

Global Trends of Chronic Kidney Disease from 1990 to 2021: A Systematic Analysis for The Global Burden of Disease Study 2021

TableS1 Classification of countries according to GBD region, SDI quintile

location	GBD Region	SDI Quintile
Afghanistan	North Africa and Middle East	Low SDI
Albania	Central Europe	Middle SDI
Algeria	North Africa and Middle East	Middle SDI
American Samoa	Oceania	Middle SDI
Andorra	Western Europe	High SDI
Angola	Central Sub-Saharan Africa	Low SDI
Antigua and Barbuda	Caribbean	High-middle SDI
Argentina	Southern Latin America	High-middle SDI
Armenia	Central Asia	High-middle SDI
Australia	Australasia	High SDI
Austria	Western Europe	High SDI
Azerbaijan	Central Asia	High-middle SDI
Bahrain	North Africa and Middle East	Middle SDI
Bangladesh	South Asia	Low-middle SDI
Barbados	Caribbean	High-middle SDI
Belarus	Eastern Europe	High-middle SDI
Belgium	Western Europe	High SDI
Belize	Caribbean	Low-middle SDI
Benin	Western Sub-Saharan Africa	Low SDI
Bermuda	Caribbean	High-middle SDI
Bhutan	South Asia	Low-middle SDI
Bolivia	Andean Latin America	Low-middle SDI

location	GBD Region	SDI Quintile
Bosnia and Herzegovina	Central Europe	Middle SDI
Botswana	Southern Sub-Saharan Africa	Middle SDI
Brazil	Tropical Latin America	Middle SDI
Brunei	High-income Asia Pacific	High SDI
Bulgaria	Central Europe	High-middle SDI
Burkina Faso	Western Sub-Saharan Africa	Low SDI
Burundi	Eastern Sub-Saharan Africa	Low SDI
Cambodia	Southeast Asia	Low-middle SDI
Cameroon	Western Sub-Saharan Africa	Low SDI
Canada	High-income North America	High SDI
Cape Verde	Western Sub-Saharan Africa	Low-middle SDI
Central African Republic	Central Sub-Saharan Africa	Low SDI
Chad	Western Sub-Saharan Africa	Low SDI
Chile	Southern Latin America	High-middle SDI
China	East Asia	Middle SDI
Colombia	Central Latin America	Middle SDI
Comoros	Eastern Sub-Saharan Africa	Low SDI
Congo	Central Sub-Saharan Africa	Low-middle SDI
Costa Rica	Central Latin America	Middle SDI
Cote d'Ivoire	Western Sub-Saharan Africa	Low SDI
Croatia	Central Europe	High SDI
Cuba	Caribbean	High-middle SDI
Cyprus	Western Europe	High SDI
Czech Republic	Central Europe	High SDI
Democratic Republic of the Congo	Central Sub-Saharan Africa	Low SDI

location	GBD Region	SDI Quintile
Denmark	Western Europe	High SDI
Djibouti	Eastern Sub-Saharan Africa	Low SDI
Dominica	Caribbean	Middle SDI
Dominican Republic	Caribbean	Middle SDI
Ecuador	Andean Latin America	Middle SDI
Egypt	North Africa and Middle East	Middle SDI
El Salvador	Central Latin America	Middle SDI
Equatorial Guinea	Central Sub-Saharan Africa	Middle SDI
Eritrea	Eastern Sub-Saharan Africa	Low SDI
Estonia	Eastern Europe	High SDI
Ethiopia	Eastern Sub-Saharan Africa	Low SDI
Federated States of Micronesia	Oceania	Low-middle SDI
Fiji	Oceania	Middle SDI
Finland	Western Europe	High SDI
France	Western Europe	High SDI
Gabon	Central Sub-Saharan Africa	Low-middle SDI
Georgia	Central Asia	High-middle SDI
Germany	Western Europe	High SDI
Ghana	Western Sub-Saharan Africa	Low-middle SDI
Greece	Western Europe	High SDI
Greenland	High-income North America	High-middle SDI
Grenada	Caribbean	Middle SDI
Guam	Oceania	High-middle SDI
Guatemala	Central Latin America	Low-middle SDI
Guinea	Western Sub-Saharan Africa	Low SDI

location	GBD Region	SDI Quintile
Guinea-Bissau	Western Sub-Saharan Africa	Low SDI
Guyana	Caribbean	Middle SDI
Haiti	Caribbean	Low SDI
Honduras	Central Latin America	Low-middle SDI
Hungary	Central Europe	High SDI
Iceland	Western Europe	High SDI
India	South Asia	Low-middle SDI
Indonesia	Southeast Asia	Middle SDI
Iran	North Africa and Middle East	High-middle SDI
Iraq	North Africa and Middle East	Low-middle SDI
Ireland	Western Europe	High SDI
Israel	Western Europe	High-middle SDI
Italy	Western Europe	High SDI
Jamaica	Caribbean	Middle SDI
Japan	High-income Asia Pacific	High SDI
Jordan	North Africa and Middle East	Middle SDI
Kazakhstan	Central Asia	High-middle SDI
Kenya	Eastern Sub-Saharan Africa	Low-middle SDI
Kiribati	Oceania	Low SDI
Kuwait	North Africa and Middle East	High-middle SDI
Kyrgyzstan	Central Asia	Low-middle SDI
Laos	Southeast Asia	Low-middle SDI
Latvia	Eastern Europe	High SDI
Lebanon	North Africa and Middle East	High-middle SDI
Lesotho	Southern Sub-Saharan Africa	Low-middle SDI

location	GBD Region	SDI Quintile
Liberia	Western Sub-Saharan Africa	Low SDI
Libya	North Africa and Middle East	High-middle SDI
Lithuania	Eastern Europe	High SDI
Luxembourg	Western Europe	High SDI
Macedonia	Central Europe	High-middle SDI
Madagascar	Eastern Sub-Saharan Africa	Low SDI
Malawi	Eastern Sub-Saharan Africa	Low SDI
Malaysia	Southeast Asia	High-middle SDI
Maldives	Southeast Asia	Middle SDI
Mali	Western Sub-Saharan Africa	Low SDI
Malta	Western Europe	High SDI
Marshall Islands	Oceania	Low-middle SDI
Mauritania	Western Sub-Saharan Africa	Low-middle SDI
Mauritius	Southeast Asia	High-middle SDI
Mexico	Central Latin America	Middle SDI
Moldova	Eastern Europe	Middle SDI
Mongolia	Central Asia	Middle SDI
Montenegro	Central Europe	High-middle SDI
Morocco	North Africa and Middle East	Low-middle SDI
Mozambique	Eastern Sub-Saharan Africa	Low SDI
Myanmar	Southeast Asia	Low-middle SDI
Namibia	Southern Sub-Saharan Africa	Low-middle SDI
Nepal	South Asia	Low SDI
Netherlands	Western Europe	High SDI
New Zealand	Australasia	High SDI

location	GBD Region	SDI Quintile
Nicaragua	Central Latin America	Low-middle SDI
Niger	Western Sub-Saharan Africa	Low SDI
Nigeria	Western Sub-Saharan Africa	Low-middle SDI
North Korea	East Asia	Low-middle SDI
Northern Mariana Islands	Oceania	High-middle SDI
Norway	Western Europe	High SDI
Oman	North Africa and Middle East	Middle SDI
Pakistan	South Asia	Low-middle SDI
Palestine	North Africa and Middle East	Low SDI
Panama	Central Latin America	High-middle SDI
Papua New Guinea	Oceania	Low SDI
Paraguay	Tropical Latin America	Middle SDI
Peru	Andean Latin America	Middle SDI
Philippines	Southeast Asia	Low-middle SDI
Poland	Central Europe	High SDI
Portugal	Western Europe	High-middle SDI
Puerto Rico	Caribbean	High SDI
Qatar	North Africa and Middle East	High-middle SDI
Romania	Central Europe	High-middle SDI
Russia	Eastern Europe	High-middle SDI
Rwanda	Eastern Sub-Saharan Africa	Low SDI
Saint Lucia	Caribbean	Middle SDI
Saint Vincent and the Grenadines	Caribbean	Middle SDI
Samoa	Oceania	Low-middle SDI
Sao Tome and Principe	Western Sub-Saharan Africa	Low SDI

location	GBD Region	SDI Quintile
Saudi Arabia	North Africa and Middle East	High-middle SDI
Senegal	Western Sub-Saharan Africa	Low SDI
Serbia	Central Europe	High-middle SDI
Seychelles	Southeast Asia	Middle SDI
Sierra Leone	Western Sub-Saharan Africa	Low SDI
Singapore	High-income Asia Pacific	High SDI
Slovakia	Central Europe	High SDI
Slovenia	Central Europe	High SDI
Solomon Islands	Oceania	Low SDI
Somalia	Eastern Sub-Saharan Africa	Low SDI
South Africa	Southern Sub-Saharan Africa	Middle SDI
South Korea	High-income Asia Pacific	High SDI
South Sudan	Eastern Sub-Saharan Africa	Low SDI
Spain	Western Europe	High-middle SDI
Sri Lanka	Southeast Asia	Middle SDI
Sudan	North Africa and Middle East	Low-middle SDI
Suriname	Caribbean	Middle SDI
Swaziland	Southern Sub-Saharan Africa	Low-middle SDI
Sweden	Western Europe	High SDI
Switzerland	Western Europe	High SDI
Syria	North Africa and Middle East	Low-middle SDI
Taiwan	East Asia	High SDI
Tajikistan	Central Asia	Low-middle SDI
Tanzania	Eastern Sub-Saharan Africa	Low SDI
Thailand	Southeast Asia	Middle SDI

location	GBD Region	SDI Quintile
The Bahamas	Caribbean	High-middle SDI
The Gambia	Western Sub-Saharan Africa	Low SDI
Timor-Leste	Southeast Asia	Low-middle SDI
Togo	Western Sub-Saharan Africa	Low SDI
Tonga	Oceania	Low-middle SDI
Trinidad and Tobago	Caribbean	High-middle SDI
Tunisia	North Africa and Middle East	Middle SDI
Turkey	North Africa and Middle East	High-middle SDI
Turkmenistan	Central Asia	High-middle SDI
Uganda	Eastern Sub-Saharan Africa	Low SDI
Ukraine	Eastern Europe	High-middle SDI
United Arab Emirates	North Africa and Middle East	High-middle SDI
United Kingdom	Western Europe	High SDI
United States	High-income North America	High SDI
Uruguay	Southern Latin America	High-middle SDI
Uzbekistan	Central Asia	Middle SDI
Vanuatu	Oceania	Low-middle SDI
Venezuela	Central Latin America	Middle SDI
Vietnam	Southeast Asia	Low-middle SDI
Virgin Islands, U.S.	Caribbean	High SDI
Yemen	North Africa and Middle East	Low SDI
Zambia	Eastern Sub-Saharan Africa	Low-middle SDI
Zimbabwe	Southern Sub-Saharan Africa	Low-middle SDI

#Low SDI: SDI<0.46; Low-middle SDI: 0.46 - 0.64; Middle SDI: 0.65 – 0.74; High-middle SDI: 0.75 – 0.85; High SDI: SDI>0.85.

Table S2 The number and age standard incidence rate of chronic kidney disease in 1990 and 2021, and AAPC from 1990 to 2021 in 204 countries and territories

	Number_1990(95%UI ¹)	ASIR ² _1990(95%CI ³)	Number_2021(95%UI)	ASIR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Afghanistan	18833 (16975-21041)	255.1 (231-282.2)	45514 (42294-49787)	367.2 (338.5-402.2)	1.175 (1.085 - 1.266)	<0.001
Albania	2815 (2542-3126)	120.7 (108.1-134.5)	8621 (7734-9518)	206.7 (188.5-225)	1.755 (1.693 - 1.818)	<0.001
Algeria	35771 (32578-39279)	256.6 (233.4-281.9)	153075 (140677-165614)	407.5 (375.5-438.8)	1.499 (1.451 - 1.547)	<0.001
American Samoa	61 (57-66)	212.8 (195.8-231)	156 (143-171)	312.6 (289.1-337.2)	1.254 (1.205 - 1.303)	<0.001
Andorra	126 (113-142)	224.5 (203.4-250.8)	336 (307-370)	222.6 (202.7-245.4)	0.024 (-0.031 - 0.078)	0.389
Angola	4839 (4507-5162)	89.5 (82.6-97.1)	19883 (18458-21540)	129.1 (118.2-140.5)	1.191 (1.136 - 1.245)	<0.001
Antigua and Barbuda	114 (105-124)	219.1 (201-238.1)	375 (343-409)	344.7 (318.7-371.8)	1.497 (1.429 - 1.565)	<0.001
Argentina	68543 (62476-75476)	213.6 (195.3-234.4)	150963 (137930-163854)	269.6 (246.9-290.7)	0.752 (0.713 - 0.79)	<0.001
Armenia	2819 (2506-3157)	94.3 (84.4-105.1)	7532 (6762-8397)	184.3 (168.3-201.7)	2.205 (2.165 - 2.246)	<0.001
Australia	51807 (49084-54962)	258.1 (245-272.1)	135305 (123723-145659)	296.3 (272-317.2)	0.455 (0.42 - 0.49)	<0.001
Austria	27499 (24724-30726)	224.6 (204-247.3)	50647 (46366-55368)	275.9 (249.4-303)	0.684 (0.652 - 0.717)	<0.001

	Number_1990(95%UI ¹)	ASIR ² _1990(95%CI ³)	Number_2021(95%UI)	ASIR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Azerbaijan	6575 (5913-7257)	110.2 (99.7-121)	22387 (19939-24791)	203.8 (187.1-221.1)	2.015 (1.98 - 2.05)	<0.001
Bahamas	346 (321-374)	197.3 (182.3-216.2)	1252 (1141-1353)	295.9 (274-317.2)	1.333 (1.264 - 1.403)	<0.001
Bahrain	612 (557-676)	292.8 (268-320.8)	4873 (4361-5457)	451.2 (413.4-487.2)	1.404 (1.365 - 1.443)	<0.001
Bangladesh	52608 (48339-57513)	90 (81.9-99.4)	187707 (170316-207797)	131.8 (120-144.8)	1.254 (1.198 - 1.31)	<0.001
Barbados	523 (480-576)	194.4 (178.6-213.8)	1473 (1348-1605)	308 (286.4-332.9)	1.501 (1.425 - 1.577)	<0.001
Belarus	10524 (9525-11767)	87.2 (79.8-96.2)	20010 (18173-22131)	141.3 (128.9-154.2)	1.568 (1.465 - 1.672)	<0.001
Belgium	38016 (34545-42363)	240.5 (220.3-264.1)	58480 (53425-63159)	247.4 (226.5-265.9)	0.095 (0.079 - 0.112)	<0.001
Belize	213 (197-231)	193.5 (176.1-212.4)	1052 (972-1129)	312 (288.7-335.7)	1.561 (1.48 - 1.643)	<0.001
Benin	3701 (3454-3984)	135.8 (124.8-147.4)	12189 (11329-13016)	177.8 (162.4-192.6)	0.886 (0.817 - 0.955)	<0.001
Bermuda	121 (110-133)	192.7 (175.3-211.4)	392 (356-428)	321.1 (295.6-348.3)	1.715 (1.634 - 1.797)	<0.001
Bhutan	425 (391-459)	125.4 (115.5-137.7)	1197 (1094-1305)	185.8 (169.7-202.7)	1.285 (1.262 - 1.308)	<0.001

	Number_1990(95%UI ¹)	ASIR ² _1990(95%CI ³)	Number_2021(95%UI)	ASIR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Bolivia (Plurinational State of)	6471 (5994-6956)	176 (162-190.1)	24667 (22843-26922)	262.4 (242.5-285.9)	1.308 (1.261 - 1.354)	<0.001
Bosnia and Herzegovina	5153 (4623-5700)	121 (109.7-132.5)	13515 (12363-14759)	227.9 (209.4-246.4)	2.071 (2.021 - 2.12)	<0.001
Botswana	1010 (928-1097)	151.6 (138.7-165.3)	3507 (3222-3805)	217.2 (199.9-237)	1.167 (1.091 - 1.242)	<0.001
Brazil	189483 (174873-205093)	192.9 (176.9-209.6)	644744 (602333-688117)	258.1 (241.7-274.5)	0.945 (0.904 - 0.986)	<0.001
Brunei Darussalam	322 (296-352)	295 (269.3-322.7)	1126 (1022-1250)	328.3 (302.5-357.6)	0.344 (0.312 - 0.376)	<0.001
Bulgaria	15334 (13681-17204)	129 (117.3-142.5)	29662 (26863-32623)	232.2 (215-251)	1.921 (1.878 - 1.965)	<0.001
Burkina Faso	7168 (6643-7771)	126.5 (116.6-138.3)	20261 (19126-21650)	165.8 (153.5-179.6)	0.885 (0.821 - 0.95)	<0.001
Burundi	2856 (2658-3083)	93.9 (86.4-102.2)	6740 (6244-7274)	109.7 (101-119.6)	0.502 (0.473 - 0.53)	<0.001
Cabo Verde	304 (280-331)	114.8 (105.2-125.2)	816 (742-885)	179.5 (162.8-195.6)	1.469 (1.381 - 1.556)	<0.001
Cambodia	7527 (6954-8200)	126.4 (115.8-139.6)	24542 (22491-27011)	183.3 (168.5-200.9)	1.22 (1.163 - 1.277)	<0.001
Cameroon	10676 (9919-11509)	178.4 (164-194.7)	39453 (36599-41901)	236.2 (219.2-253.8)	0.902 (0.835 - 0.969)	<0.001

	Number_1990(95%UI ¹)	ASIR ² _1990(95%CI ³)	Number_2021(95%UI)	ASIR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Canada	85191 (77748-90551)	260.7 (239-276.3)	184153 (167875-204154)	256.4 (234.4-282.3)	-0.036 (-0.1 - 0.028)	0.268
Central African Republic	1379 (1268-1499)	91.2 (83.6-99.2)	3387 (3140-3657)	118.2 (109.2-128.5)	0.846 (0.8 - 0.892)	<0.001
Chad	4705 (4391-5083)	127.6 (117-139.5)	13105 (12245-14003)	154.9 (142.4-168.8)	0.626 (0.547 - 0.705)	<0.001
Chile	21716 (19660-24017)	216.6 (196.6-239.2)	80300 (73877-86347)	316.6 (292.4-340)	1.26 (1.203 - 1.317)	<0.001
China	1267533 (1145753-1385805)	147.3 (133.9-161.5)	3323175 (3068978-3559324)	163.7 (153-174.1)	0.32 (0.265 - 0.375)	<0.001
Colombia	45649 (41528-50029)	227.2 (206.6-251)	171450 (156961-186839)	314.6 (289.4-341.1)	1.077 (1.051 - 1.103)	<0.001
Comoros	268 (249-290)	103.4 (95.2-112.6)	672 (627-725)	127.5 (118.5-138.8)	0.677 (0.639 - 0.715)	<0.001
Congo	1393 (1291-1512)	102.2 (94.4-111.2)	4645 (4325-5062)	147.1 (136.7-160)	1.18 (1.098 - 1.262)	<0.001
Cook Islands	24 (22-26)	174.2 (158.5-190.1)	70 (63-76)	284.5 (260.5-308.2)	1.6 (1.547 - 1.653)	<0.001
Costa Rica	8200 (7966-8432)	436.3 (425.1-446.4)	24923 (24422-25363)	454.5 (445.2-462.6)	0.132 (0.128 - 0.136)	<0.001
Côte d'Ivoire	9012 (8352-9722)	150.9 (139-164.3)	28314 (26275-30296)	193.2 (178-209.9)	0.814 (0.721 - 0.907)	<0.001
Croatia	9145 (8175-10238)	150.6 (136.3-166.1)	21856 (19855-23659)	259.7 (238.7-279.3)	1.831 (1.711 - 1.95)	<0.001

	Number_1990(95%UI ¹)	ASIR ² _1990(95%CI ³)	Number_2021(95%UI)	ASIR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Cuba	15078 (13825-16515)	146.8 (133.9-160.7)	49193 (44769-53427)	271.1 (248.7-295.4)	2.01 (1.957 - 2.062)	<0.001
Cyprus	2321 (2070-2607)	275.5 (254.5-300.6)	6413 (5860-7052)	296 (272.1-324)	0.25 (0.216 - 0.283)	<0.001
Czechia	17191 (15474-19227)	130 (118.1-143.6)	44762 (40513-49824)	218 (200.6-238.5)	1.686 (1.647 - 1.726)	<0.001
Democratic People's Republic of Korea	23090 (20851-25212)	138.4 (125.1-151)	58636 (52975-64306)	185.3 (168.5-201.7)	0.938 (0.855 - 1.022)	<0.001
Democratic Republic of the Congo	19562 (18062-21127)	94.6 (86.8-103.2)	57306 (53005-62101)	128.3 (118-140.8)	1 (0.958 - 1.041)	<0.001
Denmark	17126 (15298-19107)	207.1 (187.3-228.3)	29642 (27034-32472)	243.4 (224-263.1)	0.532 (0.513 - 0.552)	<0.001
Djibouti	185 (171-200)	98.7 (90.6-107.5)	936 (862-1011)	128.6 (118-139)	0.857 (0.804 - 0.91)	<0.001
Dominica	139 (129-151)	229.6 (212.4-247.7)	262 (238-285)	320.8 (295.7-345.2)	1.093 (1.024 - 1.162)	<0.001
Dominican Republic	6202 (5697-6821)	139.2 (126.4-153.7)	24963 (23057-26895)	243 (224-261.7)	1.835 (1.779 - 1.892)	<0.001
Ecuador	10748 (9822-11799)	180.7 (163.6-199.8)	57934 (53462-63236)	348.2 (321.3-380)	2.157 (2.102 - 2.211)	<0.001

	Number_1990(95%UI ¹)	ASIR ² _1990(95%CI ³)	Number_2021(95%UI)	ASIR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Egypt	80783 (73484-89103)	263.8 (240.7-289.5)	301550 (272715-333684)	428.8 (397.3-465.6)	1.581 (1.536 - 1.627)	<0.001
El Salvador	7712 (7063-8457)	229.5 (209.1-253.9)	24978 (23302-26600)	408.4 (380-435.7)	1.881 (1.826 - 1.937)	<0.001
Equatorial Guinea	227 (210-246)	92.5 (85.3-101.5)	1065 (987-1146)	165.2 (151.3-180.5)	1.918 (1.822 - 2.014)	<0.001
Eritrea	1470 (1358-1586)	91.2 (84-99.7)	3984 (3698-4299)	116.9 (106.8-127.4)	0.808 (0.772 - 0.844)	<0.001
Estonia	1993 (1779-2238)	104.5 (94.3-116.3)	4909 (4493-5418)	215.9 (198-235.7)	2.375 (2.322 - 2.429)	<0.001
Eswatini	689 (635-750)	184.5 (169.2-202.9)	1568 (1441-1700)	232.9 (212.3-252.2)	0.758 (0.67 - 0.846)	<0.001
Ethiopia	25075 (23288-27040)	92.9 (86-100.7)	60892 (56785-64771)	114.6 (105-124.2)	0.673 (0.614 - 0.732)	<0.001
Fiji	881 (811-959)	195.3 (179.7-213)	2163 (1978-2345)	261.9 (243.7-283.2)	0.954 (0.918 - 0.99)	<0.001
Finland	12464 (11114-14015)	171.1 (154-189.6)	25918 (23654-28781)	195.4 (180.1-214.1)	0.436 (0.418 - 0.454)	<0.001
France	179845 (162635-201949)	207.5 (188.8-229.6)	326611 (300075-352984)	229.8 (212.4-249.8)	0.344 (0.324 - 0.364)	<0.001
Gabon	755 (698-818)	115.8 (106.8-125.6)	2115 (1944-2293)	182.3 (168.3-196.9)	1.495 (1.427 - 1.563)	<0.001
Gambia	662 (623-706)	133.9 (123.6-144.7)	2198 (2064-2346)	176.6 (162.4-191.8)	0.898 (0.843 - 0.952)	<0.001

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Georgia	6362 (5720-7116)	105 (95.2-116.6)	9241 (8320-10163)	177.7 (164.1-193)	1.716 (1.671 - 1.762)	<0.001
Germany	312633 (283719-347849)	242.8 (222.3-269.7)	526670 (491104-565042)	269.8 (254.5-287.4)	0.36 (0.319 - 0.401)	<0.001
Ghana	9860 (9230-10595)	120.1 (111.5-130.6)	34499 (31872-37394)	171.1 (157.3-186.3)	1.175 (1.087 - 1.263)	<0.001
Greece	44006 (40001-48285)	283.9 (258.7-310.5)	65278 (60702-70955)	274.9 (254.2-297.8)	-0.093 (-0.134 - -0.051)	<0.001
Greenland	60 (54-65)	201 (181.8-220.5)	149 (136-165)	231 (213.6-252.8)	0.46 (0.408 - 0.511)	<0.001
Grenada	149 (139-160)	210.5 (194.1-227.4)	413 (380-447)	355 (328.5-380)	1.705 (1.658 - 1.752)	<0.001
Guam	166 (152-183)	180.8 (165.5-199.1)	534 (488-587)	265.3 (244.9-289.5)	1.261 (1.232 - 1.291)	<0.001
Guatemala	10599 (9674-11591)	244 (221.5-267)	45885 (42467-49772)	387.9 (358-420.4)	1.519 (1.488 - 1.55)	<0.001
Guinea	5459 (5060-5901)	134.1 (123.1-146.2)	12458 (11579-13322)	171.1 (157.5-184.4)	0.788 (0.737 - 0.84)	<0.001
Guinea-Bissau	795 (741-851)	142.9 (133.4-154.4)	1762 (1638-1884)	170.4 (157.2-184.1)	0.578 (0.507 - 0.65)	<0.001
Guyana	836 (776-899)	177.1 (163.4-191.6)	2046 (1880-2219)	294.6 (273.7-317.6)	1.645 (1.569 - 1.72)	<0.001
Haiti	6772 (6073-7507)	170.4 (152.6-191.5)	19290 (17777-20946)	226 (207.1-245.9)	0.92 (0.904 - 0.935)	<0.001

	Number_1990(95%UI ¹)	ASIR ² _1990(95%CI ³)	Number_2021(95%UI)	ASIR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Honduras	5948 (5452-6582)	236.2 (214.1-264.7)	22686 (20945-24585)	320.5 (295.8-348.5)	0.995 (0.971 - 1.02)	<0.001
Hungary	15676 (14056-17503)	111.7 (101.5-123.8)	42185 (38412-46628)	227.6 (209.3-248.8)	2.345 (2.297 - 2.392)	<0.001
Iceland	560 (509-616)	192.2 (175.1-210.8)	1166 (1066-1264)	199.8 (182.8-216.9)	0.133 (0.088 - 0.177)	<0.001
India	849302 (780462-920171)	152.8 (140.4-165.7)	2235892 (2056366-2414555)	180.7 (166.5-195.4)	0.539 (0.439 - 0.639)	<0.001
Indonesia	155644 (144275-167963)	130.3 (120.1-141.7)	469570 (432377-511150)	185.1 (171.2-200.1)	1.121 (1.02 - 1.224)	<0.001
Iran (Islamic Republic of)	93053 (83778-103125)	304.2 (277.3-334.7)	330887 (308639-354798)	409 (382.6-436)	0.948 (0.89 - 1.006)	<0.001
Iraq	27066 (24993-29348)	291.5 (267.3-319.7)	117615 (108689-127825)	440.3 (407.2-473.9)	1.346 (1.274 - 1.419)	<0.001
Ireland	11405 (10693-11949)	274 (257.2-285.8)	19201 (18876-19506)	245.5 (242.3-248.8)	-0.332 (-0.375 - -0.289)	<0.001
Israel	13680 (12393-15202)	273.6 (249.3-301.5)	37867 (34116-41515)	305.8 (275.3-333.6)	0.381 (0.324 - 0.439)	<0.001
Italy	195977 (175595-217213)	217.4 (196.2-239.3)	333142 (306700-361005)	218.5 (202.7-235.1)	0.033 (0.003 - 0.063)	0.032
Jamaica	3710 (3408-4045)	203.9 (186.2-222.8)	8989 (8236-9704)	295.4 (271.5-318.4)	1.222 (1.153 - 1.291)	<0.001
Japan	471525 (434120-511167)	280 (259.2-302.1)	996708 (911293-1081250)	285.2 (263.7-305.7)	0.078 (0.043 - 0.114)	<0.001

	Number_1990(95%UI ¹)	ASIR ² _1990(95%CI ³)	Number_2021(95%UI)	ASIR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Jordan	4664 (4322-5035)	289.6 (266.7-312.6)	37316 (34745-40073)	448.8 (420.9-478.2)	1.423 (1.391 - 1.455)	<0.001
Kazakhstan	14602 (13439-15891)	101.8 (93.5-111.2)	35051 (31601-38749)	183.9 (168.9-201.6)	1.932 (1.872 - 1.991)	<0.001
Kenya	10255 (9567-10957)	92.9 (85.5-101.1)	31651 (29148-34092)	118.9 (109.2-129.5)	0.799 (0.704 - 0.895)	<0.001
Kiribati	77 (71-84)	155 (142.8-169)	192 (177-207)	215.9 (199.8-232.1)	1.073 (1.053 - 1.094)	<0.001
Kuwait	2252 (2070-2441)	293 (271.2-317)	13109 (11785-14632)	397 (363.7-431.8)	1.003 (0.924 - 1.083)	<0.001
Kyrgyzstan	3991 (3710-4283)	105.5 (97.4-114)	8823 (8020-9622)	151 (138-164.5)	1.174 (1.149 - 1.198)	<0.001
Lao People's Democratic Republic	4381 (4022-4785)	169.7 (155.2-185.9)	12021 (11060-12971)	227.7 (209.2-246.2)	0.99 (0.939 - 1.041)	<0.001
Latvia	2877 (2583-3214)	87.6 (79.5-96.7)	5423 (4898-6022)	165.9 (152.5-181.7)	2.072 (2.01 - 2.134)	<0.001
Lebanon	6124 (5556-6781)	267.4 (245.4-292.7)	25285 (23327-27213)	435.3 (398-470.8)	1.596 (1.518 - 1.673)	<0.001
Lesotho	1419 (1305-1543)	149.8 (137.2-163.7)	2455 (2265-2646)	201.8 (186.1-216.7)	0.975 (0.917 - 1.032)	<0.001
Liberia	1959 (1816-2115)	130.3 (119.7-142.2)	4919 (4558-5317)	177.9 (161.7-194.5)	1.046 (1.004 - 1.089)	<0.001

	Number_1990(95%UI ¹)	ASIR ² _1990(95%CI ³)	Number_2021(95%UI)	ASIR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Libya	5633 (5189-6163)	262.4 (239.5-288.3)	23278 (21519-25396)	417.7 (384.9-453.6)	1.518 (1.401 - 1.635)	<0.001
Lithuania	4205 (3814-4676)	99 (90.4-109.6)	6974 (6366-7568)	147.6 (137-159.2)	1.287 (1.211 - 1.364)	<0.001
Luxembourg	1367 (1246-1511)	243.8 (223.3-267.3)	2759 (2529-2961)	263.1 (240.9-283)	0.272 (0.197 - 0.346)	<0.001
Madagascar	5781 (5385-6208)	86.1 (79.3-93.7)	15047 (13993-16361)	107 (97.7-116.4)	0.719 (0.666 - 0.772)	<0.001
Malawi	4890 (4550-5238)	96.8 (89.1-105.9)	11239 (10343-11977)	124 (112.8-133.9)	0.81 (0.778 - 0.841)	<0.001
Malaysia	18546 (17026-20013)	175.5 (159.3-190.3)	77138 (70879-83439)	260 (240.1-281.2)	1.324 (1.232 - 1.415)	<0.001
Maldives	214 (193-237)	186.9 (169.2-206.1)	1059 (952-1155)	288.3 (259.9-317.9)	1.433 (1.393 - 1.473)	<0.001
Mali	6631 (6181-7134)	125.1 (115.6-135.8)	19506 (18189-20764)	159.7 (147.2-172.1)	0.799 (0.737 - 0.861)	<0.001
Malta	1095 (1000-1202)	256.2 (235.6-279.7)	2663 (2436-2926)	266.7 (246.7-289.8)	0.152 (0.118 - 0.186)	<0.001
Marshall Islands	39 (36-42)	167.2 (154.2-182.6)	102 (93-110)	245.2 (225.9-264)	1.243 (1.213 - 1.274)	<0.001
Mauritania	1888 (1754-2046)	148.6 (137-161.3)	5232 (4833-5667)	200.9 (183.2-219.1)	0.996 (0.937 - 1.056)	<0.001
Mauritius	2071 (1884-2281)	254.9 (231.4-279.3)	7451 (6925-8055)	406.8 (383.3-433.7)	1.523 (1.482 - 1.565)	<0.001

	Number_1990(95%UI ¹)	ASIR ² _1990(95%CI ³)	Number_2021(95%UI)	ASIR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Mexico	151265 (138996-165600)	304.8 (278-335.4)	612577 (580429-645104)	464.3 (440.4-488.1)	1.388 (1.338 - 1.438)	<0.001
Micronesia (Federated States of)	115 (106-126)	186.5 (171.9-204.5)	247 (223-269)	290.8 (268.2-313.6)	1.439 (1.411 - 1.468)	<0.001
Monaco	156 (140-175)	211.4 (191.5-233.3)	227 (206-250)	228.4 (209.3-249.9)	0.274 (0.226 - 0.322)	<0.001
Mongolia	2040 (1864-2228)	139.6 (126-153.2)	5269 (4830-5728)	188.3 (171.5-203.8)	0.984 (0.915 - 1.054)	<0.001
Montenegro	1134 (1029-1251)	181.2 (164.7-199.2)	2639 (2368-2916)	274.2 (249.2-301.4)	1.355 (1.328 - 1.382)	<0.001
Morocco	32617 (29938-35664)	210.1 (191.8-230.8)	135407 (123555-147157)	384.3 (352.3-415.8)	1.966 (1.894 - 2.038)	<0.001
Mozambique	6980 (6451-7573)	93.1 (85.2-102)	17355 (16180-18602)	118.7 (109.3-129.1)	0.784 (0.737 - 0.831)	<0.001
Myanmar	43845 (39884-48151)	159.9 (145.8-176.2)	116368 (106212-125983)	227.6 (209.3-245)	1.154 (1.116 - 1.192)	<0.001
Namibia	1156 (1061-1260)	153.6 (140.7-167.2)	2985 (2740-3260)	198 (181.9-217.1)	0.829 (0.773 - 0.885)	<0.001
Nauru	11 (10-12)	179.9 (165.3-196)	18 (17-20)	256.1 (234.8-279.1)	1.145 (1.114 - 1.177)	<0.001
Nepal	14842 (13643-16160)	124.3 (114-136.8)	54613 (49880-59454)	213.7 (195.5-232.4)	1.751 (1.677 - 1.826)	<0.001

	Number_1990(95%UI ¹)	ASIR ² _1990(95%CI ³)	Number_2021(95%UI)	ASIR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Netherlands	44064 (40881-47584)	213.5 (198.9-229.7)	88460 (81320-95824)	242.8 (224.7-261.3)	0.438 (0.387 - 0.489)	<0.001
New Zealand	10613 (9606-11747)	264.7 (242.8-290.5)	25356 (23124-27531)	301.7 (277.3-327.3)	0.424 (0.402 - 0.447)	<0.001
Nicaragua	5618 (5153-6112)	277.7 (252.1-306.7)	24136 (22516-25614)	438.2 (408.7-465.3)	1.483 (1.441 - 1.524)	<0.001
Niger	5267 (4896-5655)	125 (115.7-136.1)	17881 (16629-19193)	152.1 (138-165.2)	0.638 (0.611 - 0.666)	<0.001
Nigeria	76055 (70880-81863)	136 (125.2-148.4)	210760 (196709-225476)	181.3 (165.2-196.4)	0.922 (0.846 - 0.999)	<0.001
Niue	4 (4-4)	182.6 (166.8-200.2)	6 (5-6)	277.9 (252.9-305.8)	1.367 (1.338 - 1.396)	<0.001
North Macedonia	2592 (2353-2867)	135.2 (123.5-147.4)	8708 (7721-9571)	260.5 (236.7-282.5)	2.15 (2.109 - 2.192)	<0.001
Northern Mariana Islands	62 (55-68)	239.9 (216.4-262.4)	192 (170-217)	340.3 (313-378.1)	1.138 (1.108 - 1.169)	<0.001
Norway	13125 (11763-14781)	182.6 (166.4-202.6)	21817 (19979-23671)	212.3 (195.3-229.1)	0.512 (0.452 - 0.573)	<0.001
Oman	1754 (1614-1896)	218.4 (197.2-237.9)	9118 (8291-9915)	396.6 (366.1-431.7)	1.945 (1.836 - 2.053)	<0.001
Pakistan	98898 (91761-107003)	142.5 (131.4-155.3)	275774 (256521-294773)	181.9 (167.8-195.9)	0.809 (0.755 - 0.863)	<0.001
Palau	24 (21-27)	213.2 (190.9-238.5)	82 (74-93)	348.8 (322.3-385.3)	1.595 (1.546 - 1.644)	<0.001

	Number_1990(95%UI ¹)	ASIR ² _1990(95%CI ³)	Number_2021(95%UI)	ASIR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Palestine	2997 (2749-3268)	290.3 (264.9-317.4)	12369 (11405-13455)	430.7 (398.7-464.2)	1.29 (1.167 - 1.413)	<0.001
Panama	3972 (3641-4354)	243.7 (221.5-269.1)	15956 (15016-17069)	363.8 (341.5-389.3)	1.341 (1.304 - 1.377)	<0.001
Papua New Guinea	2466 (2243-2731)	97.3 (87.8-108.6)	8614 (7916-9315)	128.7 (116.8-139.8)	0.896 (0.814 - 0.978)	<0.001
Paraguay	4761 (4373-5210)	191.9 (174.6-210.7)	18724 (17247-20324)	307.8 (282.8-334.3)	1.534 (1.495 - 1.573)	<0.001
Peru	19680 (18106-21486)	148.8 (136.1-163.5)	95333 (88068-103496)	284.1 (261.4-308.4)	2.132 (2.07 - 2.193)	<0.001
Philippines	66080 (61640-70710)	184.5 (170.4-199.3)	245592 (230483-262725)	271.1 (254.4-289.2)	1.289 (1.214 - 1.364)	<0.001
Poland	63497 (56153-71143)	149 (133.5-165.7)	137937 (123815-154597)	201.7 (183.5-223.1)	0.996 (0.897 - 1.095)	<0.001
Portugal	29572 (26316-33103)	211.3 (190.2-233.8)	60079 (54791-66350)	236.4 (215.3-260.2)	0.376 (0.35 - 0.402)	<0.001
Puerto Rico	8257 (7527-9060)	228.9 (208.6-251.4)	21077 (19420-22999)	354.7 (332.4-384.6)	1.433 (1.4 - 1.466)	<0.001
Qatar	463 (413-513)	294.6 (267-326.9)	6175 (5515-6879)	467.4 (432.9-503.9)	1.497 (1.463 - 1.531)	<0.001
Republic of Korea	61023 (54616-68362)	215 (193.8-239.3)	226256 (210509-241377)	242.8 (225.8-258.5)	0.405 (0.368 - 0.442)	<0.001
Republic of Moldova	2996 (2720-3309)	69.4 (63.5-76.2)	6551 (5870-7305)	123.6 (112.7-136.2)	1.859 (1.774 - 1.944)	<0.001

	Number_1990(95%UI ¹)	ASIR ² _1990(95%CI ³)	Number_2021(95%UI)	ASIR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Romania	30710 (27578-34445)	113.1 (103.3-125.2)	72834 (67186-78514)	210.9 (196-225.8)	2.046 (1.982 - 2.111)	<0.001
Russian Federation	201892 (185153-222440)	121.2 (112.8-131.7)	422141 (385788-459285)	201.9 (187.1-217.1)	1.68 (1.628 - 1.732)	<0.001
Rwanda	3596 (3326-3889)	95.8 (88.1-104.8)	8666 (7877-9399)	120.8 (110-132.2)	0.748 (0.677 - 0.818)	<0.001
Saint Kitts and Nevis	81 (73-89)	223.1 (203.6-245.7)	253 (228-280)	343.8 (319.5-374.2)	1.418 (1.343 - 1.493)	<0.001
Saint Lucia	190 (176-205)	200.5 (185.5-216.2)	736 (682-807)	314.4 (293.1-343.5)	1.467 (1.422 - 1.512)	<0.001
Saint Vincent and the Grenadines	145 (134-157)	189.1 (175.5-206.4)	411 (373-445)	294.1 (270.4-314.6)	1.444 (1.394 - 1.493)	<0.001
Samoa	196 (182-212)	190.4 (176.4-206.4)	433 (402-471)	269.7 (250.3-292.6)	1.151 (1.1 - 1.202)	<0.001
San Marino	70 (63-79)	195 (175.2-216.4)	157 (141-174)	207.3 (186.8-229.4)	0.211 (0.179 - 0.243)	<0.001
Sao Tome and Principe	130 (119-142)	163.2 (148-178.8)	325 (302-350)	240.5 (222.6-260.8)	1.279 (1.193 - 1.366)	<0.001
Saudi Arabia	21157 (19638-22839)	295.8 (272.1-320.4)	123154 (113311-133632)	495.8 (465.1-529.6)	1.689 (1.618 - 1.76)	<0.001
Senegal	5896 (5479-6341)	136.1 (125.9-146.9)	15909 (14807-17097)	171.2 (158.9-185.5)	0.746 (0.713 - 0.78)	<0.001

	Number_1990(95%UI ¹)	ASIR ² _1990(95%CI ³)	Number_2021(95%UI)	ASIR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Serbia	15572 (13985-17192)	134.8 (123.2-146.9)	39137 (35808-43025)	246.2 (227-268.2)	1.985 (1.939 - 2.03)	<0.001
Seychelles	127 (117-138)	217.2 (200.1-236.5)	379 (345-414)	315.6 (289.3-341.2)	1.228 (1.191 - 1.266)	<0.001
Sierra Leone	3353 (3108-3634)	126.6 (115.6-139)	7939 (7427-8505)	163.2 (149.6-176.3)	0.832 (0.734 - 0.931)	<0.001
Singapore	5595 (5322-5869)	254.1 (241.4-266.8)	25251 (23413-27411)	299 (279.2-325.6)	0.54 (0.52 - 0.56)	<0.001
Slovakia	8255 (7427-9098)	141 (128.1-154.9)	20773 (18945-22792)	226.6 (207.1-244.6)	1.54 (1.507 - 1.573)	<0.001
Slovenia	3003 (2710-3343)	126 (114-139.4)	9213 (8322-10191)	220.9 (200.9-243.5)	1.863 (1.766 - 1.959)	<0.001
Solomon Islands	347 (324-372)	162.8 (150.8-175.9)	825 (765-887)	179 (165.2-193.5)	0.301 (0.271 - 0.33)	<0.001
Somalia	3438 (3200-3700)	96.2 (88.6-104.4)	10305 (9580-10987)	113 (103-122.3)	0.524 (0.486 - 0.563)	<0.001
South Africa	40375 (37410-43475)	172.9 (160.1-187.5)	116840 (108463-124634)	242.6 (225.1-257.9)	1.094 (1.038 - 1.15)	<0.001
South Sudan	3133 (2915-3386)	97.8 (90.1-106.9)	5863 (5451-6351)	120.2 (110.5-131.2)	0.679 (0.625 - 0.732)	<0.001
Spain	132317 (121229-145627)	237.8 (219.7-258.3)	235484 (215974-254667)	232.2 (211.9-250)	-0.041 (-0.09 - 0.009)	0.107
Sri Lanka	21972 (20287-23967)	186.6 (171.8-203.1)	77127 (70184-84714)	280.7 (257.9-305.2)	1.351 (1.276 - 1.426)	<0.001

	Number_1990(95%UI ¹)	ASIR ² _1990(95%CI ³)	Number_2021(95%UI)	ASIR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Sudan	22886 (20725-25488)	216.8 (195.3-241.9)	72866 (66723-78876)	334.1 (303.8-366.3)	1.415 (1.276 - 1.554)	<0.001
Suriname	540 (493-591)	188.4 (171.8-206.6)	1937 (1753-2093)	303 (278.6-326.7)	1.569 (1.52 - 1.618)	<0.001
Sweden	28865 (26001-32782)	180.3 (164.1-201.3)	38458 (34200-43016)	171.3 (155.2-188.6)	-0.156 (-0.173 - -0.139)	<0.001
Switzerland	25404 (23197-28054)	237.3 (218.2-259.5)	47328 (42804-51366)	256.7 (233-278.1)	0.266 (0.231 - 0.302)	<0.001
Syrian Arab Republic	16987 (15686-18588)	269.1 (247.1-295.8)	56594 (52294-61422)	407.4 (380.3-438.9)	1.349 (1.283 - 1.415)	<0.001
Taiwan (Province of China)	41232 (38269-44342)	253.7 (236.8-271.7)	123945 (116112-131502)	302 (284.6-319)	0.564 (0.55 - 0.579)	<0.001
Tajikistan	3032 (2708-3348)	79.4 (70.8-88.4)	9226 (8357-10093)	127.7 (116.1-140)	1.557 (1.522 - 1.592)	<0.001
Thailand	83500 (76620-91125)	210 (193.6-228.5)	317728 (294103-344411)	301.4 (281.4-325.4)	1.2 (1.107 - 1.294)	<0.001
Timor-Leste	589 (545-639)	148.9 (136.7-164.2)	1927 (1773-2103)	202.4 (186.1-220.2)	1.006 (0.926 - 1.086)	<0.001
Togo	2470 (2302-2654)	137.2 (126.6-148.7)	8279 (7641-8954)	176.5 (160.1-192.2)	0.811 (0.764 - 0.859)	<0.001
Tokelau	2 (2-2)	156.5 (144.1-170.1)	4 (3-4)	248.6 (228.6-269.1)	1.519 (1.474 - 1.564)	<0.001

	Number_1990(95%UI ¹)	ASIR ² _1990(95%CI ³)	Number_2021(95%UI)	ASIR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Tonga	120 (110-131)	184.6 (169.9-203.6)	226 (209-243)	264.4 (244.8-284.9)	1.167 (1.135 - 1.199)	<0.001
Trinidad and Tobago	1663 (1540-1811)	183.3 (168.9-201)	5778 (5277-6286)	308.5 (285.2-332.5)	1.692 (1.614 - 1.769)	<0.001
Tunisia	13411 (12220-14805)	249.5 (228.1-273.3)	54366 (49514-59189)	402.8 (370.6-435.3)	1.561 (1.484 - 1.639)	<0.001
Turkey	80831 (75539-86876)	223.5 (208.2-239.6)	384231 (352192-414424)	404.1 (371.7-432.1)	1.915 (1.874 - 1.956)	<0.001
Turkmenistan	3149 (2914-3384)	115.6 (107.1-125.7)	8401 (7732-9038)	179 (165.8-191.1)	1.422 (1.38 - 1.464)	<0.001
Tuvalu	11 (10-12)	149.4 (137.4-164.8)	26 (24-29)	239.7 (221.7-260.7)	1.541 (1.509 - 1.572)	<0.001
Uganda	7432 (6918-7994)	86.9 (79.9-94.5)	19849 (18513-21371)	106.7 (97.8-116.5)	0.65 (0.563 - 0.736)	<0.001
Ukraine	52974 (47075-59414)	81.5 (73.6-89.9)	82042 (75038-90447)	123.5 (113.9-134.5)	1.338 (1.23 - 1.445)	<0.001
United Arab Emirates	2135 (1941-2336)	327.3 (300.5-358.3)	31938 (28288-36332)	466.4 (433-505.6)	1.165 (1.013 - 1.316)	<0.001
United Kingdom	195682 (178100-218323)	209 (191.3-229.7)	290434 (265595-316836)	219.7 (201.6-237.2)	0.151 (0.129 - 0.172)	<0.001
United Republic of Tanzania	14481 (13439-15616)	104.1 (95.2-113.2)	38553 (35790-41463)	128.1 (117.7-139.1)	0.688 (0.64 - 0.737)	<0.001

	Number_1990(95%UI ¹)	ASIR ² _1990(95%CI ³)	Number_2021(95%UI)	ASIR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
United States of America	965462 (882901-1056989)	303.4 (278-331)	1842212 (1695726-1979976)	323.2 (300.1-346.3)	0.207 (0.185 - 0.229)	<0.001
United States Virgin Islands	186 (171-202)	201.4 (186-217.7)	512 (467-565)	315.1 (291.6-344)	1.476 (1.398 - 1.555)	<0.001
Uruguay	7727 (7006-8507)	197.1 (179.8-215.5)	13240 (12080-14386)	238.3 (219.3-257.3)	0.616 (0.598 - 0.635)	<0.001
Uzbekistan	21869 (20280-23618)	143.9 (133-157.3)	62513 (56559-68430)	205.7 (188.1-223.6)	1.17 (1.114 - 1.226)	<0.001
Vanuatu	124 (114-132)	144.7 (133.5-157.4)	447 (413-485)	215.2 (198.3-231.4)	1.281 (1.238 - 1.323)	<0.001
Venezuela (Bolivarian Republic of)	27615 (25358-30284)	246.2 (225.1-272.6)	113852 (105689-122187)	371.2 (346.1-396.5)	1.327 (1.288 - 1.365)	<0.001
Viet Nam	61003 (55831-66358)	136.9 (125.1-149.2)	215387 (195155-237672)	214.7 (196.6-234.1)	1.486 (1.457 - 1.514)	<0.001
Yemen	12658 (11432-13948)	213 (191.6-236.6)	48349 (44356-52264)	303.7 (277.2-331)	1.148 (1.073 - 1.224)	<0.001
Zambia	4313 (4015-4642)	108.5 (100.2-118.2)	12225 (11417-13120)	137.1 (126.4-148.9)	0.801 (0.739 - 0.863)	<0.001
Zimbabwe	7854 (7224-8575)	158.8 (145.4-175.6)	15456 (14249-16766)	189.5 (174-205.7)	0.571 (0.5 - 0.643)	<0.001

1:UI=uncertainty interval. 2:ASIR = age-standardized incidence rate adjusted to the world population(per 1000,000) . 3: CI=confidence intervals. 4:AAPC = average annual percentage change calculated by Joinpoint regression analysis; AAPC>0 indicated an upward trend, and AAPC<0 indicated a downward trend. 5: *P*-value was calculated by Joinpoint regression analysis; *P*<0.05 showed that the trend suggested by the AAPC was significant.

Table S3 The number and age standard mortality rate of chronic kidney disease in 1990 and 2021, and AAPC from 1990 to 2021 in 204 countries and territories

.	Number_1990(95%UI ¹)	ASMR ² _1990(95%CI ³)	Number_2021(95%UI)	ASMR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Afghanistan	3009 (2175-4675)	47.3 (34.5-75.9)	4893 (2926-8625)	53.9 (32.9-102.2)	0.427 (0.359 - 0.495)	<0.001
Albania	234 (196-277)	12 (10-14.3)	424 (322-541)	10.6 (8.1-13.4)	-0.473 (-0.847 - -0.097)	0.014
Algeria	2344 (1667-4128)	27.1 (19-47.7)	9785 (7909-12092)	37.3 (30.6-45.5)	1.094 (0.869 - 1.32)	<0.001
American Samoa	7 (5-10)	33.5 (24.6-48.1)	31 (24-39)	73.8 (57.4-91.7)	2.729 (2.444 - 3.014)	<0.001
Andorra	5 (4-7)	12.1 (8.8-16.7)	17 (12-23)	9.3 (6.9-12.5)	-0.925 (-1.356 - -0.492)	<0.001
Angola	1417 (1093-1793)	37.6 (29.3-46.9)	4073 (2988-5384)	39.2 (27.9-50.3)	0.158 (-0.008 - 0.324)	0.062
Antigua and Barbuda	17 (16-18)	30.1 (27.9-32.2)	46 (42-49)	47.1 (43-50.5)	1.514 (0.549 - 2.488)	0.002
Argentina	9185 (8697-9648)	30.4 (28.6-31.9)	15213 (13851-16266)	26.3 (24-28.1)	-0.428 (-1.187 - 0.336)	0.271
Armenia	27 (22-31)	1 (0.8-1.1)	432 (354-523)	10.3 (8.4-12.4)	7.806 (4.827 - 10.869)	<0.001

	Number_1990(95%UI ¹)	ASMR ² _1990(95%CI ³)	Number_2021(95%UI)	ASMR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Australia	1580 (1436-1674)	8.7 (7.9-9.3)	5011 (4201-5515)	9.4 (8-10.3)	0.14 (-1.039 - 1.333)	0.817
Austria	786 (724-834)	6.6 (6.1-7)	3411 (2801-3759)	14.3 (11.9-15.6)	2.588 (1.79 - 3.392)	<0.001
Azerbaijan	357 (277-452)	6.6 (5.1-8.3)	992 (717-1295)	10.4 (7.6-13.4)	1.51 (1.125 - 1.896)	<0.001
Bahamas	37 (34-40)	23.1 (21.3-25.1)	144 (117-178)	37.5 (30.7-46.2)	1.564 (0.61 - 2.527)	0.001
Bahrain	48 (36-63)	41.7 (31.3-55.7)	259 (207-316)	52.5 (42.1-63.4)	0.634 (-0.073 - 1.346)	0.079
Bangladesh	9553 (6572-11510)	14.9 (12.8-18.3)	15175 (11740-20173)	12.3 (9.5-16.2)	-0.52 (-1.064 - 0.028)	0.063
Barbados	60 (57-64)	20.4 (19.1-21.4)	148 (117-182)	29.3 (23.3-36)	1.337 (0.338 - 2.346)	0.009
Belarus	100 (93-106)	0.8 (0.8-0.9)	360 (296-427)	2.4 (1.9-2.8)	3.566 (2.446 - 4.698)	<0.001
Belgium	1386 (1260-1478)	8.8 (8-9.4)	2816 (2274-3150)	9 (7.5-10)	0.212 (-0.279 - 0.705)	0.398
Belize	24 (23-26)	24.4 (22.8-26)	134 (117-151)	45.5 (39.5-51.1)	1.932 (1.303 - 2.564)	<0.001
Benin	782 (673-912)	37.3 (32.3-44.7)	1940 (1558-2414)	39.4 (32.5-48.4)	0.186 (0.064 - 0.307)	0.003
Bermuda	9 (9-10)	15.5 (14.5-16.5)	23 (19-27)	15.7 (13.2-19)	-0.082 (-0.842 - 0.684)	0.834

	Number_1990(95%UI ¹)	ASMR ² _1990(95%CI ³)	Number_2021(95%UI)	ASMR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Bhutan	42 (30-58)	17 (12.4-24.2)	120 (81-165)	20.9 (14-28.5)	0.655 (0.544 - 0.766)	<0.001
Bolivia (Plurinational State of)	1325 (1115-1675)	43 (36.2-53.9)	4731 (3675-6140)	58.2 (45.7-75.3)	0.966 (0.772 - 1.159)	<0.001
Bosnia and Herzegovina	361 (307-422)	9.8 (8.3-11.4)	686 (512-869)	11 (8.3-13.9)	0.517 (0.233 - 0.802)	<0.001
Botswana	109 (79-157)	23.1 (17-32.1)	348 (270-479)	28.5 (23-39)	0.672 (0.024 - 1.324)	0.042
Brazil	15168 (14505-15699)	18 (16.9-18.8)	45537 (41271-47987)	18.7 (16.9-19.7)	0.222 (-0.358 - 0.805)	0.454
Brunei Darussalam	32 (26-42)	37.5 (30.7-47.8)	86 (73-100)	36.3 (30.6-42.3)	-0.187 (-0.487 - 0.114)	0.223
Bulgaria	729 (668-785)	7.6 (7-8.2)	2428 (2049-2872)	17.4 (14.6-20.8)	2.595 (1.448 - 3.755)	<0.001
Burkina Faso	1555 (1281-1850)	38.3 (31.8-45.8)	3812 (3071-4633)	43.7 (35.3-53)	0.445 (0.306 - 0.583)	<0.001
Burundi	909 (711-1148)	39.5 (31-50.6)	1515 (1109-2172)	35 (25.8-49.9)	-0.422 (-0.602 - -0.241)	<0.001
Cabo Verde	38 (32-44)	15.4 (12.7-17.9)	124 (84-155)	28.9 (19.4-36)	2.042 (1.363 - 2.726)	<0.001
Cambodia	1050 (857-1277)	21.2 (17.5-25.7)	2681 (2007-3484)	23.5 (17.8-30.2)	0.348 (0.224 - 0.472)	<0.001

.	Number_1990(95%UI ¹)	ASMR ² _1990(95%CI ³)	Number_2021(95%UI)	ASMR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Cameroon	2151 (1677-2797)	52 (40-67.1)	5928 (4179-8334)	51.2 (37.1-71.1)	-0.051 (-0.142 - 0.04)	0.268
Canada	2119 (1921-2236)	6.8 (6.1-7.2)	7789 (6588-8473)	9.5 (8.2-10.3)	1.12 (0.391 - 1.854)	0.003
Central African Republic	507 (420-615)	47 (38.6-56.4)	963 (698-1352)	47.4 (35.4-63.9)	0.042 (-0.056 - 0.139)	0.405
Chad	751 (593-1013)	26.4 (20.5-36.9)	1811 (1330-2568)	31.6 (23.4-45.6)	0.597 (0.54 - 0.655)	<0.001
Chile	1471 (1390-1543)	16 (15-16.9)	5202 (4582-5596)	19.8 (17.5-21.3)	0.557 (-0.175 - 1.294)	0.136
China	102726 (89745-120908)	14.2 (12.4-16.8)	204230 (164736-246372)	10.8 (8.8-13)	-0.912 (-1.086 - -0.737)	<0.001
Colombia	3340 (3177-3471)	19.5 (18.4-20.4)	8646 (7184-10116)	15.5 (12.9-18.1)	-1.012 (-1.51 - -0.512)	<0.001
Comoros	70 (54-88)	39 (30.8-48)	182 (132-235)	42.3 (31-54.4)	0.224 (0.069 - 0.378)	0.004
Congo	531 (406-637)	55.8 (41-67.2)	1252 (847-1626)	54.8 (35.6-69)	-0.048 (-0.293 - 0.198)	0.704
Cook Islands	2 (2-3)	17.5 (13.8-23.2)	5 (4-7)	22 (16.6-27.2)	0.763 (0.578 - 0.949)	<0.001
Costa Rica	264 (247-279)	15.3 (14.2-16.2)	1605 (1391-1794)	29 (25.2-32.3)	2.033 (1.294 - 2.778)	<0.001
Côte d'Ivoire	1455 (1171-1787)	38.9 (32-47.7)	4060 (3151-5240)	40.5 (33-51.2)	0.137 (0.017 - 0.256)	0.025

.	Number_1990(95%UI ¹)	ASMR ² _1990(95%CI ³)	Number_2021(95%UI)	ASMR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Croatia	502 (464-540)	9.5 (8.8-10.2)	1337 (1158-1549)	13.5 (11.6-15.7)	1.138 (0.012 - 2.277)	0.048
Cuba	831 (789-866)	8.3 (7.9-8.7)	3209 (2758-3638)	16.1 (13.9-18.3)	2.28 (1.849 - 2.713)	<0.001
Cyprus	188 (156-238)	41.3 (34.1-51.5)	343 (284-403)	21.5 (18.1-25)	-1.971 (-2.869 - -1.064)	<0.001
Czechia	1096 (999-1200)	8.2 (7.5-8.9)	1562 (1326-1820)	6.8 (5.8-8)	-0.483 (-1.138 - 0.177)	0.151
Democratic People's Republic of Korea	2021 (1438-2685)	14 (10.1-19.3)	4298 (3284-5596)	14 (10.7-18.3)	-0.012 (-0.038 - 0.015)	0.383
Democratic Republic of the Congo	5868 (4671-7377)	42.3 (34.5-52)	13845 (9966-18759)	42.9 (31.4-57.7)	0.06 (-0.025 - 0.145)	0.165
Denmark	413 (379-437)	4.8 (4.5-5.1)	1699 (1457-1893)	12.1 (10.5-13.5)	3.178 (2.229 - 4.135)	<0.001
Djibouti	35 (26-47)	29.3 (22.4-37.7)	211 (152-285)	41.8 (31.4-54.7)	1.148 (1.105 - 1.191)	<0.001
Dominica	19 (16-21)	32.4 (28.2-36.3)	40 (32-49)	50.3 (40.5-61.8)	1.446 (1.356 - 1.537)	<0.001
Dominican Republic	621 (533-750)	16.7 (14.3-20.3)	2392 (1646-3064)	24 (16.5-30.7)	1.376 (0.939 - 1.815)	<0.001

	Number_1990(95%UI ¹)	ASMR ² _1990(95%CI ³)	Number_2021(95%UI)	ASMR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Ecuador	1227 (1150-1287)	23.7 (22.1-25)	6502 (4898-8822)	42.1 (32.2-56)	1.515 (1.001 - 2.033)	<0.001
Egypt	10610 (8478-16104)	51.8 (40.3-82.6)	33311 (27183-40816)	71.7 (59.7-86.6)	1.185 (0.983 - 1.389)	<0.001
El Salvador	797 (702-1141)	25.3 (22.1-36.3)	4441 (3314-5504)	69.8 (52.2-86.8)	3.598 (3.188 - 4.011)	<0.001
Equatorial Guinea	79 (62-98)	43.8 (35-53.4)	255 (156-372)	54.7 (31.3-76.5)	0.76 (0.502 - 1.02)	<0.001
Eritrea	358 (267-498)	32.6 (24.7-45.5)	902 (610-1462)	38.1 (26.6-60.6)	0.488 (0.372 - 0.604)	<0.001
Estonia	120 (112-127)	6.4 (6-6.8)	527 (437-605)	17 (14.2-19.7)	3.23 (1.869 - 4.609)	<0.001
Eswatini	100 (79-125)	38.7 (30.5-48.3)	274 (174-383)	53.5 (36.5-71.6)	1.101 (0.815 - 1.387)	<0.001
Ethiopia	12912 (10097-14949)	69 (57-79.6)	16918 (14059-20068)	42.4 (34.8-50.2)	-1.554 (-1.695 - -1.412)	<0.001
Fiji	95 (67-136)	27.7 (19.6-40.5)	314 (231-410)	48 (36.4-61.9)	1.745 (1.523 - 1.967)	<0.001
Finland	214 (194-227)	3 (2.7-3.2)	818 (657-927)	4.9 (4-5.5)	1.618 (1.047 - 2.191)	<0.001
France	6888 (6157-7355)	7.7 (6.9-8.3)	15133 (12606-16843)	7.3 (6.2-8.1)	-0.139 (-0.513 - 0.237)	0.468
Gabon	265 (212-318)	51.1 (40.7-61.6)	621 (324-822)	71.5 (35.5-93)	1.139 (0.966 - 1.312)	<0.001

.	Number_1990(95%UI ¹)	ASMR ² _1990(95%CI ³)	Number_2021(95%UI)	ASMR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Gambia	115 (90-143)	33.7 (26.8-41.3)	403 (305-513)	43.2 (33.2-54.7)	0.79 (0.242 - 1.342)	0.005
Georgia	197 (161-247)	3.3 (2.7-4.1)	713 (574-898)	12.3 (9.9-15.5)	3.731 (1.723 - 5.778)	<0.001
Germany	11051 (10128-11739)	8.3 (7.6-8.8)	39563 (31943-45262)	15.4 (12.6-17.4)	2.063 (1.469 - 2.661)	<0.001
Ghana	1745 (1343-2490)	29.5 (22.8-41.8)	7076 (5563-8854)	47.7 (37.9-59.3)	1.561 (1.414 - 1.709)	<0.001
Greece	2985 (2744-3174)	21.3 (19.4-22.7)	7053 (6077-7641)	21.3 (18.7-23)	-0.105 (-2.186 - 2.02)	0.922
Greenland	3 (3-4)	13.1 (11-15.3)	8 (6-10)	14.8 (10.7-18.6)	0.456 (0.263 - 0.651)	<0.001
Grenada	27 (24-29)	35.7 (32.5-39.2)	62 (54-69)	58.3 (51-64.9)	1.884 (1.148 - 2.625)	<0.001
Guam	14 (12-17)	22.9 (20-28.3)	51 (42-58)	24 (20.4-27.2)	0.005 (-0.712 - 0.728)	0.989
Guatemala	1108 (1063-1158)	33.7 (32-35.3)	5448 (4533-6387)	50.7 (42.3-59.3)	1.527 (0.74 - 2.321)	<0.001
Guinea	1055 (850-1342)	32.3 (25.5-41.8)	1874 (1414-2582)	34.5 (25.9-47.8)	0.213 (0.143 - 0.282)	<0.001
Guinea-Bissau	201 (157-246)	50.1 (40.3-60.7)	316 (246-404)	46.4 (37-58.9)	-0.247 (-0.346 - -0.147)	<0.001
Guyana	117 (106-128)	30.5 (27.7-33.4)	349 (269-446)	56.5 (43.8-71.2)	2.044 (1.465 - 2.626)	<0.001

	Number_1990(95%UI ¹)	ASMR ² _1990(95%CI ³)	Number_2021(95%UI)	ASMR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Haiti	962 (707-1555)	28.7 (20.5-48.9)	2177 (1207-4587)	30.9 (17.2-64.8)	0.307 (0.223 - 0.39)	<0.001
Honduras	259 (215-328)	12.3 (10.1-16)	1439 (1077-1889)	24.6 (18.8-31.7)	2.287 (1.907 - 2.668)	<0.001
Hungary	842 (795-888)	6.3 (5.9-6.6)	2173 (1852-2483)	10.1 (8.7-11.6)	1.809 (1.493 - 2.125)	<0.001
Iceland	11 (10-12)	3.6 (3.2-3.9)	41 (33-46)	5.8 (4.7-6.5)	1.542 (1.187 - 1.898)	<0.001
India	58475 (50679-67536)	13.1 (11.2-15.2)	175637 (146072-208715)	15.8 (13.1-18.7)	0.676 (0.275 - 1.079)	0.001
Indonesia	18490 (15846-22280)	17.3 (14.9-21.8)	51165 (41553-63408)	23 (18.8-29)	0.946 (0.85 - 1.042)	<0.001
Iran (Islamic Republic of)	3718 (2816-5017)	17.8 (13-24.7)	13627 (11262-15175)	20.2 (16.5-22.6)	0.409 (0.19 - 0.628)	<0.001
Iraq	2948 (2325-3775)	36.7 (28.7-47.6)	8279 (5635-10644)	43.4 (30.5-54.8)	0.621 (0.33 - 0.913)	<0.001
Ireland	311 (288-330)	8.2 (7.5-8.7)	703 (587-792)	8.2 (6.9-9.2)	0.236 (-0.86 - 1.345)	0.674
Israel	970 (893-1037)	22.2 (20.2-23.8)	2790 (2314-3075)	19.7 (16.5-21.7)	-0.517 (-1.162 - 0.132)	0.118
Italy	7528 (6774-7922)	8.8 (7.8-9.2)	19086 (15314-21515)	9.3 (7.6-10.5)	0.221 (-0.041 - 0.483)	0.099
Jamaica	434 (408-457)	23.3 (21.9-24.6)	935 (707-1205)	29.2 (22-37.5)	0.889 (-0.55 - 2.348)	0.227

.	Number_1990(95%UI ¹)	ASMR ² _1990(95%CI ³)	Number_2021(95%UI)	ASMR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Japan	17679 (16010-18557)	11.6 (10.4-12.3)	52717 (41038-59205)	9.5 (7.8-10.4)	-0.69 (-1.06 - -0.319)	<0.001
Jordan	360 (293-470)	31.6 (25.6-41.5)	1876 (1492-2406)	33.1 (26.2-41.8)	-0.016 (-0.719 - 0.692)	0.964
Kazakhstan	737 (644-832)	5.3 (4.6-6)	1982 (1631-2335)	12.2 (10.1-14.4)	2.77 (1.227 - 4.337)	<0.001
Kenya	1950 (1548-3039)	25.2 (19.6-40.8)	7330 (5884-9860)	37.6 (29.8-49.5)	1.326 (1.178 - 1.474)	<0.001
Kiribati	11 (9-13)	30 (24.2-36.8)	29 (18-42)	43.1 (28-62.3)	1.217 (1.101 - 1.333)	<0.001
Kuwait	160 (144-178)	30.7 (26.6-34.3)	374 (276-459)	16 (11.7-19.7)	-2.356 (-3.912 - -0.774)	0.004
Kyrgyzstan	159 (141-180)	4.6 (4-5.2)	498 (415-596)	10 (8.3-11.9)	2.494 (1.616 - 3.379)	<0.001
Lao People's Democratic Republic	917 (677-1191)	43.9 (33.2-56.9)	1775 (1242-2408)	40.9 (29.1-54.7)	-0.232 (-0.281 - -0.183)	<0.001
Latvia	95 (89-101)	2.9 (2.7-3.1)	321 (265-392)	7.7 (6.4-9.5)	3.151 (2.239 - 4.072)	<0.001
Lebanon	592 (455-790)	32.3 (24.7-42.7)	2102 (1733-2534)	31.9 (26.3-38.5)	-0.029 (-0.185 - 0.128)	0.717
Lesotho	153 (119-202)	19.9 (15.3-26.5)	445 (311-595)	46.2 (32.8-59.4)	2.858 (2.484 - 3.234)	<0.001

	Number_1990(95%UI ¹)	ASMR ² _1990(95%CI ³)	Number_2021(95%UI)	ASMR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Liberia	533 (427-673)	46.4 (38-57.8)	954 (706-1263)	48.4 (36.3-63.3)	0.096 (-0.084 - 0.277)	0.296
Libya	503 (374-704)	28.1 (20.5-40.1)	2127 (1413-2796)	46.9 (31.3-61.1)	1.668 (1.357 - 1.98)	<0.001
Lithuania	104 (97-109)	2.5 (2.3-2.6)	332 (281-400)	5.8 (4.9-7.1)	3.126 (1.697 - 4.574)	<0.001
Luxembourg	52 (49-55)	10.3 (9.5-10.9)	158 (130-184)	12.6 (10.5-14.5)	0.826 (0.25 - 1.405)	0.005
Madagascar	1300 (1031-1793)	26.7 (21-38.2)	2660 (1941-3524)	27 (19.7-35.4)	0.029 (-0.244 - 0.303)	0.833
Malawi	1438 (1170-1736)	38.7 (31.2-49)	3141 (2543-3818)	45.4 (37.8-54.5)	0.558 (0.397 - 0.719)	<0.001
Malaysia	2075 (1795-2376)	22.6 (19.4-25.9)	7575 (6352-8581)	29.2 (24.4-33)	0.84 (0.603 - 1.077)	<0.001
Maldives	40 (34-51)	48.4 (39.7-69.3)	88 (71-105)	28.9 (23.4-34.5)	-1.732 (-1.931 - -1.533)	<0.001
Mali	1405 (1153-1734)	38.3 (31.3-47.7)	3001 (2407-3922)	37.4 (30.3-48.1)	-0.058 (-0.212 - 0.096)	0.461
Malta	46 (42-49)	12.1 (10.9-12.9)	141 (116-160)	12.5 (10.4-14.1)	0.113 (-0.329 - 0.556)	0.618
Marshall Islands	5 (3-9)	32.5 (20.2-58.7)	17 (6-49)	54.8 (17.4-160.8)	1.719 (1.61 - 1.829)	<0.001
Mauritania	394 (305-502)	42.6 (33.2-54.3)	774 (532-1095)	40.4 (27.5-56.5)	-0.159 (-0.251 - -0.066)	0.001

.	Number_1990(95%UI ¹)	ASMR ² _1990(95%CI ³)	Number_2021(95%UI)	ASMR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Mauritius	302 (288-315)	44.3 (42-46.4)	1414 (1304-1494)	80.1 (74.1-84.6)	1.568 (0.681 - 2.464)	0.001
Mexico	14133 (13701-14565)	36.9 (35.4-38.4)	67044 (58757-76983)	54.3 (47.8-61.9)	0.782 (-0.084 - 1.655)	0.077
Micronesia (Federated States of)	16 (11-25)	33.5 (22.8-54.5)	38 (27-53)	57.6 (42.1-80.9)	1.78 (1.713 - 1.847)	<0.001
Monaco	5 (4-6)	6.1 (4.6-7.4)	12 (9-14)	9.6 (7.6-11.4)	1.522 (1.356 - 1.688)	<0.001
Mongolia	173 (139-213)	15.4 (12.4-18.9)	296 (236-365)	13.6 (10.8-16.8)	-0.355 (-0.717 - 0.007)	0.055
Montenegro	76 (61-93)	12.9 (10.4-15.8)	165 (124-208)	19.1 (14-23.9)	1.338 (0.842 - 1.836)	<0.001
Morocco	3070 (2131-5653)	23.1 (15.7-45.6)	11890 (8911-15306)	40 (30.3-51.3)	1.761 (1.684 - 1.838)	<0.001
Mozambique	1433 (1145-1942)	26 (20.8-37.4)	3627 (2744-4922)	35.7 (26.9-48.8)	1.059 (0.847 - 1.272)	<0.001
Myanmar	6501 (4977-8336)	26.6 (20.6-34.4)	11244 (9001-14131)	24.9 (20.3-31.1)	-0.213 (-0.261 - -0.164)	<0.001
Namibia	119 (92-169)	21.8 (16.7-31)	313 (231-422)	26.7 (20.3-35.2)	0.7 (0.43 - 0.971)	<0.001
Nauru	2 (1-3)	41.1 (26.1-68.8)	3 (2-5)	63 (42.9-105.4)	1.404 (1.29 - 1.518)	<0.001

	Number_1990(95%UI ¹)	ASMR ² _1990(95%CI ³)	Number_2021(95%UI)	ASMR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Nepal	1249 (960-1663)	13.5 (10.4-18.1)	4048 (2947-5424)	19.2 (14.1-25.1)	1.154 (0.968 - 1.34)	<0.001
Netherlands	1325 (1179-1417)	6.6 (5.9-7.1)	4435 (3715-4925)	10.9 (9.2-12.1)	1.612 (1.124 - 2.103)	<0.001
New Zealand	271 (249-288)	7.3 (6.6-7.7)	957 (835-1041)	10.7 (9.4-11.6)	1.244 (0.324 - 2.173)	0.008
Nicaragua	492 (444-663)	29.4 (26.2-40.1)	2686 (2148-3230)	55.3 (44.7-66.5)	2.229 (1.584 - 2.879)	<0.001
Niger	874 (706-1119)	29.5 (23.9-38.7)	2007 (1440-3038)	27 (19.9-40.1)	-0.281 (-0.375 - -0.188)	<0.001
Nigeria	12895 (10282-15658)	31 (25.1-37.6)	25429 (19318-32599)	31.3 (25-38.1)	0.034 (-0.045 - 0.113)	0.398
Niue	1 (1-1)	29.9 (23.1-40.3)	1 (1-2)	56.1 (33.1-86.2)	2.006 (1.846 - 2.167)	<0.001
North Macedonia	173 (145-208)	10.1 (8.5-12.2)	370 (282-484)	13.6 (10.7-17.3)	1.1 (0.757 - 1.445)	<0.001
Northern Mariana Islands	6 (5-8)	37.3 (30.1-47.4)	25 (20-30)	57.6 (47.3-68.4)	1.292 (0.992 - 1.592)	<0.001
Norway	268 (241-282)	3.5 (3.2-3.7)	805 (673-878)	6.5 (5.5-7)	2.033 (1.205 - 2.867)	<0.001
Oman	140 (102-207)	22.9 (16.6-33.8)	616 (490-771)	41.7 (33-50.4)	2.001 (1.219 - 2.789)	<0.001
Pakistan	10395 (8266-13167)	18.8 (14.9-23.7)	31063 (24330-39844)	26.6 (21.4-33.9)	1.121 (1.027 - 1.214)	<0.001

	Number_1990(95%UI ¹)	ASMR ² _1990(95%CI ³)	Number_2021(95%UI)	ASMR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Palau	3 (2-4)	29.5 (21.1-39.3)	9 (6-12)	50.2 (36.2-66.3)	1.688 (1.483 - 1.894)	<0.001
Palestine	348 (260-460)	45.4 (34.2-61.6)	838 (711-1010)	43.2 (36.7-51.9)	-0.21 (-0.416 - -0.004)	0.046
Panama	201 (188-215)	13.5 (12.6-14.5)	1381 (1090-1653)	30.7 (24.3-36.8)	2.879 (2.287 - 3.474)	<0.001
Papua New Guinea	220 (145-312)	11.3 (7.9-15.9)	728 (561-945)	13.6 (10.4-19)	0.645 (0.448 - 0.842)	<0.001
Paraguay	355 (301-418)	16.1 (13.6-19.1)	1389 (1036-1761)	24.9 (18.7-31.5)	1.467 (1.028 - 1.908)	<0.001
Peru	3242 (2796-3748)	27 (23.3-31.4)	10386 (7395-13295)	30.9 (22.1-39.7)	0.527 (-1.098 - 2.179)	0.527
Philippines	8626 (7839-9922)	31.7 (28.9-35.6)	32883 (27438-38113)	41.7 (35-48.1)	0.865 (0.588 - 1.142)	<0.001
Poland	5309 (5123-5460)	12.8 (12.3-13.2)	4981 (4384-5654)	6.6 (5.8-7.6)	-2.194 (-3.049 - -1.333)	<0.001
Portugal	1597 (1486-1687)	13 (12-13.8)	4736 (3954-5301)	14.5 (12.3-16.2)	0.341 (-0.155 - 0.838)	0.178
Puerto Rico	1091 (1031-1148)	31.8 (29.9-33.4)	2537 (2093-2995)	32.1 (26.6-37.9)	-0.095 (-1.224 - 1.047)	0.87
Qatar	28 (16-43)	40.7 (22.7-66)	198 (153-254)	39.9 (32.4-49.2)	0.094 (-0.627 - 0.821)	0.798
Republic of Korea	4257 (3775-4740)	18.6 (16.3-21.4)	9823 (7902-11473)	10.8 (8.7-12.7)	-1.771 (-1.876 - -1.666)	<0.001

	Number_1990(95%UI ¹)	ASMR ² _1990(95%CI ³)	Number_2021(95%UI)	ASMR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Republic of Moldova	83 (79-87)	2 (1.9-2.1)	206 (179-242)	3.6 (3.2-4.2)	1.82 (-0.004 - 3.677)	0.05
Romania	2551 (2408-2682)	10.4 (9.8-10.9)	3325 (2869-3831)	8.6 (7.4-10)	-0.638 (-1.986 - 0.729)	0.358
Russian Federation	8804 (8612-8979)	5.1 (5-5.2)	14471 (13013-16149)	6.2 (5.6-6.9)	1.119 (0.033 - 2.218)	0.043
Rwanda	1301 (1059-1534)	47.9 (39.1-57)	2068 (1481-2765)	38.7 (28-51.2)	-0.702 (-0.928 - -0.476)	<0.001
Saint Kitts and Nevis	16 (15-17)	43.6 (40.5-46.8)	34 (28-40)	57.6 (48.5-65.8)	0.945 (0.22 - 1.676)	0.011
Saint Lucia	30 (29-32)	37.3 (35.3-39.2)	93 (77-111)	40.3 (33.5-47.9)	0.265 (-0.194 - 0.727)	0.258
Saint Vincent and the Grenadines	19 (17-20)	26.9 (24.9-28.7)	54 (48-61)	41.1 (36.2-46.4)	1.333 (0.556 - 2.117)	0.001
Samoa	24 (17-33)	31 (22.2-41)	58 (44-75)	43.5 (33-55.5)	1.099 (0.987 - 1.211)	<0.001
San Marino	2 (2-2)	5.5 (4.5-6.6)	4 (3-6)	3.9 (2.6-5.3)	-1.422 (-1.938 - -0.904)	<0.001
Sao Tome and Principe	34 (28-38)	53.7 (45.3-60.8)	69 (50-85)	72.4 (51.4-86.9)	0.948 (0.71 - 1.187)	<0.001
Saudi Arabia	2408 (1798-3342)	45.1 (33.5-64.1)	12226 (9096-15498)	79.3 (59.8-95.7)	1.85 (1.691 - 2.009)	<0.001

	Number_1990(95%UI ¹)	ASMR ² _1990(95%CI ³)	Number_2021(95%UI)	ASMR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Senegal	1300 (1084-1593)	40.6 (34.1-50.3)	3035 (2315-4175)	43.5 (33.6-59.2)	0.154 (0.009 - 0.3)	0.038
Serbia	1464 (1214-1828)	16.5 (13.6-20.8)	2713 (2196-3252)	15.9 (12.8-19.1)	0.001 (-0.348 - 0.351)	0.994
Seychelles	17 (15-19)	29.3 (25.5-33.4)	50 (40-58)	47.2 (37.9-55.4)	1.468 (1.138 - 1.798)	<0.001
Sierra Leone	628 (495-784)	30.1 (23.8-37.2)	1048 (802-1392)	29 (22.6-37.5)	-0.117 (-0.242 - 0.008)	0.066
Singapore	264 (250-275)	13.7 (12.8-14.4)	833 (718-926)	10.2 (8.7-11.3)	-0.918 (-1.669 - -0.161)	0.018
Slovakia	617 (530-708)	10.6 (9.1-12.2)	831 (677-1002)	8.9 (7.3-10.7)	-0.586 (-0.843 - -0.328)	<0.001
Slovenia	152 (142-163)	6.4 (5.9-6.9)	327 (261-415)	6.1 (4.9-7.8)	-0.074 (-0.515 - 0.369)	0.742
Solomon Islands	31 (13-50)	22.1 (11.6-34.6)	90 (69-116)	25 (20.1-31.5)	0.409 (0.17 - 0.648)	0.001
Somalia	1051 (755-1454)	45.7 (33.4-63.2)	2791 (1917-4130)	47.9 (33.1-68.3)	0.168 (0.049 - 0.287)	0.006
South Africa	4020 (3508-4993)	19.7 (16.8-25.1)	13502 (12124-14916)	33.2 (29.6-36.6)	1.653 (1.006 - 2.303)	<0.001
South Sudan	1009 (753-1391)	40.9 (31-56.2)	1949 (1428-2539)	55 (39.9-71.2)	0.963 (0.868 - 1.059)	<0.001
Spain	6907 (6235-7340)	13.3 (11.9-14.1)	14802 (11854-16621)	10.5 (8.6-11.8)	-0.692 (-0.912 - -0.472)	<0.001

	Number_1990(95%UI ¹)	ASMR ² _1990(95%CI ³)	Number_2021(95%UI)	ASMR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Sri Lanka	2614 (2219-3080)	27.7 (23.3-32.8)	5243 (3567-7155)	21.2 (14.6-28.5)	-0.754 (-1.146 - -0.36)	<0.001
Sudan	2043 (1462-3607)	22.7 (15.9-43.5)	5602 (4127-7495)	32.1 (24.3-43.8)	1.116 (1.048 - 1.184)	<0.001
Suriname	71 (61-81)	27.7 (24.2-31.8)	253 (189-329)	41.4 (31-53.6)	1.42 (0.843 - 2)	<0.001
Sweden	636 (578-678)	3.8 (3.5-4.1)	2518 (2087-2834)	8.9 (7.4-9.9)	2.741 (2.023 - 3.464)	<0.001
Switzerland	808 (722-860)	7.1 (6.4-7.6)	2599 (2042-2973)	10.2 (8.1-11.7)	1.288 (0.788 - 1.79)	<0.001
Syrian Arab Republic	1951 (1524-2563)	39.1 (30.4-52.8)	4836 (3387-6504)	47.7 (33.6-62.8)	0.525 (0.261 - 0.79)	<0.001
Taiwan (Province of China)	2954 (2802-3083)	24.1 (22.5-25.4)	8814 (7593-9771)	20 (17.4-22.1)	-0.637 (-1.226 - -0.044)	0.035
Tajikistan	59 (48-83)	1.8 (1.4-2.6)	152 (106-220)	2.4 (1.7-3.3)	0.947 (0.644 - 1.25)	<0.001
Thailand	7941 (6624-9995)	24.3 (20.2-30.6)	31734 (24197-39501)	29.9 (22.8-37.1)	0.629 (0.431 - 0.826)	<0.001
Timor-Leste	76 (57-101)	25.6 (19.7-35.6)	238 (172-335)	29.8 (21.8-41.4)	0.452 (0.258 - 0.647)	<0.001
Togo	381 (314-467)	31 (26.1-38)	1136 (854-1520)	34.5 (26.7-45.2)	0.351 (0.246 - 0.456)	<0.001

	Number_1990(95%UI ¹)	ASMR ² _1990(95%CI ³)	Number_2021(95%UI)	ASMR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Tokelau	0 (0-1)	24.6 (17.1-42.5)	1 (0-1)	37.3 (27-54.7)	1.388 (1.214 - 1.563)	<0.001
Tonga	7 (5-10)	13.4 (9.4-18.6)	16 (11-21)	20.6 (14.3-27)	1.425 (1.158 - 1.694)	<0.001
Trinidad and Tobago	192 (184-201)	24.7 (23.5-25.8)	755 (564-967)	40.2 (30.1-51.3)	1.713 (0.867 - 2.565)	<0.001
Tunisia	926 (706-1392)	22.2 (17-33.3)	3765 (2674-5162)	32.1 (23.1-43.9)	1.14 (0.924 - 1.356)	<0.001
Turkey	9286 (7515-12586)	30.6 (24.5-42.5)	24805 (19764-30524)	29.5 (23.3-36.4)	-0.075 (-0.514 - 0.367)	0.74
Turkmenistan	209 (191-228)	8.9 (8.1-9.8)	744 (574-947)	18 (14-22.7)	2.057 (1.052 - 3.072)	<0.001
Tuvalu	2 (1-3)	27.8 (20.8-43.6)	4 (3-6)	40.7 (29.7-58.9)	1.255 (1.175 - 1.335)	<0.001
Uganda	1868 (1404-2443)	31 (23.5-40.7)	5279 (4093-6903)	38.8 (30.8-50.8)	0.725 (0.631 - 0.818)	<0.001
Ukraine	84 (80-88)	0.1 (0.1-0.1)	1605 (1204-2049)	2.4 (1.8-3.1)	9.456 (6.804 - 12.174)	<0.001
United Arab Emirates	83 (57-119)	23.1 (16-32.6)	672 (427-914)	37.5 (20.9-49.2)	1.594 (-0.498 - 3.731)	0.136
United Kingdom	4239 (3908-4410)	4.6 (4.2-4.8)	9679 (8207-10541)	6.2 (5.4-6.8)	1.01 (0.389 - 1.633)	0.001

	Number_1990(95%UI ¹)	ASMR ² _1990(95%CI ³)	Number_2021(95%UI)	ASMR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
United Republic of Tanzania	3665 (3049-4635)	36.1 (30.3-46.2)	8860 (7121-11155)	37.7 (30.1-46.9)	0.164 (0.032 - 0.297)	0.015
United States of America	27826 (25245-29210)	8.5 (7.7-8.9)	135880 (118167-146606)	21.9 (19.3-23.5)	3.11 (2.903 - 3.317)	<0.001
United States Virgin Islands	15 (12-19)	19.9 (16.6-24)	33 (23-43)	20.5 (14.7-26.6)	0.071 (-0.404 - 0.548)	0.771
Uruguay	598 (561-628)	15.5 (14.5-16.2)	1167 (1034-1270)	17.9 (16.1-19.4)	0.487 (-0.087 - 1.064)	0.096
Uzbekistan	617 (441-920)	5 (3.4-7.9)	3589 (3013-4204)	14.2 (12.1-16.7)	2.861 (1.262 - 4.485)	<0.001
Vanuatu	13 (8-22)	22 (14.3-38.7)	55 (40-85)	34.3 (24.7-52.6)	1.453 (1.305 - 1.6)	<0.001
Venezuela (Bolivarian Republic of)	1587 (1501-1651)	16.3 (15.2-17.1)	11753 (8833-14984)	40.5 (30.4-51.3)	3.234 (2.521 - 3.952)	<0.001
Viet Nam	9150 (6657-11695)	23.5 (17.1-30.1)	23706 (16677-29759)	27 (19.1-33.4)	0.476 (0.413 - 0.539)	<0.001
Yemen	871 (580-1629)	19.1 (12.7-38.9)	2471 (1678-4179)	20.6 (14.2-34.6)	0.242 (0.1 - 0.384)	0.001

		Year 1990		Year 2021		AAPC ⁴ (95%CI)	P value ⁵	Trend1		Trend2		Trend3		Trend4		Trend5		Trend6	
		Number	ASDR ²	Number	ASDR			Period	APC ⁶	Period	APC	Period	APC	Period	APC	Period	APC	Period	APC
		(95%UI ¹)	(95%CI ³)	(95%UI)	(95%CI)														
type of CKD	Female			2069393															
		9670407	426.9	2	465.7	0.292													
		(8788280-10592764)	(389.1-467.4)	(188366-14-2272)	(424-511.1)	(0.193 - 0.392)	<0.001	1990-1996	0.029	1996-2002	1.119	2002-2011	0.15	2011-2016	0.609	2016-2019	-0.187	2019-2021	0.547
	DMT1 ⁷			8832)															
		2227518	47	3875628	45.2	-0.119													
		(1835373-2679208)	(38.4-57.3)	(306239-6-48455)	(36-56.3)	(-0.209 - -0.03)	0.009	1990-1997	-0.163	1997-2000	0.936	2000-2004	-0.052	2004-2007	-1.523	2007-2012	-0.57	2012-2021	0.257
	DMT2 ⁸			1127893															
		4122919	105.7	5	131.1	0.696													
		(3498980-4818958)	(90.7-122.7)	(968278-5-13103)	(112.8-152.5)	(0.595 - 0.797)	<0.001	1990-1994	0.109	1994-1997	0.908	1997-2004	1.591	2004-2007	-0.314	2007-2015	0.88	2015-2021	0.208
	GN ⁹			871)															
		3751088	77.8	6959758	84.5	0.271													
		(3252292-4269460)	(67.6-88.4)	(601841-4-79616)	(73.2-96.1)	(0.171 - 0.37)	<0.001	1990-1997	0.116	1997-2000	1.192	2000-2012	0.057	2012-2016	0.815	2016-2019	-0.265	2019-2021	0.441
	Hypertension			73)															
		4344896	107.8	1085072	128.4	0.322													
		(3676494-5110004)	(91.3-126.9)	(920708-0-12320)	(109.1-145.6)	(0.262 - 0.383)	<0.001	1990-1996	0.321	1996-2003	1.314	2003-2007	-0.156	2007-2016	0.671	2016-2021	0.284		
			650)																

		Year 1990		Year 2021		AAPC ⁴ (95%CI)	P value ⁵	Trend1		Trend2		Trend3		Trend4		Trend5		Trend6	
		Number	ASDR ²	Number	ASDR			Period	APC ⁶	Period	APC	Period	APC	Period	APC	Period	APC	Period	APC
		(95%UI ¹)	(95%CI ³)	(95%UI)	(95%CI)														
type of CKD	Other and unspecified causes			1148863															
		6293473	141.5	6	140.4	-0.016	0.655	1990-1995	-0.368	1995-2003	0.491	2003-2012	-0.189	2012-2016	0.137	2016-2019	-0.601	2019-2021	0.19
		(5433783-7066172)	(122.8-160.3)	(100078-38-13046210)	(122.6-159.3)	(-0.088 - 0.056)													
Region	Southeast Asia	2408834	751.9	5703263	846.3	0.413	<0.001	1990-2005	0.534	2005-2013	0.13	2013-2021	0.47						
		(2133712-2690991)	(672.3-850.8)	(5028657-6329025)	(753.1-940.5)	(0.366 - 0.46)													
	Oceania	22680	583.7	65815	699	0.623	<0.001	1990-2001	1.436	2001-2010	0.024	2010-2021	0.306						
		(16686-29125)	(445.8-742)	(55558-77796)	(597.9-821.3)	(0.541 - 0.706)													
	East Asia	4372608	461.3	6486167	322.4	-1.154	<0.001	1990-1998	-1.596	1998-2004	0.471	2004-2007	-3.513	2007-2018	-1.3	2018-2021	-0.274		
		(3843678-4996867)	(406.8-529.1)	(5538060-7597380)	(275.4-377.3)	(-1.252 - -1.057)													
	South Asia	3674401	509.8	8443339	540.6	0.237	0.027	1990-1997	0.423	1997-2012	-0.107	2012-2015	1.124	2015-2018	-0.162	2018-2021	1.048		
		(3157460-4115106)	(449.6-573.3)	(7372315-9681828)	(473.8-620.4)	(0.027 - 0.447)													

		Year 1990		Year 2021		AAPC ⁴ (95%CI)	P value ⁵	Trend1		Trend2		Trend3		Trend4		Trend5		Trend6		
		Number	ASDR ²	Number	ASDR			Period	APC ⁶	Period	APC	Period	APC	Period	APC	Period	APC	Period	APC	
		(95%UI ¹)	(95%CI ³)	(95%UI)	(95%CI)															
Region	Western	1112629	928.7	2437269	930.7	0.005	0.894	1990-	0.977	1994-	0.057	1997-	-0.292	2009-	0.536	2013-	0.194	2016-	-0.623	
	Sub-Saharan	(952298-1	(800.3-1067	(199265	(788.4-1	(-0.067 -		1994		1997		2009		2013		2016		2021		
	Africa	275995)	.1)	2-28936	081.1)	0.077)														
	Southern	202978	623.9	551466	896	1.223	<0.001	1990-	1.681	1995-	3.937	2004-	-0.318							
	Sub-Saharan	(179955-2	(548.6-742.	(494226-	(807.3-9	(0.985 -		1995		2004		2021								
	Africa	34849)	1)	622064)	97)	1.462)														
	Central	349929	1158.7	783700	1124.7	-0.1	0.002	1990-	-0.041	1999-	-0.861	2007-	0.299							
	Sub-Saharan	(293393-4	(983.4-1367	(622595-	(899-143	(-0.163 -		1999		2007		2021								
	Africa	10516)	)	996532)	6.1)	-0.037)														
Eastern	1117669	1095.2	2047629	948.4	-0.464	<0.001	1990-	0.197	1994-	-0.593	1998-	-1.137	2009-	-0.342	2014-	0.212				
Sub-Saharan	(975468-1	(965.9-1255	(179201	(838.7-1	(-0.539 -		1994		1998		2009		2014		2021					
Africa	248904)	)	9-23741	090.4)	-0.388)															
Tropical	594892	562.7	1311915	517	-0.227	0.034	1990-	-0.553	1994-	1.793	2000-	-1.747	2006-	-0.326						
Latin	(560161-6	(527.9-598.	(122067	(480.6-5	(-0.436 -		1994		2000		2006		2021							
America	31009)	7)	5-14011	52.1)	-0.017)															
Andean Latin	190986	754	524246	872.4	0.615	<0.001	1990-	2.109	2003-	-0.018	2011-	-3.323	2015-	0.928						
America	(174177-2	(688-838.7)	(434446-	(723.5-1	(0.323 -		2003		2011		2015		2021							
	11377)		625013)	037.9)	0.907)															

		Year 1990		Year 2021		AAPC ⁴ (95%CI)	P value ⁵	Trend1		Trend2		Trend3		Trend4		Trend5		Trend6	
		Number (95%UI ¹)	ASDR ² (95%CI ³)	Number (95%UI)	ASDR (95%CI)			Period	APC ⁶	Period	APC	Period	APC	Period	APC	Period	APC	Period	APC
Region	Central Latin America	779859 (736752-822191)	767.9 (724.2-811.6)	2993750 (2691663-3371708)	1171.1 (1054.8-1316.3)	1.108 (0.479 - 1.741)	0.001	1990-1996	0.36	1996-1999	9.863	1999-2005	1.97	2005-2008	3.897	2008-2016	-0.488	2016-2021	-3.049
	Caribbean	161590 (149056-180712)	565.1 (523.6-636.6)	385286 (331558-454109)	735.8 (631-867.9)	0.89 (0.571 - 1.209)	<0.001	1990-1995	-1.431	1995-1998	1.454	1998-2001	3.321	2001-2008	0.732	2008-2016	1.943	2016-2021	0.006
	North Africa and Middle East	1493457 (1272351-1963220)	759.9 (642.7-1059.2)	3925988 (3427227-4413622)	846.6 (747.2-948)	0.392 (0.31 - 0.475)	<0.001	1990-2004	-0.158	2004-2016	1.162	2016-2021	0.098						
	Central Asia	176292 (152244-202201)	326.1 (278.5-378.8)	427633 (377524-490696)	493.2 (436-565.5)	1.394 (0.66 - 2.133)	<0.001	1990-1992	9.986	1992-2002	2.079	2002-2005	4.265	2005-2010	-0.304	2010-2013	-2.504	2013-2021	-0.011
	Central Europe	469644 (436516-504841)	342.8 (318.7-368.5)	539982 (472193-612672)	266.9 (233.4-306.2)	-0.763 (-1.042 - -0.484)	<0.001	1990-1993	-2.153	1993-2002	-1.083	2002-2007	0.836	2007-2011	-1.176	2011-2014	-3.165	2014-2021	0.399
	Eastern Europe	521705 (463250-581791)	207.4 (184.7-230.9)	642467 (562943-726952)	204.7 (180.4-232.1)	0 (-0.576 - 0.58)	0.999	1990-1994	5.003	1994-1997	-4.052	1997-2000	1.782	2000-2013	-1.689	2013-2016	2.898	2016-2021	0.234

		Year 1990		Year 2021		AAPC ⁴ (95%CI)	P value ⁵	Trend1		Trend2		Trend3		Trend4		Trend5		Trend6	
		Number (95%UI ¹)	ASDR ² (95%CI ³)	Number (95%UI)	ASDR (95%CI)			Period	APC ⁶	Period	APC	Period	APC	Period	APC	Period	APC	Period	APC
Region	Western Europe	1267566 (1125408-1409086)	234.1 (206.8-260.1)	2361342 (206709 8-26381 63)	241.7 (209.8-271.1)	0.127 (-0.031 - 0.285)	0.115	1990-1992	-3.154	1992-1997	-0.332	1997-2002	1.946	2002-2010	-0.446	2010-2015	1.489	2015-2021	-0.242
	Southern Latin America	281092 (266405-294525)	612.7 (580.9-641.7)	441138 (411345-467913)	515.2 (481.8-546.8)	-0.558 (-1.132 - 0.019)	0.058	1990-1992	0.959	1992-1995	-2.484	1995-1998	3.491	1998-2002	1.541	2002-2019	-1.14	2019-2021	-4.228
	High-income North America	895097 (798640-986360)	266.6 (238.3-293.2)	3120983 (286420 6.8-3351 576)	508.8 (467-545.4)	2.107 (1.883 - 2.332)	<0.001	1990-1998	-2.596	1998-2004	0.471	2004-2007	-2.513	2007-2018	-2.3	2018-2021	-0.574		
	High-income Asia Pacific	599581 (550356-643830)	315.7 (289-339.2)	1146613 (990343-1268312))	235.6 (206-259.6)	-0.996 (-1.159 - -0.834)	<0.001	1990-1992	-2154	1992-1997	-1.332	1997-2002	0.946	2002-2010	-0.646	2010-2015	0.489	2015-2021	-0.642
	Australasia	46405 (42217-50551)	211.1 (192.4-229.6)	113693 (101514-125301)	216.6 (193.2-239.2)	0.007 (-0.519 - 0.535)	0.98	1990-1996	-1.113	1996-2012	0.888	2012-2015	3.39	2015-2021	-2.831				
	Low SDI	2564545 (2265146-2870454)	853.9 (760.1-971.8)	5042405 (440865 3-58415 16)	791.8 (704.1-909.1)	-0.242 (-0.33 - -0.154)	<0.001	1990-1996	0.152	1996-2008	-0.893	2008-2011	0.014	2011-2014	1.073	2014-2021	-0.129		

		Year 1990		Year 2021		AAPC ⁴ (95%CI)	P value ⁵	Trend1		Trend2		Trend3		Trend4		Trend5		Trend6	
		Number (95%UI ¹)	ASDR ² (95%CI ³)	Number (95%UI)	ASDR (95%CI)			Period	APC ⁶	Period	APC	Period	APC	Period	APC	Period	APC	Period	APC
SDI ¹⁰	Low-middle SDI	1061126																	
		4690095	609.4	0	687	0.414		1990-		2003-		2012-		2015-					
		(4056126- 5163160)	(545.1-686. 3)	(959982 1-11771	(622.5-7 65.2)	(0.331 - 0.498)	<0.001	2003	0.518	2012	0.189	2015	0.826	2021	0.32				
	Middle SDI	1570056																	
		7031758	585.6	8	596.4	0.046		1990-		1995-		2003-							
		(6325501- 7794727)	(531.8-652. 6)	(142069 21-1714	(540.3-6 50.5)	(-0.03 - 0.123)	0.236	1995	-0.395	2003	0.998	2021	-0.251						
	High-middle SDI	5944277																	
		3534406	360.8	(537285	324.6	-0.356		1990-		1997-		2004-20		2007-20		2013-20			
		(3184087- 3954975)	(325.5-401. 5)	0-66234 07)	(293.6-3 60.9)	(-0.486 - -0.226)	<0.001	1997	-0.393	2004	-0.589	07	-1.525	13	-0.851	16	0.213		
	High SDI	7115740																	
		2898450	277.6	(646411	358.5	0.829 (0.68		1990-		1992-		1997-		2001-		2009-		2015-	
		(2605440- 3169018)	(250-303.2)	2-77592 50)	(324.7-3 90.2)	- 0.977)	<0.001	1992	-1.254	1997	0.084	2001	2.917	2009	0.385	2015	2.059	2021	0.147

1:UI=uncertainty interval. 2:ASDR = age-standardized disability-adjusted life years rate adjusted to the world population(per 1000,000) . 3: CI=confidence intervals. 4:AAPC = average annual percentage change calculated by Joinpoint regression analysis; AAPC>0 indicated an upward trend, and AAPC<0 indicated a downward trend. 5: P-value was calculated by Joinpoint regression analysis; P<0.05 showed that the trend suggested by the AAPC was significant. 6:APC= annual percent change, APC was significantly different from 0 (two-side p<0.05). 7:DMT1=diabetes mellitus type 1. 8.DMT2=diabetes mellitus type 2. 9.GN=glomerulonephritis. 10.SDI = socio-demographic index.

Table S5 The number and age standard disability-adjusted life years rate of chronic kidney disease in 1990 and 2021, and AAPC from 1990 to 2021 in 204 countries and territories

	Number_1990(95%UI ¹)	ASDR ² _1990(95%CI ³)	Number_2021(95%UI)	ASDR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Afghanistan	94773 (70923-137292)	1274.3 (956-1918.6)	173983 (108001-286182)	1343.2 (830.9-2358)	0.172 (0.08 - 0.264)	<0.001
Albania	9416 (8198-10999)	378.2 (328.6-441.4)	11183 (9088-13561)	303.9 (249.2-366.3)	-0.783 (-1.065 - -0.5)	<0.001
Algeria	79125 (60711-119848)	593.9 (442.4-962.7)	241373 (197533-295747)	724.2 (595.9-868.8)	0.656 (0.594 - 0.718)	<0.001
American Samoa	260 (201-353)	953.2 (740.8-1294.2)	938 (740-1163)	1950.9 (1545.9-2408.4)	2.489 (2.239 - 2.74)	<0.001
Andorra	148 (115-187)	286.9 (224.8-360.9)	357 (285-435)	229.2 (181.7-279.9)	-0.816 (-1.029 - -0.601)	<0.001
Angola	60560 (47304-74043)	1068.6 (834.9-1327)	158051 (120480-207619)	1011.8 (761.7-1315)	-0.244 (-0.338 - -0.15)	<0.001
Antigua and Barbuda	436 (405-466)	807.8 (751.9-862.9)	1162 (1070-1242)	1116.5 (1028.1-1190.1)	1.012 (0.199 - 1.83)	0.015
Argentina	223942 (212662-235443)	705.3 (669.3-740.3)	315536 (295283-335059)	573.2 (537.7-608.5)	-0.59 (-0.859 - -0.32)	<0.001
Armenia	4757 (3535-5893)	168.2 (126.2-208.6)	15239 (12675-18395)	380.2 (316.2-457.4)	2.698 (1.065 - 4.357)	0.001
Australia	38617 (35222-42200)	211.2 (193.1-230.1)	93074 (82639-102916)	207.1 (183.5-229)	-0.162 (-0.578 - 0.256)	0.446
Austria	23090 (20228-25966)	213.4 (187-238.5)	56356 (49530-62593)	288.2 (253.5-323.9)	1.043 (0.497 - 1.593)	<0.001

	Number_1990(95%UI ¹)	ASDR ² _1990(95%CI ³)	Number_2021(95%UI)	ASDR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Azerbaijan	22175 (18576-26606)	374.1 (313.5-447.8)	47430 (37765-57959)	451.9 (364.8-546.7)	0.629 (0.331 - 0.928)	<0.001
Bahamas	1314 (1209-1413)	710.7 (653.6-766.6)	4315 (3520-5314)	1035.6 (849-1270.9)	1.236 (0.45 - 2.029)	0.002
Bahrain	1611 (1272-2077)	856.9 (670.3-1110.3)	7698 (6382-9087)	963.5 (793.3-1153.7)	0.373 (-0.143 - 0.893)	0.157
Bangladesh	551460 (306452-697970)	604.3 (447.8-702)	577364 (481335-715354)	408 (343.9-506)	-1.222 (-1.35 - -1.094)	<0.001
Barbados	1555 (1455-1646)	564.8 (528.5-598.1)	3422 (2743-4181)	732.6 (589.2-903)	1 (0.276 - 1.73)	0.007
Belarus	13038 (10184-15922)	109.6 (86.1-132.8)	21603 (17974-26090)	149.8 (125.8-179.8)	1.041 (0.585 - 1.498)	<0.001
Belgium	36155 (31529-40640)	248.1 (215.3-279.2)	55840 (47926-63208)	234 (201.3-266.8)	-0.174 (-0.447 - 0.1)	0.214
Belize	848 (796-903)	718.8 (674.5-763.4)	4198 (3725-4677)	1236.1 (1098.8-1377.9)	1.683 (1.075 - 2.294)	<0.001
Benin	29653 (25048-34516)	999.3 (868.4-1155.7)	71721 (57427-87409)	990.1 (808.6-1210.3)	-0.021 (-0.183 - 0.141)	0.801
Bermuda	264 (244-284)	421.4 (389.5-452.8)	482 (414-570)	395.4 (339.7-465.5)	-0.303 (-0.918 - 0.316)	0.337
Bhutan	1915 (1398-2531)	571.2 (433-749)	3865 (2821-5112)	600.1 (438.8-786.1)	0.16 (0.087 - 0.234)	<0.001

	Number_1990(95%UI ¹)	ASDR ² _1990(95%CI ³)	Number_2021(95%UI)	ASDR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Bolivia (Plurinational State of)	45375 (38779-56751)	1123.7 (953.4-1408.5)	121335 (92262-157620)	1307.4 (1008.7-1688.7)	0.519 (0.458 - 0.581)	<0.001
Bosnia and Herzegovina	13424 (11787-15111)	326.9 (287.9-366.2)	17500 (14014-21236)	311.2 (253.2-378.5)	-0.082 (-0.368 - 0.204)	0.574
Botswana	4159 (3143-5808)	645.6 (493-883.8)	11766 (9282-16126)	734.5 (596.1-978.2)	0.406 (0.032 - 0.782)	0.033
Brazil	582735 (547944-618485)	565.2 (529.7-600.8)	1273112 (1182007-1361964)	513.8 (477-550.1)	-0.264 (-0.475 - -0.053)	0.014
Brunei Darussalam	1038 (881-1248)	843.6 (710.9-1036.2)	2607 (2282-2940)	776.6 (676.5-884.2)	-0.316 (-0.473 - -0.159)	<0.001
Bulgaria	27816 (24930-30650)	274.1 (246.8-301.4)	59631 (50184-71490)	487.9 (408.3-590.7)	1.766 (1.035 - 2.502)	<0.001
Burkina Faso	60272 (50415-71118)	1014.2 (852.5-1190.6)	140312 (112697-173625)	1094.7 (897.5-1322.3)	0.273 (0.083 - 0.463)	0.005
Burundi	31943 (25440-39942)	1032.6 (815.3-1304.7)	52752 (39451-75471)	837.3 (623.9-1184.7)	-0.696 (-0.892 - -0.501)	<0.001
Cabo Verde	1204 (1015-1391)	462.9 (389-534.5)	3178 (2305-3934)	677.4 (486.9-835)	1.236 (1.085 - 1.386)	<0.001
Cambodia	48373 (39570-58172)	757.4 (633.3-895.9)	101003 (77788-132516)	733.6 (574.4-943.9)	-0.074 (-0.187 - 0.04)	0.203
Cameroon	80907 (63460-102530)	1348.1 (1083-1721.9)	224422 (163790-306794)	1320 (973-1795.1)	-0.077 (-0.168 - 0.015)	0.1

	Number_1990(95%UI ¹)	ASDR ² _1990(95%CI ³)	Number_2021(95%UI)	ASDR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Canada	55398 (49172-61889)	178.4 (158.9-198.9)	150955 (134749-165748)	224.7 (200.2-246)	0.76 (0.411 - 1.109)	<0.001
Central African Republic	20433 (16924-24299)	1327.3 (1106-1592.6)	39107 (28354-53349)	1303.3 (972.4-1758.2)	-0.059 (-0.188 - 0.071)	0.373
Chad	28291 (22969-36811)	736.8 (598.1-968.7)	73527 (56687-98420)	840.5 (646.7-1175.4)	0.455 (0.387 - 0.524)	<0.001
Chile	43420 (40600-46183)	413.7 (384.8-440.4)	104137 (95786-111766)	415.1 (383.4-445.7)	-0.079 (-0.706 - 0.553)	0.807
China	4195631 (3673738-4813077)	457.7 (402.1-526.9)	6127923 (5184384-7208227)	315.3 (266.6-371.5)	-1.195 (-1.305 - -1.085)	<0.001
Colombia	122275 (114363-131312)	573.8 (533.1-613.7)	233106 (198873-269966)	424.4 (362.5-491.3)	-1.189 (-1.562 - -0.815)	<0.001
Comoros	2494 (1867-3109)	984.8 (763.6-1217)	5242 (3955-6654)	990.7 (748.1-1260.4)	-0.039 (-0.743 - 0.669)	0.913
Congo	19457 (15403-23362)	1483.5 (1157.4-1769.5)	44198 (31384-57320)	1365.6 (964.3-1712.3)	-0.242 (-0.486 - 0.003)	0.053
Cook Islands	71 (59-89)	535 (446.1-669.1)	151 (120-180)	631.4 (503.8-753)	0.545 (0.407 - 0.684)	<0.001
Costa Rica	9157 (8313-10118)	468.5 (425.5-515.9)	41809 (37382-46132)	764.5 (683.8-843)	1.624 (0.8 - 2.454)	<0.001
Côte d'Ivoire	62444 (50103-77072)	1012.2 (827.3-1226.8)	153321 (116483-194558)	1019.7 (809.3-1277.2)	0.034 (-0.111 - 0.181)	0.643
Croatia	15608 (14199-16944)	284.1 (259-307)	26558 (22898-31103)	308.8 (265.4-364.9)	0.253 (-0.63 - 1.145)	0.575

	Number_1990(95%UI ¹)	ASDR ² _1990(95%CI ³)	Number_2021(95%UI)	ASDR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Cuba	29762 (27495-32222)	285.6 (263.5-308.7)	79000 (69453-88900)	436.6 (383.8-494.2)	1.467 (0.892 - 2.045)	<0.001
Cyprus	3922 (3338-4773)	660.4 (562-797.9)	6772 (5876-7764)	377.8 (329.3-432.4)	-1.783 (-2.187 - -1.377)	<0.001
Czechia	35113 (31942-38431)	277 (253-303.2)	39158 (33376-45630)	197.7 (167.8-233.1)	-1.104 (-1.6 - -0.605)	<0.001
Democratic People's Republic of Korea	83478 (63914-105819)	483.4 (373.1-605.9)	153167 (124247-191899)	479.2 (390.6-602.6)	-0.03 (-0.049 - -0.011)	0.002
Democratic Republic of the Congo	238276 (194665-290653)	1138.9 (935.7-1393.9)	513717 (387253-677593)	1112.3 (844.2-1452.8)	-0.073 (-0.173 - 0.027)	0.154
Denmark	13497 (11412-15540)	177.6 (150.6-205.1)	31945 (28185-35763)	266.7 (235-300.9)	1.328 (0.896 - 1.761)	<0.001
Djibouti	1395 (1048-1830)	727.5 (561.1-939.8)	6952 (5050-9547)	959.1 (723.5-1275.5)	0.882 (0.799 - 0.964)	<0.001
Dominica	502 (447-555)	836.1 (744.6-925.4)	1029 (819-1263)	1295.5 (1035.6-1585.1)	1.427 (1.33 - 1.525)	<0.001
Dominican Republic	25415 (22411-29374)	515.4 (449.4-606.1)	73332 (54273-90211)	701.5 (518.5-864.8)	1.155 (0.724 - 1.587)	<0.001
Ecuador	40275 (37767-42623)	619.3 (581.4-655.6)	155833 (114778-216359)	950.4 (705.5-1310.6)	0.976 (0.423 - 1.533)	0.001

	Number_1990(95%UI ¹)	ASDR ² _1990(95%CI ³)	Number_2021(95%UI)	ASDR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Egypt	344984 (287412-482687)	1140.6 (932.6-1686.7)	933318 (767956-1131670)	1501.7 (1248.8-1804.3)	0.916 (0.676 - 1.156)	<0.001
El Salvador	28536 (25800-38102)	784.3 (704.6-1063.6)	118020 (88527-144949)	1904 (1419.6-2342.5)	3.076 (2.768 - 3.384)	<0.001
Equatorial Guinea	3014 (2404-3713)	1226.6 (976.6-1504.5)	9444 (6004-13862)	1323.1 (834.3-1860.8)	0.338 (0.164 - 0.513)	<0.001
Eritrea	15112 (11352-20868)	900.2 (680.9-1231.1)	32532 (22413-51729)	930.2 (649.1-1463.5)	0.084 (-0.06 - 0.228)	0.253
Estonia	5689 (5107-6257)	315.4 (284.6-344.8)	11443 (9973-13008)	455.8 (396.1-518.5)	1.192 (0.658 - 1.728)	<0.001
Eswatini	3616 (2910-4479)	1010.5 (813.5-1237.9)	9663 (6172-13306)	1431 (945-1925)	1.167 (0.904 - 1.43)	<0.001
Ethiopia	466721 (355203-540047)	1765.7 (1400.4-2039.4)	524752 (440481-620029)	966 (806.9-1140.3)	-1.932 (-2.061 - -1.804)	<0.001
Fiji	3880 (2939-5283)	849.7 (647.6-1147.1)	10463 (7966-13388)	1313 (1004.2-1661.1)	1.356 (1.169 - 1.544)	<0.001
Finland	8482 (7019-9973)	126 (103.9-148)	18425 (15613-21274)	145.1 (120.5-168.5)	0.484 (0.291 - 0.677)	<0.001
France	146507 (130176-162496)	180.8 (160.5-199.7)	266719 (232254-297859)	174 (151.5-196.1)	-0.082 (-0.376 - 0.212)	0.583
Gabon	8190 (6669-9730)	1304.8 (1072.4-1558)	19184 (11205-25666)	1670.8 (951.9-2188.5)	0.836 (0.64 - 1.032)	<0.001
Gambia	4626 (3620-5727)	892.6 (714-1097.6)	13852 (10535-17707)	1074.8 (822.4-1368.1)	0.702 (-0.136 - 1.548)	0.101

	Number_1990(95%UI ¹)	ASDR ² _1990(95%CI ³)	Number_2021(95%UI)	ASDR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Georgia	15560 (12706-18459)	264.2 (216.6-310.6)	24983 (20472-30628)	478.5 (394.3-587.7)	1.659 (1.085 - 2.236)	<0.001
Germany	300086 (265594-331706)	249.2 (219.7-276.9)	635444 (555490-709238)	302.9 (266-338.8)	0.647 (0.272 - 1.024)	0.001
Ghana	67702 (52675-92629)	772.8 (608.9-1076.7)	237458 (184981-297856)	1145 (904.6-1420.1)	1.286 (1.114 - 1.46)	<0.001
Greece	59717 (54719-64585)	424.9 (388.7-459.4)	112985 (100431-122488)	435.5 (396.1-475.3)	0.222 (-0.961 - 1.42)	0.714
Greenland	117 (102-135)	335.7 (294.9-381.6)	216 (178-257)	352.2 (285.9-418.3)	0.256 (0.116 - 0.395)	<0.001
Grenada	742 (678-812)	1044.7 (958.2-1144)	1684 (1467-1904)	1487.2 (1300.8-1673.6)	1.202 (0.549 - 1.859)	<0.001
Guam	535 (470-650)	626.6 (552.2-754.4)	1682 (1452-1875)	846.8 (733.4-946.5)	0.94 (0.576 - 1.306)	<0.001
Guatemala	44304 (42312-46649)	920.2 (874.3-970.6)	167359 (143276-194780)	1387.5 (1182.2-1617.2)	1.385 (0.493 - 2.285)	0.002
Guinea	39480 (32723-48547)	900.2 (741.3-1118.7)	67059 (52117-90058)	897 (697.8-1221.3)	-0.011 (-0.117 - 0.095)	0.843
Guinea-Bissau	8272 (6561-10146)	1414.4 (1129.6-1709.7)	12715 (9952-16050)	1220.6 (970.4-1525.5)	-0.47 (-0.58 - -0.361)	<0.001
Guyana	4232 (3811-4631)	883.2 (800.5-971.4)	10889 (8428-13860)	1574.8 (1227.3-1986.4)	1.933 (1.134 - 2.737)	<0.001
Haiti	40217 (31355-58452)	909.5 (697.6-1415.1)	82512 (50633-163742)	916.4 (561.1-1807.6)	0.072 (-0.131 - 0.276)	0.486

	Number_1990(95%UI ¹)	ASDR ² _1990(95%CI ³)	Number_2021(95%UI)	ASDR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Honduras	11630 (10042-13654)	444.7 (379.4-536.2)	46141 (35816-59163)	682.7 (536.6-871)	1.418 (1.085 - 1.752)	<0.001
Hungary	30171 (27070-33010)	235.3 (211.2-256.8)	46215 (39960-53280)	249.3 (214.4-289)	0.231 (0.002 - 0.461)	0.048
Iceland	348 (298-399)	120.5 (102.8-138.3)	884 (755-1011)	149.8 (127.2-172.4)	0.745 (0.544 - 0.946)	<0.001
India	2650925 (2335452-3030444)	481.6 (422.5-547.6)	6487629 (5592187-7501487)	521.8 (451.8-601.8)	0.304 (0.048 - 0.562)	0.02
Indonesia	875942 (750362-1005150)	664 (576-770.3)	1990496 (1655069-2360240)	760.4 (644.6-906.7)	0.448 (0.358 - 0.537)	<0.001
Iran (Islamic Republic of)	139435 (116402-174468)	463.6 (372.3-595.6)	356124 (310077-393518)	467.5 (406.8-515.1)	0.022 (-0.117 - 0.161)	0.76
Iraq	94335 (75090-120601)	950.3 (757.7-1205.4)	232396 (157615-296780)	940.8 (660.6-1195)	-0.01 (-0.212 - 0.193)	0.924
Ireland	9959 (8464-11701)	256.4 (219-299.9)	18990 (16118-22176)	246.7 (207-289.4)	-0.129 (-0.702 - 0.446)	0.659
Israel	22516 (20420-24257)	480.7 (435.3-518.1)	52713 (46207-58485)	417.3 (366.3-463.5)	-0.502 (-1.039 - 0.038)	0.068
Italy	198890 (174312-221494)	245.8 (215.5-275.2)	328820 (282849-371176)	217 (185-247.9)	-0.428 (-0.6 - -0.256)	<0.001
Jamaica	11644 (10948-12362)	617.4 (578.5-656.5)	25773 (19982-32671)	831.3 (642.4-1055.4)	1.552 (0.263 - 2.856)	0.018
Japan	460213 (416011-499612)	290.4 (262.5-315)	923022 (792680-1028099)	239.9 (209.7-266.1)	-0.639 (-0.922 - -0.355)	<0.001

	Number_1990(95%UI ¹)	ASDR ² _1990(95%CI ³)	Number_2021(95%UI)	ASDR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Jordan	12490 (10264-15613)	749.9 (617.2-949.5)	54300 (44489-67799)	710.1 (581.4-884.9)	-0.149 (-0.596 - 0.3)	0.514
Kazakhstan	49636 (42866-56925)	351.5 (300-403.8)	80323 (68213-94683)	448.3 (381.6-524.2)	0.928 (0.078 - 1.784)	0.032
Kenya	66436 (54525-94453)	608.9 (488.9-921.4)	230896 (188910-304540)	863.7 (701.7-1139.4)	1.137 (0.944 - 1.331)	<0.001
Kiribati	460 (380-548)	970 (797.7-1154.4)	1109 (759-1633)	1285.5 (892.4-1861.8)	0.935 (0.833 - 1.037)	<0.001
Kuwait	5748 (5276-6312)	716.8 (647.3-792.7)	11585 (9417-13665)	360.7 (286.1-427.9)	-2.369 (-3.655 - -1.066)	<0.001
Kyrgyzstan	12369 (10585-14240)	346.9 (294.6-401.8)	25313 (21875-29466)	448.3 (386.9-523.7)	0.591 (-0.005 - 1.191)	0.052
Lao People's Democratic Republic	36532 (27933-46903)	1380.5 (1067.1-1764.2)	63295 (45478-85994)	1174.6 (854.1-1578.5)	-0.522 (-0.592 - -0.451)	<0.001
Latvia	5859 (5024-6735)	184.2 (159.9-210.5)	9429 (7832-11172)	271.3 (225.8-322.4)	1.203 (0.788 - 1.62)	<0.001
Lebanon	16012 (12337-21059)	730.5 (569-955)	39230 (33152-46228)	630.3 (532.3-739.4)	-0.479 (-0.656 - -0.303)	<0.001
Lesotho	5121 (4128-6439)	560.6 (450.9-707.1)	14547 (10549-19456)	1221.5 (901-1605.1)	2.638 (2.337 - 2.941)	<0.001
Liberia	20964 (16740-25988)	1241 (1006.8-1562.2)	35243 (26717-46785)	1197 (916.2-1548.1)	-0.182 (-0.419 - 0.055)	0.131

	Number_1990(95%UI ¹)	ASDR ² _1990(95%CI ³)	Number_2021(95%UI)	ASDR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Libya	15078 (11908-19609)	675.2 (524.4-903.5)	58512 (37581-76498)	1067 (712.7-1379.3)	1.479 (1.25 - 1.709)	<0.001
Lithuania	7168 (6069-8288)	172.3 (147.2-198)	11654 (9803-13772)	237.6 (201.7-283.9)	1.032 (0.412 - 1.656)	0.001
Luxembourg	1331 (1185-1491)	264.3 (234.3-295.6)	3013 (2613-3410)	276.4 (240-314)	0.208 (-0.224 - 0.642)	0.346
Madagascar	47382 (38780-60549)	702.8 (568.5-945.4)	100664 (76256-129965)	678.7 (508.2-884.3)	-0.076 (-0.407 - 0.257)	0.655
Malawi	56194 (46192-66313)	1003.2 (830-1214.1)	110135 (88010-133712)	1114.9 (915.1-1338)	0.364 (0.171 - 0.558)	<0.001
Malaysia	77325 (68494-86547)	713.4 (633.7-796.6)	238095 (207099-268811)	817.7 (710.6-922.9)	0.524 (0.257 - 0.792)	<0.001
Maldives	1558 (1280-1852)	1347.6 (1152.4-1701.1)	2804 (2338-3335)	719.8 (606.7-852.7)	-2.062 (-2.217 - -1.907)	<0.001
Mali	56774 (47423-68232)	1040.3 (873.6-1283.9)	114837 (94129-145340)	950.5 (780.4-1210.6)	-0.274 (-0.41 - -0.139)	<0.001
Malta	1203 (1076-1338)	303 (271.3-336)	2837 (2467-3202)	305.7 (267.1-347.2)	0.026 (-0.275 - 0.327)	0.868
Marshall Islands	212 (144-351)	990.7 (669.1-1662.6)	669 (256-1739)	1587.8 (613.1-4196.4)	1.544 (1.449 - 1.639)	<0.001
Mauritania	13123 (10398-16336)	1080.7 (859.4-1353.4)	23187 (16553-31976)	937.8 (665.7-1292.5)	-0.466 (-0.625 - -0.307)	<0.001
Mauritius	10096 (9532-10683)	1253.6 (1184.9-1323.6)	38582 (35823-40737)	2196.1 (2043.1-2318.9)	1.486 (0.562 - 2.42)	0.002

	Number_1990(95%UI ¹)	ASDR ² _1990(95%CI ³)	Number_2021(95%UI)	ASDR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Mexico	474218 (450937-498550)	932.2 (884.9-983.3)	1940953 (1680240-2260842)	1489.7 (1295.2-1728)	1.027 (0.173 - 1.889)	0.018
Micronesia (Federated States of)	595 (425-860)	1017.5 (724.1-1495.1)	1337 (979-1830)	1629.5 (1205.4-2229.3)	1.546 (1.487 - 1.606)	<0.001
Monaco	121 (100-145)	182.2 (150.3-216.1)	228 (194-266)	233.4 (198.8-273.1)	0.811 (0.663 - 0.959)	<0.001
Mongolia	8119 (6668-9950)	603.2 (498.7-719.3)	13518 (11300-16158)	508.1 (425.4-602.4)	-0.508 (-0.948 - -0.066)	0.024
Montenegro	2342 (1990-2734)	382.9 (325.9-447.3)	3844 (3139-4690)	440.5 (361.7-537.9)	0.526 (0.245 - 0.808)	<0.001
Morocco	94039 (70697-146372)	572.7 (420.8-963.5)	289479 (223424-366427)	861.5 (664.2-1088.9)	1.323 (1.265 - 1.382)	<0.001
Mozambique	59057 (48400-73912)	681.4 (559-901.3)	141035 (107847-186077)	882.2 (684.6-1181.5)	0.852 (0.763 - 0.941)	<0.001
Myanmar	292701 (227943-364529)	964.3 (759.6-1204.7)	410628 (337703-500939)	799.6 (662.6-966.4)	-0.604 (-0.669 - -0.539)	<0.001
Namibia	4420 (3529-5944)	613.6 (493.2-821.7)	10401 (7883-13859)	695.8 (539.9-902.1)	0.443 (0.183 - 0.704)	0.001
Nauru	70 (47-100)	1204.2 (807.1-1774.9)	127 (95-167)	1785 (1311.6-2476.4)	1.281 (1.188 - 1.374)	<0.001
Nepal	65171 (52099-79837)	548.6 (437.4-676.3)	160662 (126887-204193)	652.7 (513.5-826)	0.561 (0.467 - 0.656)	<0.001

	Number_1990(95%UI ¹)	ASDR ² _1990(95%CI ³)	Number_2021(95%UI)	ASDR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Netherlands	37878 (32720-42847)	202.1 (174.6-228.7)	82167 (72158-93046)	238.5 (208.3-270.3)	0.511 (0.236 - 0.787)	<0.001
New Zealand	7788 (7047-8501)	211.3 (190.8-230.6)	20618 (18809-22453)	263.6 (241.2-286.6)	0.649 (-0.124 - 1.429)	0.1
Nicaragua	20446 (18371-26070)	922.3 (832.9-1189.3)	86099 (68224-102148)	1596.8 (1282.9-1885.7)	1.886 (1.361 - 2.413)	<0.001
Niger	41923 (33643-50607)	842.5 (698.1-1076.1)	80122 (59677-120176)	687.8 (523.4-1007.5)	-0.646 (-0.767 - -0.525)	<0.001
Nigeria	506251 (409099-599064)	881 (719.4-1053.3)	1007285 (771422-1268598)	824.4 (662.5-1015.2)	-0.225 (-0.295 - -0.154)	<0.001
Niue	19 (16-25)	880.2 (706-1130.8)	32 (20-47)	1612.3 (1011.2-2371.9)	2.022 (1.821 - 2.223)	<0.001
North Macedonia	6763 (5934-7869)	365.5 (320.3-423)	10889 (8783-13799)	373.5 (303.8-461.8)	0.117 (0.003 - 0.231)	0.044
Northern Mariana Islands	259 (200-334)	1022.8 (833.2-1275.7)	773 (644-914)	1475 (1249.1-1715.8)	1.127 (0.927 - 1.327)	<0.001
Norway	9013 (7541-10541)	137.2 (113.6-160.3)	17052 (14870-19536)	168.6 (144-194.1)	0.684 (0.193 - 1.178)	0.006
Oman	4965 (3836-6906)	578.2 (442.1-815.4)	19110 (15607-23751)	879 (718.9-1088.5)	1.393 (1.073 - 1.715)	<0.001
Pakistan	404931 (332986-499986)	590.5 (491.7-724.2)	1213820 (972621-1508801)	795.1 (645.5-990.2)	0.958 (0.893 - 1.022)	<0.001
Palau	97 (72-125)	880.1 (657.4-1119.2)	293 (214-385)	1382.2 (1017.8-1796)	1.452 (1.291 - 1.613)	<0.001

	Number_1990(95%UI ¹)	ASDR ² _1990(95%CI ³)	Number_2021(95%UI)	ASDR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Palestine	9946 (7801-12853)	979.4 (756.4-1283.1)	23468 (20331-27681)	885.7 (758.8-1049)	-0.361 (-0.529 - -0.194)	<0.001
Panama	7457 (6800-8224)	442 (401.2-486.7)	36062 (29067-42682)	814.7 (656-963.9)	2.055 (1.581 - 2.53)	<0.001
Papua New Guinea	11577 (8052-15381)	451.5 (332.1-589)	36547 (30525-44537)	515.1 (430.9-644.5)	0.445 (0.267 - 0.623)	<0.001
Paraguay	12158 (10659-13822)	465.6 (403.4-536)	38803 (31124-48290)	643.4 (516-802.8)	1.242 (1.051 - 1.433)	<0.001
Peru	105337 (92303-120681)	713.7 (619.9-822.7)	247079 (184433-311887)	720.9 (537.4-910.6)	0.007 (-1.363 - 1.397)	0.992
Philippines	354857 (323905-395725)	919.3 (837.5-1037.4)	1136959 (958347-1307840)	1232.7 (1049.6-1414.5)	0.965 (0.811 - 1.119)	<0.001
Poland	166060 (154655-176751)	405.7 (378.1-432.2)	136197 (117984-158787)	206.2 (177.9-241.2)	-2.227 (-2.754 - -1.698)	<0.001
Portugal	40610 (36847-44376)	330.5 (300.6-360.9)	76569 (67526-85773)	296.5 (262.7-332.8)	-0.359 (-0.703 - -0.013)	0.042
Puerto Rico	28212 (26770-29738)	793 (753.4-835.2)	51201 (43010-59665)	821.9 (692.5-956.4)	0.011 (-0.949 - 0.98)	0.982
Qatar	1101 (745-1589)	821.9 (512.1-1248.9)	7653 (6095-9741)	757 (614.5-939.6)	-0.206 (-0.797 - 0.389)	0.497
Republic of Korea	130194 (117908-142679)	429.6 (388.7-470.4)	200278 (171976-226706)	225.6 (193.7-255.8)	-2.08 (-2.195 - -1.964)	<0.001
Republic of Moldova	7738 (6388-9225)	184.4 (151.2-219.8)	12608 (10418-14983)	233.8 (193.3-279.2)	0.564 (-0.284 - 1.419)	0.193

	Number_1990(95%UI ¹)	ASDR ² _1990(95%CI ³)	Number_2021(95%UI)	ASDR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Romania	87976 (81527-94928)	348.6 (324-375.7)	92610 (78865-107339)	278 (236.9-323.9)	-0.759 (-1.274 - -0.242)	0.004
Russian Federation	428507 (391751-466416)	259.2 (236.9-282)	464004 (409800-529294)	213.6 (189.1-243.6)	-0.528 (-1.199 - 0.148)	0.125
Rwanda	48445 (39539-56316)	1255.6 (1043.6-1472.4)	65862 (48112-87152)	891.8 (663.5-1176.6)	-1.115 (-1.367 - -0.862)	<0.001
Saint Kitts and Nevis	420 (392-454)	1164.4 (1090.2-1254.5)	914 (747-1082)	1350.4 (1133.2-1575.8)	0.491 (-0.139 - 1.126)	0.127
Saint Lucia	885 (837-936)	955 (904-1009.7)	2376 (1996-2807)	1041.6 (875.8-1230)	0.289 (-0.323 - 0.904)	0.355
Saint Vincent and the Grenadines	569 (534-610)	737.2 (689.7-789)	1457 (1294-1663)	1083.5 (962.5-1234.4)	1.175 (0.477 - 1.878)	0.001
Samoa	868 (651-1147)	891.3 (674.9-1163.8)	1888 (1466-2394)	1214.4 (948-1524.9)	1.004 (0.907 - 1.1)	<0.001
San Marino	56 (47-66)	167.1 (138.9-195.7)	113 (89-140)	145.8 (113.8-182.3)	-0.533 (-0.718 - -0.347)	<0.001
Sao Tome and Principe	1102 (882-1290)	1349 (1113.6-1530.2)	2097 (1609-2634)	1636.6 (1240-1979.7)	0.612 (0.413 - 0.811)	<0.001
Saudi Arabia	80180 (61535-108291)	1089.8 (832.6-1468.2)	416093 (307761-529386)	1762.8 (1351.1-2169.6)	1.539 (1.303 - 1.775)	<0.001
Senegal	49306 (41083-60783)	1065.1 (898.2-1309.7)	95390 (73587-131487)	1027.6 (799-1391.7)	-0.209 (-0.363 - -0.055)	0.008

	Number_1990(95%UI ¹)	ASDR ² _1990(95%CI ³)	Number_2021(95%UI)	ASDR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Serbia	42655 (36005-50866)	434.2 (367.7-519.7)	58087 (48712-67910)	374.3 (316.5-434.5)	-0.455 (-0.782 - -0.126)	0.007
Seychelles	522 (466-589)	886.7 (790.4-1000.8)	1424 (1193-1643)	1226.4 (1031.4-1409.8)	1.069 (0.805 - 1.334)	<0.001
Sierra Leone	24287 (18928-30087)	832.1 (664.2-1021.9)	39388 (29974-52547)	770.1 (604.3-1010.8)	-0.252 (-0.39 - -0.114)	<0.001
Singapore	8136 (7624-8708)	355.8 (333.3-379.5)	20705 (18435-23087)	251.9 (223.9-280.3)	-1.126 (-1.532 - -0.717)	<0.001
Slovakia	19699 (17271-22267)	344.2 (302.5-388.6)	22738 (19458-26211)	265.3 (228.2-305.9)	-0.793 (-1.037 - -0.548)	<0.001
Slovenia	5091 (4580-5635)	220.2 (197.7-243.3)	7512 (6152-9249)	175.2 (142.3-217.9)	-0.731 (-1.037 - -0.424)	<0.001
Solomon Islands	1408 (669-2226)	774.7 (410.4-1191.8)	4011 (3105-5040)	870.9 (699.1-1073.3)	0.387 (0.163 - 0.611)	0.001
Somalia	42592 (31540-57931)	1182.7 (867-1615.4)	109717 (77473-161379)	1218.6 (853.7-1741)	0.114 (0.041 - 0.187)	0.002
South Africa	155415 (136560-179958)	616.7 (540.4-733.3)	415624 (377739-462537)	862.3 (784.9-953.7)	1.218 (1.069 - 1.367)	<0.001
South Sudan	33407 (25693-43506)	1014.3 (768.8-1354.6)	69366 (50852-90453)	1345 (1002.1-1742.3)	0.93 (0.777 - 1.082)	<0.001
Spain	156194 (141120-171158)	309.6 (280.3-339)	243084 (212322-273844)	225.4 (196.3-255.5)	-0.968 (-1.161 - -0.775)	<0.001
Sri Lanka	91811 (79288-106066)	769 (660-894.4)	161739 (117194-209551)	628.1 (460.8-813.2)	-0.604 (-0.985 - -0.222)	0.002

	Number_1990(95%UI ¹)	ASDR ² _1990(95%CI ³)	Number_2021(95%UI)	ASDR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Sudan	76183 (58482-110063)	624.9 (468.4-1022.6)	180786 (136192-237944)	770.7 (590-1012.6)	0.676 (0.596 - 0.756)	<0.001
Suriname	2433 (2055-2721)	831.3 (717.6-937.4)	7429 (5840-9298)	1181.2 (931.8-1473)	1.207 (0.738 - 1.678)	<0.001
Sweden	19881 (16791-23071)	141.2 (119.7-164.3)	44455 (38202-50852)	196.3 (169.2-224.9)	1.048 (0.775 - 1.322)	<0.001
Switzerland	21014 (18209-23719)	208.2 (180.6-235.2)	44996 (38424-51285)	228.6 (194.4-262.7)	0.315 (0.062 - 0.568)	0.015
Syrian Arab Republic	68209 (55197-84454)	968.5 (772.3-1242.8)	126862 (93695-168253)	1020.6 (760-1328.9)	0.165 (-0.166 - 0.498)	0.329
Taiwan (Province of China)	93499 (86835-100493)	604.5 (560.6-649.3)	205078 (181400-224760)	502.7 (447-550.5)	-0.617 (-1.044 - -0.189)	0.005
Tajikistan	6728 (5319-8239)	198.2 (154.9-245.3)	15292 (12007-19273)	217.6 (169.3-274.6)	0.326 (0.216 - 0.437)	<0.001
Thailand	306169 (262369-368081)	746.2 (641-897.8)	865932 (699035-1045232)	859.1 (698.5-1033.1)	0.447 (0.25 - 0.644)	<0.001
Timor-Leste	3510 (2766-4402)	805.7 (634-1037.6)	8029 (6032-10955)	852 (645.3-1147.7)	0.204 (-0.031 - 0.44)	0.089
Togo	16010 (13190-19324)	839.2 (706.9-1015.6)	42127 (31777-54924)	888.2 (691.8-1154.8)	0.19 (0.042 - 0.339)	0.012
Tokelau	10 (7-16)	752.8 (553-1180.9)	16 (12-22)	1136.2 (878.9-1548.4)	1.439 (1.188 - 1.691)	<0.001

	Number_1990(95%UI ¹)	ASDR ² _1990(95%CI ³)	Number_2021(95%UI)	ASDR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Tonga	294 (223-388)	481.5 (368.9-628.6)	535 (402-689)	639.2 (479.5-818.8)	0.936 (0.785 - 1.088)	<0.001
Trinidad and Tobago	6161 (5850-6493)	681.8 (647.7-716.4)	20236 (15316-25658)	1101.3 (836.6-1394.7)	1.717 (0.953 - 2.486)	<0.001
Tunisia	28625 (23139-40343)	534.6 (427.2-765.1)	85581 (62643-113057)	677.1 (500.9-889.4)	0.749 (0.576 - 0.922)	<0.001
Turkey	288241 (239747-364731)	749.2 (624.5-967.7)	552195 (453860-666416)	619.4 (509.5-750)	-0.579 (-0.984 - -0.173)	0.005
Turkmenistan	12416 (11128-13743)	475.9 (423.2-536.5)	33906 (27087-41471)	730.9 (586.8-893.3)	1.329 (0.668 - 1.995)	<0.001
Tuvalu	65 (51-93)	888.1 (693.7-1286.5)	127 (95-175)	1178.5 (885-1617.2)	0.928 (0.858 - 0.999)	<0.001
Uganda	65235 (50387-82208)	764.5 (582-980.3)	183294 (144104-239789)	919.2 (725.5-1193.4)	0.558 (0.404 - 0.712)	<0.001
Ukraine	53706 (38096-69878)	84.8 (60.7-108.7)	111725 (89366-135575)	171.8 (138.9-207.4)	2.475 (1.808 - 3.146)	<0.001
United Arab Emirates	3892 (2982-5153)	586.6 (434.3-801.6)	29680 (21617-37421)	782.9 (522.7-997.8)	0.942 (-0.419 - 2.32)	0.176
United Kingdom	155905 (129827-180904)	192.4 (160.6-223)	258501 (216482-299277)	213.4 (177.7-247.3)	0.315 (0.047 - 0.584)	0.021
United Republic of Tanzania	131082 (109800-160936)	903.1 (755.1-1140.9)	288849 (234235-364048)	899.3 (731.7-1124.4)	0.009 (-0.133 - 0.151)	0.905

	Number_1990(95%UI ¹)	ASDR ² _1990(95%CI ³)	Number_2021(95%UI)	ASDR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
United States of America	839563 (749127-924830)	276.1 (246.7-303.3)	2969764 (2728422-3188334)	543.3 (499.5-582.6)	2.208 (1.977 - 2.44)	<0.001
United States Virgin Islands	510 (432-606)	563.5 (478.3-667.3)	835 (611-1068)	599.2 (452.3-758)	0.247 (-0.102 - 0.597)	0.166
Uruguay	13717 (12910-14498)	364.8 (343.3-385.1)	21441 (19615-23134)	387.1 (357.2-417.5)	0.178 (-0.331 - 0.69)	0.493
Uzbekistan	44533 (35798-54486)	315.3 (247.4-392.7)	171630 (147004-200979)	580.8 (501.4-677.5)	2.025 (0.771 - 3.294)	0.001
Vanuatu	551 (376-866)	696.8 (485.1-1113.2)	2161 (1586-3205)	1042 (776.4-1542.2)	1.299 (1.13 - 1.469)	<0.001
Venezuela (Bolivarian Republic of)	61836 (57241-66347)	527.6 (484.6-568)	324201 (249903-407035)	1087 (843.3-1362.7)	2.526 (1.708 - 3.351)	<0.001
Viet Nam	305955 (223778-380082)	671.5 (506.4-832.4)	676321 (501845-849831)	685.9 (514.2-847.4)	0.073 (0.035 - 0.11)	<0.001
Yemen	33670 (24098-53572)	521.1 (367.1-927.4)	82899 (60825-131865)	510 (372.6-812.5)	-0.078 (-0.235 - 0.079)	0.329
Zambia	49375 (39792-57931)	1179.3 (995.9-1379.6)	123798 (84564-188445)	1289.7 (932.6-1817.4)	0.331 (0.177 - 0.486)	<0.001
Zimbabwe	30248 (24565-39272)	664 (538-847)	89465 (68552-116945)	1084.3 (848.3-1401.9)	1.737 (1.422 - 2.054)	<0.001

1: UI=uncertainty interval. 2: ASDR = age-standardized disability-adjusted life years rate adjusted to the world population(per 1000,000) . 3: CI=confidence intervals. 4: AAPC = average annual percentage change calculated by Joinpoint regression analysis; AAPC>0 indicated an upward trend, and AAPC<0 indicated a downward trend. 5: P-value was calculated by Joinpoint regression analysis; P<0.05 showed that the trend suggested by the AAPC was significant.

Table S6 The number and age standard prevalence rate of chronic kidney disease in 1990 and 2021, and joinpoint analysis from 1990 to 2021

[illegible]

		Year 1990		Year 2021		AAPC ⁴ (95%CI)	P value ⁵	Trend1		Trend2		Trend3		Trend4		Trend5		Trend6	
		Number (95%UI ¹)	ASPR ² (95%CI ³)	Number (95%UI)	ASPR (95%CI)			Period	APC ⁶	Period	APC	Period	APC	Period	APC	Period	APC	Period	APC
type of CKD	DMT1 ⁷	2967857 (2607069-3328285)	57.5 (50.9-64.1)	6295711 (5459693-7114345)	77.3 (66.9-87.6)	0.956 (0.847 - 1.065)	<0.001	1990-1995	-0.788	1995-2000	2.883	2000-2007	0.898	2007-2015	1.921	2015-2019	0.711	2019-2021	-2.512
	DMT2 ⁸	58105268 (53056992-63286818)	1327.2 (1223.3-1439.4)	1075599 (991707-115994732)	1259.6 (1162-1359.9)	-0.169 (-0.197 - -0.14)	<0.001	1990-1996	-0.221	1996-1999	-0.635	1999-2010	-0.221	2010-2015	0.225	2015-2021	-0.114		
	GN ⁹	6370882 (5926723-6848154)	128.5 (119.3-137.6)	1073580 (992550-11520171)	129.9 (120.2-139.5)	0.041 (0.027 - 0.054)	<0.001	1990-1995	-0.25	1995-2000	0.227	2000-2010	0.007	2010-2015	0.412	2015-2019	-0.534	2019-2021	0.702
	Hypertension	11712345 (10891658-12623876)	310.7 (289.1-333.8)	2446765 (22861634-26230869)	291.2 (272.5-311.9)	-0.213 (-0.244 - -0.181)	<0.001	1990-1994	-0.755	1994-1999	-0.269	1999-2005	0.007	2005-2010	-0.27	2010-2014	0.052	2014-2021	-0.159

	Region	Year 1990		Year 2021		AAPC ⁴ (95%CI)	<i>P</i> value ⁵	Trend1		Trend2		Trend3		Trend4		Trend5		Trend6	
		Number (95%UI ¹)	ASPR ² (95%CI ³)	Number (95%UI)	ASPR (95%CI)			Period	APC ⁶	Period	APC	Period	APC	Period	APC	Period	APC	Period	APC
	Other and unspecified causes	27180636 0 (25312297-59) 59)	6248.8 (5852.5-6683.3)	5246639 71 (488899-870) 562)	6247.9 (5823.9-6691.4)	0.007 (-0.016 - 0.031)	0.538	1990-1997	-0.291	1994-2001	-0.033	2001-2005	-0.163	2005-2010	0.047	2010-2015	0.439	2015-2021	-0.025
	Southeast Asia	33768821 (31068003-36689892))	10225.2 (9474-11022.1)	7356143 7 (677797-96) 7973)	10474.6 (9718.9-11301.7)	0.084 (0.075 - 0.092)	<0.001	1990-2001	0.009	2001-2009	0.178	2009-2016	0.093	2016-2019	0.207	2019-2021	-0.101		
	Oceania	306814 (282467-332777)	7742.4 (7231.4-8304.2)	776661 (715870-846878))	7950.7 (7408.8-8567.7)	0.087 (0.077 - 0.096)	<0.001	1990-1995	0.089	1995-2000	0.189	2000-2008	0.129	2008-2016	0.01	2016-2021	-0.128		
	East Asia	69797869 (64858255-75190145))	7083.6 (6610.1-7593.5)	1228492 32 (113607-491) 132)	6258.1 (5823.1-6729.8)	-0.388 (-0.463 - -0.313)	<0.001	1990-2000	-1.393	2000-2005	0.601	2005-2010	-0.789	2010-2015	2.073	2015-2019	-1.971	2019-2021	0.322

	Year 1990		Year 2021		AAPC ⁴ (95%CI)	<i>P</i> value ⁵	Trend1		Trend2		Trend3		Trend4		Trend5		Trend6	
	Number (95%UI ¹)	ASPR ² (95%CI ³)	Number (95%UI)	ASPR (95%CI)			Period	APC ⁶	Period	APC	Period	APC	Period	APC	Period	APC	Period	APC
Region	South Asia	72584182 (67087414-78502263))		1588033 54 147190 732-171 10265.7) 556959) 2247249	9565.3 (8903.7-10265.7) (-0.242 -0.042)	0.168	1990-2001	0.241	2001-2004	-1.631	2004-2011	-0.056	2011-2015	-0.563	2015-2019	0.777	2019-2021	-0.629
	Western Sub-Saharan Africa	9003658 (8381320-9663357)	8310.7 (7767.4-8851.6)	7 (208825-26-2419 1820)	8324.3 (7782.3-8871) (-0.002 -0.018)	0.116	1990-1995	-0.157	1995-2000	0.185	2000-2011	0.115	2011-2015	0.04	2015-2019	-0.292	2019-2021	-0.069
	Southern Sub-Saharan Africa	2945199 (2740170-3170275)	8946.4 (8370.4-9563.7)	5972951 (554745-6-64155 24)	9037.9 (8440.6-9647.1) (0.033 -0.057)	<0.001	1990-1999	0.181	1999-2021	-0.011								
Central Sub-Saharan Africa	2633228 (2443845-2831336)	9222 (8598.7-9806.7)	6811951 (636374-7-73131 87)	9165.2 (8640.8-9709.7) (-0.032 -0.006)	0.005	1990-1993	0.455	1993-1996	0.071	1996-2005	-0.145	2005-2009	-0.083	2009-2015	-0.147	2015-2021	0.06	
Eastern Sub-Saharan Africa	5981606 (5488507-6503182)	5677.2 (5266.2-6113.1)	6 (137417-59-1642 2384)	5821.3 (5404.5-6293.6)	0.08 (0.077 -0.083)	<0.001	1990-1995	-0.001	1995-2005	0.098	2005-2010	0.189	2010-2015	0.104	2015-2019	0.184	2019-2021	-0.344

		Year 1990		Year 2021		AAPC ⁴ (95%CI)	P value ⁵	Trend1		Trend2		Trend3		Trend4		Trend5		Trend6	
		Number	ASPR ²	Number	ASPR			Period	APC ⁶	Period	APC	Period	APC	Period	APC	Period	APC	Period	APC
		(95%UI ¹)	(95%CI ³)	(95%UI)	(95%CI)														
Region				1929570															
	Tropical	8408163	7763	3	7576.2	-0.077													
	Latin America	(7820461-9015639)	(7240.7-8281.3)	(18022781-20680042)	(7081.8107.5)	(-0.097 -0.056)	<0.001	1990-1992	-0.483	1992-1995	-0.205	1995-2000	0.344	2000-2008	-0.211	2008-2019	-0.096	2019-2021	0.122
	Andean Latin America	1465459 (1365798-1575973)	5766.6 (5377.8-6181)	3743589 (3478926-4028408)	5946.1 (5524.8-6371.5)	0.1 (0.091 - 0.108)	<0.001	1990-2000	-0.068	2000-2006	0.164	2006-2011	0.227	2011-2014	0.313	2014-2019	0.234	2019-2021	-0.232
	Central Latin America	8628113 (8065183-9238847)	8477 (7931.6-9062.8)	2210180 (20701763-23422153)	8642.9 (8089.3-9163.7)	0.066 (0.057 - 0.075)	<0.001	1990-1995	-0.119	1995-2000	0.016	2000-2005	0.132	2005-2009	0.265	2009-2015	0.16	2015-2021	-0.021
	Caribbean	1867236 (1741663-2000227)	6480.2 (6037.6-6925.8)	3468705 (3235452-3720720)	6633 (6181.3-7112.4)	0.075 (0.071 - 0.079)	<0.001	1990-1995	-0.025	1995-1999	0.048	1999-2004	0.098	2004-2011	0.076	2011-2019	0.183	2019-2021	-0.114
	North Africa and Middle East	19739135 (18244354-21279746)	9119.7 (8490.9-9769.6)	4966875 (45835433-53616786)	9180 (8523.5-9830.1)	0.022 (0.012 - 0.032)	<0.001	1990-1994	0.12	1994-2005	0.05	2005-2010	-0.018	2010-2015	0.06	2015-2019	-0.033	2019-2021	-0.221

		Year 1990		Year 2021		AAPC ⁴ (95%CI)	P value ⁵	Trend1		Trend2		Trend3		Trend4		Trend5		Trend6	
		Number	ASPR ²	Number	ASPR			Period	APC ⁶	Period	APC	Period	APC	Period	APC	Period	APC	Period	APC
		(95%UI ¹)	(95%CI ³)	(95%UI)	(95%CI)														
Region	Central Asia	5534240	10649.1	9356434	10698.2	0.011	<0.001	1990-2000	0.047	2000-2005	-0.169	2005-2010	0.147	2010-2015	0.05	2015-2019	0.134	2019-2021	-0.403
		(5182702-5905060)	(10005.7-11309.3)	(8704146-9969948)	(10022.9-11348.1)	(0.005 - 0.017)													
				1148126															
	Central Europe	8932587	6368.6	6	6205.2	-0.081	<0.001	1990-1992	0.485	1992-1995	0.17	1995-2000	-0.27	2000-2004	-0.18	2004-2015	-0.231	2015-2021	0.106
		(8363724-9525233)	(5978-6772)	(10766159-12145281)	(5841-6596.2)	(-0.099 - -0.062)													
				2731284															
	Eastern Europe	24173788	9327.5	3	9266.3	-0.022	<0.001	1990-1995	-0.01	1995-1999	-0.054	1999-2011	-0.036	2011-2014	-0.02	2014-2019	0.08	2019-2021	-0.157
		(22444048-26062971)	(8680-10050.1)	(25403078-29335270)	(8619.4-9989.5)	(-0.029 - -0.015)													
				4159146															
	Western Europe	29093594	5469.9	6	5226.2	-0.145	<0.001	1990-1994	-0.5	1994-2000	-0.111	2000-2005	-0.443	2005-2015	-0.143	2015-2019	0.525	2019-2021	-0.131
		(27230515-30911868)	(5132.6-5799.4)	(39070950-43910754)	(4924.4-5544.2)	(-0.156 - -0.134)													
				4860631															
	Southern Latin America	2695843	5784.4	5970.4	0.101	<0.001	1990-1995	-0.129	1995-2009	0.286	2009-2018	0.031	2018-2021	-0.168					
		(2510441-2883801)	(5397.3-6182.9)	(4530777-5214539)	(5543.1-6415)										(0.087 - 0.115)				

		Year 1990		Year 2021		AAPC ⁴ (95%CI)	P value ⁵	Trend1		Trend2		Trend3		Trend4		Trend5		Trend6	
		Number	ASPR ²	Number	ASPR			Period	APC ⁶	Period	APC	Period	APC	Period	APC	Period	APC	Period	APC
		(95%UI ¹)	(95%CI ³)	(95%UI)	(95%CI)														
Region	High-income	895097	266.6	3120983	508.81	2.107	<0.001	1990-	-0.04	1995-	-0.064	1999-	-0.046	2011-	-0.06	2014-	0.08		
	North	(798640-9	(238.3-293.2	(286420	(467.04-	(1.883 -		1995		1999		2011		2014		2021			
	America	86360)	)	76	545.39)	2.332)													
Region	High-income	599581		1146613	235.57	-0.996	<0.001	1990-	-0.6	1994-	-0.211	2000-	-0.543	2005-	-0.143	2015-	0.525		
	Asia Pacific	(550356-6	315.7	(990343	(206.04-	(-1.159 -		1994		2000		2005		2015		2021			
		43830)	(289-339.2)	-126831	259.61)	-0.834)													
Region	Australasia	1399739	6084.4	2810777	5910	-0.106	<0.001	1990-	-0.153	2006-	0.09	2018-	-0.631						
		(1315064-	(5719.4-645	(263778	(5548.2-	(-0.149 -		2006		2018		2021							
		1481429)	6.3)	9-29953	6301.6)	-0.062)													
SDI ¹⁰	Low SDI	23236078	8090.4	5452896	7984.4	-0.034	0.248	1990-	0.121	2001-	-0.665	2004-	0.009	2011-	-0.272	2015-	0.319	2019-	-0.32
		(21506138	(7566.4-862	(503620	(7449.4-	(-0.092 -		2001		2004		2011		2015		2019		2021	
		-25034232	5)	40-5903	8549.7)	0.024)													
SDI ¹⁰	Low-middle	70588690	9292.5	1498610	9171	-0.038	0.335	1990-	-0.017	1995-	0.322	2000-	-0.693	2004-	-0.058	2016-	0.472	2019-	-0.318
	SDI	(65338440	(8660.5-995	(139108	(8544.98	(-0.115 -		1995		2000		2004		2016		2019		2021	
		-76043937	2.5)	422-161	48.2)	0.039)													

		Year 1990		Year 2021		AAPC ⁴ (95%CI)	P value ⁵	Trend1		Trend2		Trend3		Trend4		Trend5		Trend6	
		Number (95%UI ¹)	ASPR ² (95%CI ³)	Number (95%UI)	ASPR (95%CI)			Period	APC ⁶	Period	APC	Period	APC	Period	APC	Period	APC	Period	APC
SDI ¹⁰	Middle SDI	10581934		2208230															
		2	8450.6	54	8280.1	-0.069													
		(98201190	(7891.9-906	(205500	(7728-88	(-0.102 -	<0.001	1990-	-0.621	1993-	-0.282	1999-	0.077	2005-	-0.135	2010-	0.621	2015-	-0.241
		-11375565	9.2)	732-237	85.3)	-0.035)		1993		1999		2005		2010		2015		2021	
	High-middle SDI	0)		345634)															
		78208075		1271110															
		(72803156	7641.2	61	7267.7	-0.162		1990-	-0.55	2000-	0.147	2005-	-0.297	2010-	0.781	2015-	-0.703	2019-	0.095
		-84086890	(7150-8189)	(118337	(6782.1-	(-0.189 -	<0.001	2000		2005		2010		2015		2019		2021	
	High SDI	)		580-136	7816.7)	-0.135)													
				309239)															
		72796005	6884	07	6733.5	-0.076		1990-	-0.384	1993-	-0.145	2000-	-0.358	2005-	0.207	2019-	-0.64		
		(68039542	(6452-7322.	(113333	(6322.1-	(-0.101 -	<0.001	1993		2000		2005		2019		2021			
		-77665594	7)	443-127	7159.6)	-0.051)													
		)		967827)															

1: UI=uncertainty interval. 2: ASDR = age-standardized prevalence rate adjusted to the world population (per 1000,000) . 3: CI=confidence intervals. 4: AAPC = average annual percentage change calculated by Joinpoint regression analysis; AAPC>0 indicated an upward trend, and AAPC<0 indicated a downward trend. 5: P-value was calculated by Joinpoint regression analysis; P<0.05 showed that the trend suggested by the AAPC was significant. 6:APC = annual percent change, APC was significantly different from 0 (two-side p<0.05). 7: DMT1=diabetes mellitus type 1. 8.DMT2=diabetes mellitus type 2. 9.GN=glomerulonephritis. 10.SDI = socio-demographic index.

Table S7 The number and age standard prevalence rate of chronic kidney in 1990 and 2021, and AAPC from 1990 to 2021 in 204 countries and territories

	Number_1990(95%UI ¹)	ASPR ² _1990(95%CI ³)	Number_2021(95%UI)	ASPR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Afghanistan	611982 (569081-656341)	8808.9 (8175.3-9452.3)	1440765 (1317910-1571513)	8934.9 (8262.8-9627.3)	0.046 (0.042 - 0.049)	<0.001
Albania	152351 (142462-163786)	6243.7 (5830.9-6667.4)	230609 (214471-246180)	6154 (5711.8-6544.9)	-0.045 (-0.048 - -0.041)	<0.001
Algeria	1413887 (1302734-1527151)	8946 (8267.2-9615.9)	3553584 (3275804-3852065)	8807.2 (8150-9515.2)	-0.052 (-0.065 - -0.039)	<0.001
American Samoa	2729 (2519-2958)	8831.3 (8197.4-9501.6)	4468 (4153-4802)	9256.7 (8599-9943)	0.152 (0.137 - 0.167)	<0.001
Andorra	3305 (3059-3549)	5604.9 (5216.1-5996.5)	7623 (7073-8129)	5535 (5147.9-5919.3)	-0.037 (-0.054 - -0.019)	<0.001
Angola	473841 (440001-510739)	9090.8 (8510.8-9718.4)	1482282 (1374318-1605870)	9018.9 (8383.2-9636)	-0.028 (-0.033 - -0.023)	<0.001
Antigua and Barbuda	3729 (3474-3994)	6700.1 (6253.5-7179.1)	7270 (6762-7815)	6956.3 (6479.9-7455.7)	0.121 (0.114 - 0.129)	<0.001
Argentina	1774583 (1648138-1900776)	5585.8 (5197.5-5980)	3114327 (2893145-3345866)	5876.1 (5442.4-6323.9)	0.165 (0.149 - 0.18)	<0.001
Armenia	300635 (278865-323273)	10265.9 (9580.8-10974)	404070 (378068-430935)	10245 (9598-10928)	-0.009 (-0.014 - -0.004)	<0.001
Australia	1165447 (1094777-1238029)	6076.8 (5714.8-6452.5)	2353593 (2211156-2523412)	5877.9 (5525.9-6272.1)	-0.12 (-0.168 - -0.072)	<0.001
Austria	611202 (567555-653621)	5590.9 (5205.7-5978.5)	892225 (838208-953902)	5671 (5326.4-6084.5)	0.059 (0.045 - 0.074)	<0.001

	Number_1990(95%UI ¹)	ASPR ² _1990(95%CI ³)	Number_2021(95%UI)	ASPR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Azerbaijan	593465 (554684-636804)	10594.8 (9927.5-11288.4)	1146469 (1073053-1221894)	10696 (10019-11338.2)	0.028 (0.011 - 0.045)	0.002
Bahamas	12715 (11806-13734)	6542.7 (6098.9-7002.9)	28177 (26096-30221)	6759.3 (6258.6-7239.1)	0.105 (0.099 - 0.111)	<0.001
Bahrain	31525 (28728-34958)	9152.1 (8487.5-9866.9)	130181 (119335-142831)	9108.5 (8445.2-9765.8)	-0.017 (-0.026 - -0.007)	0.001
Bangladesh	5331909 (4950686-5772489)	8395.6 (7832.8-8968.1)	12882108 (11949483-13899210)	8555.4 (7963.4-9177.3)	0.068 (0.047 - 0.088)	<0.001
Barbados	17997 (16818-19169)	6459.9 (6051.7-6909.2)	28988 (27004-31010)	6676.8 (6215.3-7161.7)	0.108 (0.103 - 0.114)	<0.001
Belarus	1162192 (1079543-1248012)	9654.1 (8993.2-10364.9)	1314740 (1220742-1405904)	9704.3 (9000.4-10430.5)	0.017 (0.007 - 0.028)	0.001
Belgium	808609 (750019-867640)	5722.1 (5342.5-6109.5)	1120459 (1051828-1196504)	5633.2 (5305.5-6009.4)	-0.044 (-0.056 - -0.031)	<0.001
Belize	7609 (7071-8133)	6629.9 (6188.8-7130.9)	24923 (23248-26780)	6996.9 (6519.9-7476.1)	0.17 (0.156 - 0.184)	<0.001
Benin	188015 (174766-201634)	7343.4 (6857.5-7853.5)	552484 (512421-599062)	7482.3 (7003.2-8021.9)	0.061 (0.054 - 0.069)	<0.001
Bermuda	4041 (3755-4358)	6209.7 (5792.5-6656.9)	6571 (6087-7048)	6114.2 (5679.3-6583.5)	-0.051 (-0.057 - -0.044)	<0.001
Bhutan	31715 (29384-34240)	9135.3 (8522.1-9749.9)	64186 (59913-69314)	9213.5 (8612.1-9876.6)	0.028 (0.019 - 0.036)	<0.001

	Number_1990(95%UI ¹)	ASPR ² _1990(95%CI ³)	Number_2021(95%UI)	ASPR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Bolivia (Plurinational State of)	242900 (225810-260389)	6093.3 (5681.1-6496.9)	628320 (584306-676494)	6177.1 (5740.2-6632.4)	0.044 (0.034 - 0.053)	<0.001
Bosnia and Herzegovina	260939 (242972-279575)	6132.4 (5735.3-6544.3)	323305 (300335-346499)	6233.5 (5827.2-6665.1)	0.053 (0.043 - 0.063)	<0.001
Botswana	60835 (56449-65830)	8684.7 (8075.9-9285.6)	164894 (153184-177219)	8867.3 (8244.1-9441.2)	0.09 (0.063 - 0.118)	<0.001
Brazil	8215420 (7640129-8812335)	7772.7 (7248.7-8291.2)	18814692 (17566365-20174535)	7576.6 (7078.5-8111.2)	-0.08 (-0.102 - -0.059)	<0.001
Brunei Darussalam	15220 (13998-16528)	9497.7 (8852.2-10130.5)	39451 (36520-42780)	9461.9 (8796.6-10168.9)	-0.011 (-0.018 - -0.003)	0.006
Bulgaria	673785 (626288-720194)	6187.8 (5773-6611.1)	726001 (674875-778060)	6282.1 (5866.9-6704.4)	0.048 (0.03 - 0.066)	<0.001
Burkina Faso	365246 (337985-392297)	7076.2 (6568.6-7570.5)	901049 (834507-973982)	7181.8 (6699.9-7686.7)	0.048 (0.045 - 0.051)	<0.001
Burundi	187278 (170970-204259)	5868.1 (5412.1-6352.8)	456223 (414259-502680)	5921.6 (5472.5-6436.6)	0.028 (0.025 - 0.032)	<0.001
Cabo Verde	17443 (16294-18677)	7283.3 (6802.8-7767.9)	38020 (35307-41075)	7366.7 (6831.1-7880.3)	0.042 (0.028 - 0.055)	<0.001
Cambodia	566875 (518696-615039)	9455 (8749.4-10222.8)	1378217 (1266270-1503301)	9453 (8751.4-10231.3)	0.001 (-0.003 - 0.005)	0.565

	Number_1990(95%UI ¹)	ASPR ² _1990(95%CI ³)	Number_2021(95%UI)	ASPR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Cameroon	463067 (431742-496225)	8270.7 (7742.1-8827.3)	1594660 (1486358-1713045)	9043.6 (8503.4-9609.8)	0.294 (0.264 - 0.323)	<0.001
Canada	2229477 (2055472-2415616)	7026.4 (6480.6-7603.7)	3809329 (3540568-4060952)	6524.4 (6091.5-7000.7)	-0.237 (-0.263 - -0.21)	<0.001
Central African Republic	133406 (123251-143340)	9207.4 (8552.5-9860.3)	276101 (255353-297770)	9141.2 (8513.3-9769.2)	-0.025 (-0.033 - -0.018)	<0.001
Chad	241571 (223146-258353)	7195.1 (6688.4-7683.2)	603512 (558192-650782)	7271 (6764.7-7787.6)	0.036 (0.033 - 0.039)	<0.001
Chile	699136 (650457-755320)	6211 (5786.9-6653.9)	1444161 (1343232-1545985)	6106.6 (5659.6-6545.9)	-0.056 (-0.079 - -0.033)	<0.001
China	67398525 (62608781-72614585)	7091.9 (6614.3-7603.1)	118403911 (109388671-127484286)	6249.4 (5812.4-6720.2)	-0.396 (-0.473 - -0.318)	<0.001
Colombia	1697055 (1583361-1826064)	7912.4 (7376.2-8461.8)	4222423 (3939788-4478779)	7695.6 (7194-8158.8)	-0.09 (-0.1 - -0.08)	<0.001
Comoros	15628 (14361-16936)	5870.7 (5455.7-6305.4)	35339 (32389-38509)	5851.8 (5407.4-6323.6)	-0.009 (-0.021 - 0.003)	0.132
Congo	122987 (114132-132085)	9370.1 (8763.1-9998)	331895 (307907-357776)	9319.6 (8696.9-9931.8)	-0.018 (-0.033 - -0.002)	0.023
Cook Islands	1150 (1062-1242)	8019.6 (7447.9-8644.5)	1841 (1712-1970)	8230 (7649.9-8830.4)	0.083 (0.071 - 0.095)	<0.001
Costa Rica	197345 (183956-211905)	9636.7 (8996.2-10298.8)	517788 (484174-550601)	9532.1 (8909.8-10127.1)	-0.005 (-0.048 - 0.038)	0.821

	Number_1990(95%UI ¹)	ASPR ² _1990(95%CI ³)	Number_2021(95%UI)	ASPR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Côte d'Ivoire	462576 (427133-500797)	7562 (7049.4-8106.4)	1249475 (1157292-1360894)	7597.7 (7075.2-8139.2)	0.018 (0.016 - 0.019)	<0.001
Croatia	352794 (326765-378976)	6188.9 (5755.5-6629)	441010 (407740-471831)	6109.1 (5670-6576.3)	-0.04 (-0.044 - -0.037)	<0.001
Cuba	670575 (622916-717810)	6258.5 (5824.6-6706.2)	1023168 (949443-1092062)	6157.3 (5728.3-6614.3)	-0.053 (-0.059 - -0.047)	<0.001
Cyprus	47988 (44580-51332)	6009 (5608.3-6395)	112031 (104079-120582)	5817.6 (5430.8-6247.9)	-0.104 (-0.11 - -0.099)	<0.001
Czechia	777458 (723745-829773)	6159.6 (5756.9-6580.7)	1033665 (960274-1099534)	5875 (5479.3-6268.4)	-0.152 (-0.158 - -0.146)	<0.001
Democratic People's Republic of Korea	1150078 (1067243-1233674)	6571.8 (6117.4-7043.5)	2027239 (1883443-2173423)	6390.8 (5955.9-6816.8)	-0.095 (-0.111 - -0.08)	<0.001
Democratic Republic of the Congo	1824071 (1691866-1955647)	9255.3 (8613.5-9831.1)	4529099 (4238150-4861233)	9196.8 (8707.1-9726.6)	-0.02 (-0.027 - -0.012)	<0.001
Denmark	415234 (386838-442513)	5589.5 (5229.3-5953.9)	564571 (524056-607172)	5607 (5237.4-6009.8)	0.011 (0.005 - 0.017)	<0.001
Djibouti	13012 (11876-14272)	5545.1 (5142.1-5961.8)	55546 (50733-60942)	5776.9 (5342.9-6232.5)	0.132 (0.124 - 0.139)	<0.001
Dominica	4263 (3961-4572)	6991.4 (6509.2-7479.9)	5745 (5329-6134)	7303.9 (6813-7818.6)	0.142 (0.131 - 0.153)	<0.001

	Number_1990(95%UI ¹)	ASPR ² _1990(95%CI ³)	Number_2021(95%UI)	ASPR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Dominican Republic	299732 (277339-324408)	6357.9 (5927.6-6822.6)	710332 (660993-766986)	6688.8 (6211.1-7193.2)	0.164 (0.153 - 0.174)	<0.001
Ecuador	392453 (366304-421830)	5893.4 (5492-6356.8)	1073132 (996177-1149397)	6249.3 (5811.7-6689.2)	0.194 (0.183 - 0.204)	<0.001
Egypt	3069526 (2834187-3319651)	8613.6 (8031.7-9206)	7320032 (6762507-7887829)	9167.8 (8515-9825.4)	0.201 (0.193 - 0.209)	<0.001
El Salvador	239034 (222018-257099)	6892.2 (6378.2-7415.7)	460009 (431238-489587)	7296.1 (6841.6-7771)	0.185 (0.162 - 0.208)	<0.001
Equatorial Guinea	20935 (19447-22604)	9087.3 (8498.5-9734.5)	75546 (69523-82103)	9342.3 (8719.9-9945.4)	0.088 (0.081 - 0.095)	<0.001
Eritrea	99470 (90769-109284)	5529.9 (5117.9-5982.1)	244600 (224167-268056)	5676.6 (5255.1-6117.6)	0.086 (0.063 - 0.11)	<0.001
Estonia	181645 (168130-196037)	9678.7 (8968.1-10435.8)	206581 (192387-221597)	9660.9 (9006.3-10389.7)	-0.005 (-0.016 - 0.007)	0.418
Eswatini	33811 (31458-36377)	8783.2 (8183.6-9417.6)	66871 (61736-72023)	9047.6 (8414.1-9624.3)	0.133 (0.114 - 0.152)	<0.001
Ethiopia	1542523 (1422919-1673239)	5569.3 (5168.8-5985.1)	3762262 (3443544-4113603)	5649.3 (5230.3-6098.2)	0.046 (0.036 - 0.056)	<0.001
Fiji	43084 (39626-46792)	8584.3 (7980.7-9231)	74318 (68583-80409)	8913.8 (8286.6-9600.9)	0.119 (0.112 - 0.126)	<0.001
Finland	368157 (345612-392962)	5556.6 (5209.3-5940.6)	555910 (513129-595333)	5349.2 (4968.6-5714.9)	-0.117 (-0.129 - -0.104)	<0.001
France	3209806 (2980224-3426824)	4202.2 (3898.7-4488.2)	5214795 (4858423-5614715)	4368.8 (4085.6-4698.7)	0.126 (0.109 - 0.143)	<0.001

	Number_1990(95%UI ¹)	ASPR ² _1990(95%CI ³)	Number_2021(95%UI)	ASPR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Gabon	57987 (53943-62001)	9126 (8487.1-9779.8)	117028 (108707-125772)	9238 (8645.4-9881)	0.037 (0.032 - 0.043)	<0.001
Gambia	36537 (33712-39478)	7285.8 (6764.4-7776.6)	103566 (95771-112154)	7469.2 (6954.6-8002.9)	0.086 (0.077 - 0.095)	<0.001
Georgia	632971 (590879-679007)	10617.5 (9919.4-11342.7)	544204 (506648-579897)	10551.1 (9851.3-11224)	-0.024 (-0.03 - -0.017)	<0.001
Germany	6261066 (5866849-6644060)	5349.6 (5017.4-5675)	8931944 (8467049-9441979)	5278.4 (4985.5-5622.2)	-0.037 (-0.066 - -0.009)	0.011
Ghana	516871 (472923-562875)	5943.1 (5509.3-6423.8)	1422793 (1305227-1553890)	6033.8 (5584.9-6513.2)	0.05 (0.044 - 0.056)	<0.001
Greece	798820 (740666-853941)	5762.3 (5361.4-6162.9)	1143247 (1066167-1220356)	5587.8 (5236.3-5992.8)	-0.092 (-0.114 - -0.07)	<0.001
Greenland	2958 (2729-3212)	6970.7 (6515.6-7414.6)	4412 (4094-4732)	6988.2 (6509.1-7491.4)	0.006 (-0.003 - 0.014)	0.184
Grenada	5042 (4684-5387)	6983.1 (6481.8-7464)	8182 (7614-8784)	7279.5 (6800.4-7818.7)	0.134 (0.127 - 0.141)	<0.001
Guam	8188 (7532-8928)	7935.1 (7378.4-8544.5)	16160 (14994-17291)	8480.2 (7890.5-9106)	0.214 (0.203 - 0.225)	<0.001
Guatemala	342544 (318619-365583)	8065.5 (7574.1-8638.4)	1096863 (1023152-1176256)	8857.7 (8275.1-9478.3)	0.304 (0.287 - 0.32)	<0.001
Guinea	275726 (256995-296333)	7313.9 (6820.2-7803.8)	568301 (528813-612479)	7498.3 (6998.8-7995.5)	0.086 (0.076 - 0.095)	<0.001
Guinea-Bissau	40061 (37305-43253)	7641.8 (7095.7-8167.3)	85214 (78709-92411)	7643.8 (7104.1-8145.4)	0.007 (-0.003 - 0.017)	0.183

	Number_1990(95%UI ¹)	ASPR ² _1990(95%CI ³)	Number_2021(95%UI)	ASPR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Guyana	34192 (31637-36857)	6803.9 (6325.9-7280.5)	48899 (45521-52822)	7062.5 (6579-7608.2)	0.12 (0.109 - 0.13)	<0.001
Haiti	274957 (254724-296317)	6959.2 (6473-7441.6)	662956 (613153-717829)	7123.7 (6614.8-7647.9)	0.077 (0.072 - 0.082)	<0.001
Honduras	209413 (194859-225041)	8405.3 (7844.1-8968.8)	633449 (591340-678996)	8613 (8025.9-9216)	0.079 (0.071 - 0.086)	<0.001
Hungary	816867 (760112-874417)	6193.2 (5788.2-6630.4)	965275 (898080-1028450)	5992.9 (5610.7-6393.6)	-0.104 (-0.119 - -0.089)	<0.001
Iceland	13378 (12516-14287)	4739 (4420.2-5063.2)	23128 (21625-24673)	4528.9 (4231-4840.2)	-0.138 (-0.176 - -0.101)	<0.001
India	60111283	10258.7 (9547.9-10986.1)	128031911	9710.5 (9024.2-10420.3)	-0.146 (-0.339 - 0.047)	0.138
	(55460535-65038616)		(118513994-138721278)			
Indonesia	13599739	10447.7 (9661.9-11264.5)	29413896	10740.3 (9942.1-11598.8)	0.104 (0.086 - 0.121)	<0.001
	(12496422-14810294)		(26931317-32010165)			
Iran (Islamic Republic of)	3141831 (2920460-3371296)	9513.7 (8874-10180.4)	8145077 (7562399-8737333)	9474.8 (8837.1-10118.4)	-0.011 (-0.024 - 0.001)	0.073
Iraq	1026557 (949992-1108210)	9536.9 (8851.5-10239.3)	2977727 (2740400-3234895)	9464.2 (8764.4-10188.2)	-0.025 (-0.031 - -0.019)	<0.001
Ireland	261985 (241344-282388)	6681.7 (6202.5-7184.3)	465353 (440528-488132)	6594.1 (6237.5-6952)	-0.033 (-0.049 - -0.017)	<0.001

	Number_1990(95%UI ¹)	ASPR ² _1990(95%CI ³)	Number_2021(95%UI)	ASPR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Israel	288923 (270285-308809)	6007.8 (5618.9-6420.3)	674873 (630913-722204)	5866.8 (5487.9-6273.7)	-0.073 (-0.085 - -0.061)	<0.001
Italy	4457622 (4142484-4769497)	5591.9 (5235.5-5978.8)	5921997 (5501809-6294811)	5061.3 (4746.2-5410.5)	-0.313 (-0.351 - -0.275)	<0.001
Jamaica	122884 (115047-131333)	6456.9 (6045.3-6921.3)	209554 (194578-224704)	6708.1 (6219-7188.8)	0.125 (0.116 - 0.133)	<0.001
Japan	13889911 (12903717-14885294)	8744.8 (8150.4-9364.1)	22877631 (21341971-24294034)	8264.3 (7717.7-8855.7)	-0.185 (-0.222 - -0.147)	<0.001
Jordan	187654 (172497-203471)	9249.5 (8606.8-9945.6)	889238 (817131-968041)	8989.7 (8318.6-9729.3)	-0.095 (-0.109 - -0.081)	<0.001
Kazakhstan	1471284 (1368347-1573180)	10730.4 (10056.3-11412)	1952569 (1812225-2090896)	10662.4 (9928.1-11394.4)	-0.022 (-0.027 - -0.018)	<0.001
Kenya	700742 (642264-764896)	5761.7 (5343.2-6221.9)	1979251 (1807371-2167364)	5900.7 (5470-6369)	0.076 (0.068 - 0.084)	<0.001
Kiribati	4029 (3716-4354)	8459.6 (7856.8-9093.5)	7836 (7239-8460)	8718.2 (8109.9-9329.4)	0.097 (0.089 - 0.105)	<0.001
Kuwait	106214 (96298-117759)	8982.8 (8321.1-9651.6)	393166 (356902-436552)	8593.1 (7931.8-9269.4)	-0.145 (-0.152 - -0.139)	<0.001
Kyrgyzstan	349912 (326466-372023)	10650.2 (9986.3-11306.1)	554675 (518240-592588)	10147.7 (9422.6-10780.3)	-0.16 (-0.173 - -0.147)	<0.001

	Number_1990(95%UI ¹)	ASPR ² _1990(95%CI ³)	Number_2021(95%UI)	ASPR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Lao People's Democratic Republic	277122 (254762-299243)	10702 (9904.8-11504.6)	621716 (570484-678042)	10478.7 (9688-11293)	-0.066 (-0.069 - -0.063)	<0.001
Latvia	313358 (290679-336853)	9660.9 (8967.6-10391.3)	303626 (282328-323377)	9785.8 (9110.5-10514.3)	0.041 (0.035 - 0.048)	<0.001
Lebanon	211783 (195737-228352)	8827.6 (8183.8-9494.6)	548008 (508010-589947)	8988.2 (8309.1-9607.8)	0.057 (0.038 - 0.077)	<0.001
Lesotho	79823 (74328-85461)	8435.2 (7898.7-8992.7)	114258 (105784-123018)	8824.6 (8201.2-9408.8)	0.176 (0.146 - 0.206)	<0.001
Liberia	107783 (99699-116096)	7548.2 (7002.1-8076.2)	244755 (226016-265719)	7551.2 (7049.8-8085.2)	0.003 (-0.006 - 0.013)	0.479
Libya	228746 (211473-246316)	9024.4 (8360-9727.3)	610601 (560616-667943)	9269.1 (8567.5-10032.2)	0.086 (0.082 - 0.089)	<0.001
Lithuania	414295 (384463-446122)	9790.2 (9086.7-10563.5)	441211 (411206-472545)	9837.2 (9134.9-10590)	0.015 (0.008 - 0.022)	<0.001
Luxembourg	30243 (27852-32537)	5937.6 (5491.4-6400.1)	55107 (50921-59381)	5775.6 (5340.1-6220.8)	-0.088 (-0.101 - -0.075)	<0.001
Madagascar	389060 (359027-423079)	5625.8 (5196.6-6061.5)	994473 (908917-1089154)	5685.3 (5246.2-6164.1)	0.033 (0.027 - 0.04)	<0.001
Malawi	326018 (298440-355273)	5918.5 (5492-6409.4)	705439 (644778-770229)	6124.8 (5658.2-6619.3)	0.111 (0.1 - 0.123)	<0.001
Malaysia	1328704 (1222289-1442379)	10828.3 (10076.2-11666.6)	3443338 (3171290-3729769)	11008.6 (10171.2-11849.4)	0.053 (0.02 - 0.085)	0.002

	Number_1990(95%UI ¹)	ASPR ² _1990(95%CI ³)	Number_2021(95%UI)	ASPR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Maldives	12689 (11699-13709)	10424.9 (9701.4-11220.8)	52048 (47116-57976)	10202.7 (9432-11087)	-0.061 (-0.069 - -0.053)	<0.001
Mali	358053 (333871-381898)	7349.8 (6875.5-7816.7)	909702 (841914-979718)	7419.9 (6929.5-7932.6)	0.031 (0.025 - 0.037)	<0.001
Malta	24308 (22689-26237)	5881.7 (5499.5-6324.9)	46498 (43037-49500)	5665.8 (5292.2-6053.1)	-0.118 (-0.134 - -0.102)	<0.001
Marshall Islands	1905 (1760-2065)	8175.3 (7594.6-8766.6)	3728 (3432-4030)	8476 (7879.7-9042)	0.116 (0.113 - 0.12)	<0.001
Mauritania	91156 (84420-98252)	7479.4 (6957.7-8019.8)	197970 (183860-213616)	7285.5 (6794.6-7783.8)	-0.084 (-0.086 - -0.082)	<0.001
Mauritius	96542 (88907-105229)	10712.2 (9939.1-11620.8)	189008 (175935-203155)	11411.6 (10649.1-12263.7)	0.21 (0.183 - 0.238)	<0.001
Mexico	4594717 (4287702-4924515)	8781.5 (8206.6-9393.8)	11780174 (11009027-12569139)	9052.2 (8453.8-9672.7)	0.097 (0.084 - 0.109)	<0.001
Micronesia (Federated States of)	5110 (4740-5505)	8313.3 (7738.6-8898.9)	7394 (6849-8003)	8744.1 (8145.4-9371.5)	0.163 (0.141 - 0.184)	<0.001
Monaco	3295 (3048-3530)	5539.9 (5150.2-5916.3)	4350 (4042-4640)	5497.2 (5141.2-5862.9)	-0.021 (-0.03 - -0.012)	<0.001
Mongolia	146040 (136801-156132)	11239.6 (10569.3-11958.8)	287978 (267255-309250)	10667.7 (9937.1-11381.2)	-0.171 (-0.184 - -0.158)	<0.001

	Number_1990(95%UI ¹)	ASPR ² _1990(95%CI ³)	Number_2021(95%UI)	ASPR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Montenegro	40300 (37650-42973)	6416 (6010.8-6835.5)	54152 (50266-57833)	6415 (5962.1-6863.8)	0.001 (-0.006 - 0.008)	0.806
Morocco	1521333 (1399644-1649317)	8496.6 (7864-9155.1)	3125307 (2880319-3372664)	8498.4 (7864-9135)	0.001 (-0.006 - 0.007)	0.864
Mozambique	471644 (433799-513878)	5918.7 (5479.6-6395.1)	1066862 (978804-1170332)	6162.6 (5705.7-6708.9)	0.13 (0.123 - 0.136)	<0.001
Myanmar	2982783 (2758045-3235228)	10357.2 (9596.6-11185.4)	5373282 (4929525-5841826)	10173 (9393.1-11017.3)	-0.054 (-0.066 - -0.043)	<0.001
Namibia	68175 (63117-73308)	8664.4 (8056.5-9233.5)	144692 (133912-155904)	8510.1 (7908.4-9112.4)	-0.037 (-0.068 - -0.005)	0.022
Nauru	544 (502-592)	8632.1 (8048-9264.7)	698 (644-757)	9105 (8473.2-9748.9)	0.172 (0.165 - 0.178)	<0.001
Nepal	1177468 (1101596-1257964)	10501.2 (9843.1-11204.3)	2762106 (2575557-3032129)	10887.7 (10177.4-11883.1)	0.118 (0.069 - 0.166)	<0.001
Netherlands	1147619 (1073580-1226033)	6067.4 (5675.9-6498.2)	1745668 (1634215-1877107)	6048.2 (5674.3-6481.1)	-0.017 (-0.04 - 0.007)	0.162
New Zealand	234292 (217327-250752)	6128.4 (5708.2-6546.6)	457184 (423466-488353)	6072.6 (5649.2-6499)	-0.028 (-0.044 - -0.011)	0.001
Nicaragua	190029 (177519-203548)	9675.2 (9075.4-10313.2)	575347 (537918-614144)	10511.2 (9794.3-11157.8)	0.265 (0.251 - 0.279)	<0.001
Niger	265038 (246140-284905)	6880.2 (6411.5-7331.4)	790430 (731816-852136)	6881.8 (6387.8-7357.1)	0.003 (-0.001 - 0.008)	0.117

	Number_1990(95%UI ¹)	ASPR ² _1990(95%CI ³)	Number_2021(95%UI)	ASPR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Nigeria	4951044 (4609650-5305923)	9402.3 (8798.4-10034.7)	11730967 (10926433-12598672)	9488.9 (8881.1-10113.3)	0.033 (0.017 - 0.049)	<0.001
Niue	186 (173-199)	8670.5 (8041.9-9334)	175 (162-188)	8957.5 (8282.6-9663)	0.103 (0.096 - 0.111)	<0.001
North Macedonia	140331 (130960-149494)	7386 (6902-7876.8)	220103 (205048-234493)	7377.4 (6929.9-7832.2)	-0.007 (-0.028 - 0.014)	0.513
Northern Mariana Islands	2867 (2626-3141)	8797.6 (8200.9-9441.4)	4746 (4387-5099)	9078.8 (8455.6-9714.1)	0.102 (0.086 - 0.119)	<0.001
Norway	314586 (291897-335963)	5207.1 (4866.3-5562)	469377 (437256-500382)	5534.4 (5167.8-5922.5)	0.188 (0.165 - 0.211)	<0.001
Oman	98358 (89680-108123)	8427.7 (7838.2-9068.7)	344284 (313617-379720)	9024.5 (8385.7-9702.4)	0.219 (0.206 - 0.232)	<0.001
Pakistan	5931806 (5491196-6396491)	8589.1 (7994.6-9202.4)	15063043 (13945283-16289223)	9164.6 (8522.8-9774.2)	0.201 (0.183 - 0.22)	<0.001
Palau	1027 (956-1114)	8544.2 (7955.6-9159.8)	1947 (1797-2108)	8900.4 (8266.8-9595.2)	0.131 (0.125 - 0.138)	<0.001
Palestine	105072 (97202-113180)	9224.6 (8569.8-9850.2)	316240 (292025-342754)	8942.6 (8314.5-9603.5)	-0.102 (-0.109 - -0.094)	<0.001
Panama	142393 (132809-153036)	8261.6 (7709.3-8864.8)	373196 (347346-398963)	8453.5 (7857.2-9031.7)	0.075 (0.068 - 0.082)	<0.001

	Number_1990(95%UI ¹)	ASPR ² _1990(95%CI ³)	Number_2021(95%UI)	ASPR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Papua New Guinea	179603 (165528-195405)	7388.6 (6896.2-7935.3)	538462 (494564-590048)	7685.7 (7155-8282.9)	0.128 (0.119 - 0.137)	<0.001
Paraguay	192742 (179980-206867)	7374.3 (6876.7-7891.9)	481010 (448476-516329)	7561.4 (7051.6-8091.3)	0.085 (0.078 - 0.092)	<0.001
Peru	830105 (773577-894482)	5621.6 (5237.5-6016)	2042137 (1897519-2195297)	5732.7 (5325.1-6154.3)	0.064 (0.059 - 0.069)	<0.001
Philippines	4286723 (3941958-4660864)	10549.8 (9776.7-11356.1)	10193697 (9395294-11071571)	10530.4 (9775.3-11372.9)	-0.003 (-0.012 - 0.007)	0.587
Poland	2866015 (2680925-3059816)	6850.9 (6418.5-7310.9)	3872502 (3620089-4134821)	6415.3 (6012.6-6855.3)	-0.214 (-0.241 - -0.188)	<0.001
Portugal	641583 (596339-685707)	5124.5 (4804.7-5501.1)	941606 (850524-1011350)	4777 (4420.4-5132.3)	-0.226 (-0.237 - -0.215)	<0.001
Puerto Rico	241664 (224964-259466)	6681.7 (6222.4-7166.2)	380144 (353031-405700)	6833 (6356.4-7333.3)	0.071 (0.061 - 0.082)	<0.001
Qatar	28926 (26054-32385)	9257.3 (8540.3-9961.5)	238389 (214245-267350)	9111.2 (8448-9852.6)	-0.045 (-0.07 - -0.021)	<0.001
Republic of Korea	2703535 (2505415-2935211)	7789.4 (7280-8381.1)	5620395 (5254764-6008210)	6872.2 (6417-7364.4)	-0.387 (-0.414 - -0.359)	<0.001
Republic of Moldova	469578 (435381-501649)	10729.3 (10014.3-11456.7)	596118 (553806-636138)	11293.7 (10519.6-12048.1)	0.17 (0.126 - 0.214)	<0.001
Romania	1605525 (1495525-1715394)	6180.4 (5775.4-6591.1)	1993675 (1890808-2098153)	6300.7 (5964.6-6652.5)	0.052 (-0.017 - 0.121)	0.142

	Number_1990(95%UI ¹)	ASPR ² _1990(95%CI ³)	Number_2021(95%UI)	ASPR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Russian Federation	15387961 (14274967-16655381)	9062.2 (8429.2-9771.4)	18056081 (16744178-19455656)	8973.8 (8345.5-9704.8)	-0.031 (-0.035 - -0.027)	<0.001
Rwanda	234499 (214398-255853)	5852.6 (5422.1-6320)	513932 (471486-561218)	5696.5 (5277.2-6164.1)	-0.089 (-0.094 - -0.084)	<0.001
Saint Kitts and Nevis	2582 (2409-2774)	7034.2 (6570.2-7551.8)	4826 (4470-5192)	6962.4 (6470-7455.7)	-0.036 (-0.05 - -0.023)	<0.001
Saint Lucia	6820 (6312-7305)	6901.6 (6410.1-7371.5)	15679 (14634-16864)	6954.1 (6489.8-7468.2)	0.024 (0.014 - 0.034)	<0.001
Saint Vincent and the Grenadines	5218 (4816-5601)	6544.4 (6043.5-7001.3)	9229 (8590-9910)	6902.6 (6435.8-7413.5)	0.17 (0.162 - 0.179)	<0.001
Samoa	8628 (8012-9299)	8335.3 (7760-8940.8)	13962 (12935-15079)	8626.9 (8017.8-9290.7)	0.113 (0.102 - 0.124)	<0.001
San Marino	1771 (1651-1899)	5453.5 (5097.1-5832.3)	3397 (3165-3648)	5392.6 (5034.8-5768.8)	-0.035 (-0.042 - -0.029)	<0.001
Sao Tome and Principe	5810 (5424-6228)	7967.4 (7434.1-8520.1)	12272 (11408-13236)	8194.6 (7639.2-8749.2)	0.094 (0.089 - 0.098)	<0.001
Saudi Arabia	854299 (786274-926817)	9213.2 (8560.7-9892.3)	3067523 (2798321-3367524)	9245.5 (8568.2-9935.6)	0.01 (-0.007 - 0.028)	0.243
Senegal	294300 (271578-318380)	6986.3 (6472.3-7529.8)	679249 (627366-734863)	6614 (6185.7-7067.8)	-0.181 (-0.199 - -0.163)	<0.001

	Number_1990(95%UI ¹)	ASPR ² _1990(95%CI ³)	Number_2021(95%UI)	ASPR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Serbia	603591 (559791-648669)	5667.2 (5283.7-6069)	753941 (699986-811166)	5593.3 (5189.2-6041)	-0.039 (-0.052 - -0.026)	<0.001
Seychelles	6521 (6032-7044)	10613 (9840.2-11453.2)	12837 (11856-13936)	10884.5 (10070.5-11753)	0.091 (0.085 - 0.097)	<0.001
Sierra Leone	191300 (177895-206334)	7521.3 (7006.4-8070.4)	405349 (372950-439223)	7610.6 (7071.5-8155.3)	0.04 (0.033 - 0.046)	<0.001
Singapore	269496 (247876-292201)	9889.3 (9177.1-10490.2)	738749 (680520-792459)	9230 (8547.7-9877.1)	-0.228 (-0.258 - -0.197)	<0.001
Slovakia	357483 (334696-382908)	6221.6 (5843.7-6645)	486371 (454761-518472)	5960 (5575.9-6352.7)	-0.136 (-0.148 - -0.123)	<0.001
Slovenia	142299 (133101-152114)	6083.6 (5696.5-6507.4)	213545 (199557-227477)	5968.2 (5539.4-6369.4)	-0.062 (-0.067 - -0.056)	<0.001
Solomon Islands	14747 (13720-15956)	8066.7 (7526-8676.1)	37933 (34962-41296)	8231.6 (7603.5-8851.1)	0.065 (0.062 - 0.069)	<0.001
Somalia	224333 (205558-246035)	5516.9 (5100.6-5954.8)	603690 (549230-663805)	5565 (5152.6-6029.6)	0.029 (0.014 - 0.043)	<0.001
South Africa	2257302 (2099020-2428551)	9062.8 (8465.3-9681)	4677573 (4347292-5025759)	9097.4 (8501.9-9729.1)	0.021 (0.008 - 0.035)	0.002
South Sudan	193641 (177480-211370)	5618.8 (5175.1-6089.5)	323627 (296973-354259)	5730.3 (5317.9-6182.2)	0.062 (0.042 - 0.081)	<0.001
Spain	2768974 (2588950-2935877)	5464.9 (5131.1-5781.9)	4288430 (3948305-4576051)	5022.8 (4691-5348.8)	-0.266 (-0.287 - -0.245)	<0.001
Sri Lanka	1386481 (1270757-1506959)	10274.6 (9504.3-11118.7)	2647885 (2443533-2855363)	10450.5 (9660.4-11299.2)	0.057 (0.045 - 0.069)	<0.001

	Number_1990(95%UI ¹)	ASPR ² _1990(95%CI ³)	Number_2021(95%UI)	ASPR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Sudan	1061226 (976894-1142517)	8869.2 (8238.7-9502)	2607644 (2388823-2834157)	9227.5 (8545.5-9928.6)	0.127 (0.123 - 0.132)	<0.001
Suriname	19697 (18356-21176)	6671.6 (6215.3-7151.6)	42747 (39950-45625)	6878.3 (6435.8-7347.1)	0.095 (0.084 - 0.106)	<0.001
Sweden	821047 (759582-881515)	6415.6 (5943-6890.7)	1121779 (1040388-1207272)	6424 (5973.5-6887.8)	0.011 (-0.029 - 0.051)	0.602
Switzerland	639460 (600031-681319)	6582.8 (6179-7026.2)	995630 (934109-1061548)	6354 (5957.2-6788.6)	-0.11 (-0.169 - -0.052)	<0.001
Syrian Arab Republic	651505 (602699-705033)	9137.9 (8502.5-9774.2)	1213830 (1120670-1309607)	8947.4 (8264.7-9632.4)	-0.069 (-0.076 - -0.062)	<0.001
Taiwan (Province of China)	1249266 (1163816-1344723)	7155.4 (6728.1-7647.1)	2418082 (2270339-2579826)	6571.2 (6152.2-7040.8)	-0.278 (-0.307 - -0.249)	<0.001
Tajikistan	322282 (300325-346451)	9924.7 (9264.6-10630.8)	708588 (659872-761599)	9851.2 (9246.7-10479)	-0.03 (-0.045 - -0.015)	<0.001
Thailand	4699377 (4333121-5101891)	10448.1 (9717.1-11188.5)	10328746 (9637500-11140578)	10839.2 (10107.8-11724.9)	0.12 (0.097 - 0.143)	<0.001
Timor-Leste	45151 (41110-49397)	9936.4 (9194.9-10715.2)	104170 (96163-112715)	10410.8 (9601.8-11301.7)	0.156 (0.149 - 0.164)	<0.001
Togo	131761 (121749-142772)	7346 (6804-7869)	382466 (353706-416128)	7283.9 (6781.1-7815.9)	-0.025 (-0.036 - -0.013)	<0.001

	Number_1990(95%UI ¹)	ASPR ² _1990(95%CI ³)	Number_2021(95%UI)	ASPR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Tokelau	107 (99-114)	8149.5 (7578-8739.1)	121 (112-130)	8484 (7876.5-9158.2)	0.13 (0.124 - 0.136)	<0.001
Tonga	5372 (4996-5776)	8442.8 (7847.4-9065.9)	7502 (6986-8081)	8763.8 (8180-9417.8)	0.119 (0.114 - 0.125)	<0.001
Trinidad and Tobago	64179 (59428-68941)	6674.1 (6204.2-7119.3)	124244 (115206-133282)	7009.5 (6525-7524.9)	0.157 (0.145 - 0.169)	<0.001
Tunisia	522181 (483654-562934)	8690.3 (8101.6-9339.4)	1144106 (1055790-1229704)	8690.2 (8056.9-9347.2)	0.001 (-0.003 - 0.005)	0.581
Turkey	4172206 (3844649-4504302)	9813.7 (9115.6-10517.9)	8863959 (8169195-9513046)	9503.7 (8759.6-10189.4)	-0.099 (-0.122 - -0.076)	<0.001
Turkmenistan	254957 (238341-273926)	11011.1 (10342.1-11708.9)	484074 (452902-515793)	10909.7 (10221.7-11599.9)	-0.027 (-0.055 - 0.001)	0.057
Tuvalu	609 (566-656)	8324.3 (7745.8-8960.2)	948 (879-1026)	8641.4 (8027.9-9325)	0.121 (0.117 - 0.126)	<0.001
Uganda	554191 (507911-603268)	6119.9 (5653.8-6571.6)	1414668 (1296989-1547642)	6081.4 (5638.5-6582.4)	-0.019 (-0.026 - -0.013)	<0.001
Ukraine	6244758 (5793184-6760948)	9772.5 (9071.5-10538.3)	6394485 (5969352-6867844)	9814.1 (9113.9-10548.5)	0.011 (0.008 - 0.015)	<0.001
United Arab Emirates	123088 (111138-138046)	9906.1 (9179.7-10668.9)	940579 (846409-1053023)	9512.7 (8796.6-10259.4)	-0.132 (-0.141 - -0.123)	<0.001
United Kingdom	5130703 (4779037-5480493)	6119.8 (5722.5-6520.2)	6254851 (5837368-6635678)	5449.1 (5106.2-5788.7)	-0.359 (-0.448 - -0.27)	<0.001

	Number_1990(95%UI ¹)	ASPR ² _1990(95%CI ³)	Number_2021(95%UI)	ASPR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
United Republic of Tanzania	793891 (729869-860415)	5368.9 (4960.7-5794.8)	2186544 (2008467-2390011)	5861.5 (5421.9-6348.6)	0.282 (0.269 - 0.295)	<0.001
United States of America	22892228 (21306718-24521743)	7438.3 (6947-7942.8)	38674171 (35778672-41193631)	7550.8 (7050.6-8067.4)	0.037 (-0.024 - 0.099)	0.237
United States Virgin Islands	6113 (5650-6602)	6554.3 (6091.8-7043.7)	9684 (8946-10346)	6791.6 (6302.6-7286)	0.116 (0.108 - 0.123)	<0.001
Uruguay	221996 (206709-237075)	6192.6 (5767.9-6613.6)	301874 (280956-322913)	6282.8 (5818-6738.2)	0.044 (0.015 - 0.073)	0.003
Uzbekistan	1462693 (1370470-1565221)	10757.8 (10084.1-11467.1)	3273806 (3046385-3512972)	11069.1 (10338.8-11793.6)	0.087 (0.076 - 0.098)	<0.001
Vanuatu	7356 (6741-7986)	8514.5 (7893.4-9206.9)	19551 (18111-21165)	8886.1 (8277.8-9532.4)	0.138 (0.135 - 0.142)	<0.001
Venezuela (Bolivarian Republic of)	1015584 (943619-1092889)	8453 (7868.5-9056.9)	2442552 (2275365-2599385)	8317.3 (7756.4-8846.8)	-0.052 (-0.065 - -0.04)	<0.001
Viet Nam	4431264 (4056446-4826467)	9094.4 (8336.9-9858.1)	9699996 (8886323-10558442)	9152.1 (8434.8-9895.8)	0.025 (-0.001 - 0.051)	0.062

	Number_1990(95%UI ¹)	ASPR ² _1990(95%CI ³)	Number_2021(95%UI)	ASPR_2021(95%CI)	AAPC ⁴ (95%CI)	<i>P</i> value ⁵
Yemen	560437 (518019-609175)	8318 (7725.8-8913.9)	1752190 (1608715-1906736)	8511.9 (7887.1-9137.9)	0.075 (0.07 - 0.079)	<0.001
Zambia	231401 (212298-251949)	5513.6 (5099.7-5947.9)	662316 (603070-727722)	5769.9 (5330.9-6256.6)	0.147 (0.139 - 0.155)	<0.001
Zimbabwe	445253 (413595-477795)	8575.2 (7995.1-9192.8)	804662 (746942-870315)	8832.9 (8243-9439.3)	0.108 (0.083 - 0.132)	<0.001

1:UI=uncertainty interval. 2:ASPR = age-standardized prevalence rate adjusted to the world population(per 1000,000) . 3: CI=confidence intervals. 4:AAPC = average annual percentage change calculated by Joinpoint regression analysis; AAPC>0 indicated an upward trend, and AAPC<0 indicated a downward trend. 5: P-value was calculated by Joinpoint regression analysis; P<0.05 showed that the trend suggested by the AAPC was significant.