

**The Global Burden of Atopic Dermatitis in Children and Adolescents,
and Projections to 2036: Findings from the Global Burden of Disease
Study, 1990-2021**

Supplementary Files

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Supplementary Table 1. Cases of incidence and prevalence for global in 1990 and 2021, in children and adolescents.

(UI, uncertainty intervals)

	Incidence (95% UI)		Prevalence (95% UI)	
	Cases in 1990	Cases in 2021	Cases in 1990	Cases in 2021
Global:				
Both	10329489 (9666645,11036482)	10866926 (10148098,11616576)	77163810 (73109965,81417576)	83,025,939 (78822521,87605105)
Male	4798459 (4488821,5136362)	5081381 (4737823,5449092)	35858533 (34108107,37785912)	38790679 (36879919,40901251)
Female	5531030 (5159699,5914452)	5785546 (5393570,6183202)	41305276 (39122047,43601486)	44235260 (41886316,46661010)
SDI level:				
High	1660054 (1547871,1782856)	1461982 (1360185,1572366)	14740293 (13985308,15535258)	12214482 (11583167,12853251)
High-middle	1666954 (1552598,1791799)	1355404 (1257580,1457811)	14669856 (13906783,15428653)	13107370 (12436549,13819221)
Middle	3261356 (3055219,3473036)	3050294 (2843869,3259766)	22934592 (21700845,24156561)	22639275 (21450979,23879659)
Low-middle	2675911 (2500916,2864509)	3015328 (2816057,3228277)	18060686 (17113313,19148525)	21713715 (20588738,23013353)
Low	1056121 (986360,1131662)	1975031 (1841552,2115737)	6690570 (6333337,7070683)	13285581 (12582023,14034970)
GBD Region:				
Central Asia	305182 (277703,334071)	324017 (294146,354810)	2919735 (2739578,3104591)	3193590 (2991410,3397407)

South Asia	2562994 (2387722,2751767)	2804003 (2609208,3019504)	17123539 (16190152,18218265)	20554860 (19424912,21845547)
Southeast Asia	954121 (882573,1025752)	959663 (887422,1030374)	6674719 (6281335,7044222)	6896877 (6513435,7275071)
East Asia	1703421 (1588983,1821045)	1262148 (1180968,1356701)	11455752 (10808068,12111485)	8991208 (8489605,9497185)
High-income Asia Pacific	404712 (377231,438048)	257299 (240178,277715)	4210647 (3975247,4467369)	2649335 (2497519,2813227)
Western Europe	762964 (700108,830109)	712320 (652956,776121)	6691468 (6306236,7104552)	6320553 (5943538,6717515)
Eastern Europe	264887 (246279,285374)	174741 (162956,187800)	4005166 (3837466,4178678)	2856661 (2743251,2974254)
Central Europe	173212 (160311,187973)	106271 (98493,115256)	1443299 (1364327,1529610)	876204 (826412,928587)
High-income North America	468369 (438860,498384)	471024 (441457,501722)	3935479 (3745879,4119527)	4173053 (3963025,4386842)
Caribbean	76031 (68716,83853)	74135 (66880,81878)	529358 (493206,565183)	534753 (497905,571387)
Andean Latin America	80701 (74857,86870)	97483 (90319,104828)	573429 (541996,606798)	709369 (670237,750379)
Tropical Latin America	381137 (354944,407776)	371760 (346572,396921)	2852160 (2701987,3019322)	2701401 (2563590,2857963)
Southern Latin America	149942 (136025,164185)	134806 (121774,148247)	1171408 (1096487,1254059)	1155177 (1079375,1240493)
Central Latin America	412607 (382261,447302)	388162 (357974,421682)	2815048 (2652043,2990027)	2825582 (2652764,2999238)
Oceania	16937 (15232,18645)	32401 (29170,35651)	112964 (105702,121403)	214308 (200570,230328)
Australasia	40922 (37558,44436)	49109 (44657,53606)	305712 (283246,325967)	375292 (349530,403283)
Central Sub-Saharan Africa	103543 (94103,113206)	229947 (208206,252087)	611507 (568648,653386)	1453683 (1350685,1551676)
Eastern Sub-Saharan Africa	343226 (319441,366854)	670775 (620851,717819)	2110466 (1991727,2227492)	4377431 (4131796,4621570)

Southern Sub-Saharan Africa	83783 (77448,89737)	94652 (87245,101532)	537396 (506798,568885)	630923 (594445,668191)
Western Sub-Saharan Africa	333161 (310815,354593)	791655 (738982,842181)	2111016 (2002741,2225863)	5254556 (4980649,5544139)
North Africa and Middle East	707637 (650743,765282)	860556 (786287,932055)	4973543 (4677789,5278219)	6281122 (5871002,6655638)

Supplementary Table 2. ASIR, ASPR, and ASDR in four age subgroups of children and adolescents, in 1990 and 2021.

(ASR, age-standardized rate; ASIR, age-standardized incidence rate; ASPR, age-standardized prevalence rate; ASDR, the age-standardized rates of disability-adjusted life years; UI, uncertainty intervals)

Age subgroups		<5 years	5-9 years	10-14 years	15-19 years
Incidence (95% UI)	ASIR in 1990 (per 100,000)	111.16 (103.29,119.62)	33.01 (27.42,39.03)	14.82 (11.69,18.48)	9.42 (7.51,11.56)
	ASIR in 2021 (per 100,000)	105.4 (97.69,113.34)	31.46 (26.19,37.13)	14.27 (11.3,17.8)	8.81 (7.03,10.79)
Prevalence (95% UI)	ASPR in 1990 (per 100,000)	414.92 (393.18,436.58)	442.05 (411.46,477.06)	257.3 (236.09,279.76)	151.85 (138.11,166.12)
	ASPR in 2021 (per 100,000)	390.68 (370.11,410.81)	409.63 (381.48,442.27)	238.66 (219.65,260.02)	140.68 (127.94,153.84)
DALYs (95% UI)	ASDR in 1990 (per 100,000)	18.33 (9.51,30.46)	19.56 (10.12,33.17)	11.34 (5.74,19.38)	6.64 (3.44,11.09)
	ASDR in 2021 (per 100,000)	17.34 (8.91,28.97)	18.16 (9.38,30.48)	10.53 (5.32,18.06)	6.15 (3.2,10.24)

Supplementary Table 3: The ASIR, ASPR, and ASDR for 204 countries in 2021, in children and adolescents.

(ASIR, age-standardized incidence rate; ASPR, age-standardized prevalence rate; ASDR, the age-standardized rates of disability-adjusted life years; UI, uncertainty intervals)

Location	ASIR(95%UI)	Location	ASPR(95%UI)	Location	ASDR(95%UI)
Uzbekistan	359.42 (326.51, 393.90)	Mongolia	3526.24 (3303.91, 3757.26)	Mongolia	156.32 (79.76, 261.68)
Mongolia	359.02 (326.27, 393.62)	Kyrgyzstan	3435.41 (3215.68, 3656.62)	Tajikistan	152.26 (77.76, 262.00)
Tajikistan	356.03 (323.31, 390.13)	Uzbekistan	3435.01 (3218.93, 3654.65)	Kyrgyzstan	152.20 (78.53, 257.33)
Kazakhstan	346.62 (314.76, 379.75)	Tajikistan	3434.82 (3218.34, 3655.28)	Uzbekistan	152.09 (77.57, 258.19)
Kyrgyzstan	341.64 (310.53, 374.34)	Kazakhstan	3411.95 (3194.71, 3631.02)	Kazakhstan	151.56 (76.78, 258.70)
Turkmenistan	333.16 (302.87, 364.74)	Japan	3372.68 (3185.61, 3585.00)	Japan	149.83 (76.01, 251.49)
Japan	327.12 (304.42, 352.44)	Georgia	3367.30 (3170.90, 3605.31)	Georgia	149.59 (75.12, 252.09)
Georgia	322.90 (289.58, 353.97)	Turkmenistan	3345.73 (3132.55, 3559.40)	Turkmenistan	148.27 (75.20, 254.45)
France	315.10 (282.38, 349.52)	Armenia	3298.13 (3083.07, 3514.12)	Armenia	146.47 (74.00, 247.36)
Denmark	309.37 (276.66, 341.48)	Azerbaijan	3287.11 (3071.59, 3502.71)	Azerbaijan	145.78 (74.05, 246.91)
Armenia	306.11 (278.24, 335.27)	France	3073.17 (2804.30, 3324.15)	Estonia	136.30 (69.17, 227.57)
Singapore	304.53 (274.68, 334.53)	Estonia	3064.15 (2917.87, 3224.52)	France	136.11 (69.49, 230.62)

Azerbaijan	299.12 (271.85, 327.69)	Denmark	2815.83 (2542.34, 3082.31)	Denmark	124.91 (64.92, 209.29)
Israel	298.75 (270.86, 326.68)	Republic of Korea	2798.58 (2594.00, 2989.05)	Republic of Korea	124.47 (63.51, 212.30)
United Kingdom	297.10 (274.85, 320.22)	Italy	2729.03 (2588.21, 2890.68)	Italy	120.94 (62.13, 204.88)
Iceland	297.02 (264.31, 328.25)	Brunei Darussalam	2660.63 (2498.23, 2842.07)	Brunei Darussalam	118.30 (60.57, 200.60)
New Zealand	294.43 (272.68, 315.85)	United Kingdom	2615.96 (2478.47, 2754.49)	United Kingdom	116.00 (59.55, 196.71)
Brunei Darussalam	294.30 (268.00, 321.39)	Russian Federation	2595.86 (2494.96, 2703.22)	Russian Federation	115.45 (58.44, 192.03)
Malta	290.38 (263.21, 317.41)	Iceland	2560.59 (2337.56, 2813.89)	Iceland	113.56 (57.87, 191.38)
Italy	289.27 (267.98, 310.80)	Norway	2524.16 (2388.20, 2671.41)	Norway	112.06 (56.96, 190.33)
Germany	288.37 (262.78, 312.38)	Singapore	2455.52 (2240.23, 2668.56)	Singapore	109.19 (55.08, 183.32)
Norway	287.95 (267.18, 309.63)	New Zealand	2392.19 (2265.30, 2539.99)	Israel	106.32 (55.31, 181.73)
Sweden	283.35 (263.74, 304.33)	Germany	2392.06 (2247.12, 2539.20)	Germany	106.02 (54.82, 176.11)
Switzerland	282.38 (255.66, 308.90)	Israel	2389.30 (2246.65, 2531.05)	New Zealand	105.91 (54.07, 177.82)
Cyprus	279.33 (248.50, 307.50)	Malta	2352.73 (2211.50, 2492.82)	Malta	104.55 (54.16, 177.55)
Austria	277.69 (251.45, 303.49)	Sweden	2344.04 (2217.41, 2479.96)	Sweden	104.14 (52.82, 175.97)
Luxembourg	277.58 (251.24, 303.58)	Switzerland	2338.39 (2197.58, 2480.34)	Switzerland	103.86 (53.60, 176.60)
Monaco	273.99 (247.83, 299.71)	Ireland	2321.08 (2182.87, 2466.82)	Belgium	103.18 (53.48, 173.71)
Belgium	270.50 (244.56, 296.32)	Belgium	2320.71 (2182.24, 2465.24)	Ireland	103.01 (52.94, 174.69)

Netherlands	266.73 (241.12, 291.38)	Luxembourg	2317.55 (2178.90, 2459.99)	Luxembourg	102.88 (52.93, 173.75)
Ireland	266.21 (240.48, 292.04)	Austria	2310.71 (2171.94, 2451.48)	Austria	102.78 (52.70, 172.84)
Republic of Korea	264.11 (238.91, 291.41)	Monaco	2309.94 (2170.32, 2451.34)	Monaco	102.60 (53.51, 172.92)
Portugal	258.37 (233.43, 282.59)	Finland	2279.96 (2143.82, 2425.49)	Finland	101.39 (51.66, 170.96)
Chile	257.11 (232.37, 282.65)	Netherlands	2270.15 (2134.66, 2411.22)	Netherlands	100.82 (51.60, 174.59)
Argentina	255.23 (230.51, 280.76)	Portugal	2238.70 (2103.38, 2380.03)	Portugal	99.32 (51.22, 168.26)
Finland	254.19 (229.21, 279.22)	San Marino	2211.94 (2073.95, 2356.44)	San Marino	98.23 (50.75, 166.20)
Uruguay	251.77 (227.40, 276.97)	Andorra	2205.42 (2066.66, 2351.57)	Andorra	97.73 (50.13, 162.45)
Spain	248.18 (220.77, 276.81)	Argentina	2192.87 (2048.96, 2354.74)	Argentina	97.18 (49.68, 165.06)
Greece	246.08 (220.17, 273.04)	Chile	2184.66 (2041.30, 2346.10)	Chile	97.01 (49.71, 166.09)
San Marino	239.26 (215.80, 262.71)	Spain	2179.72 (1942.26, 2424.36)	Cyprus	96.54 (48.81, 162.05)
Australia	229.61 (207.79, 253.04)	Cyprus	2176.29 (1958.50, 2385.11)	Spain	96.50 (49.80, 163.96)
Andorra	228.74 (205.75, 252.05)	Uruguay	2170.36 (2028.25, 2330.09)	Uruguay	96.34 (49.74, 166.85)
Hungary	216.97 (194.29, 241.98)	Greece	2039.80 (1844.17, 2256.92)	Greece	90.49 (46.44, 150.20)
Venezuela					
(Bolivarian Republic of)	209.44 (189.97, 229.93)	Hungary	1984.21 (1832.00, 2151.14)	Hungary	87.99 (45.09, 148.75)

Brazil	206.81 (192.90, 220.81)	United States of America	1737.89 (1653.15, 1824.76)	United States of America	76.99 (39.76, 128.59)
Greenland	199.20 (183.85, 214.74)	Australia	1725.01 (1591.08, 1870.73)	Australia	76.72 (39.45, 129.52)
Paraguay	198.50 (179.74, 215.39)	Greenland	1621.92 (1535.38, 1716.01)	Greenland	71.94 (37.11, 121.89)
United States of America	195.51 (183.28, 208.39)	Venezuela (Bolivarian Republic of)	1617.23 (1494.28, 1743.30)	Venezuela (Bolivarian Republic of)	71.59 (37.45, 121.74)
Papua New Guinea	190.15 (171.41, 209.07)	Canada	1578.77 (1492.95, 1671.99)	Canada	70.16 (35.91, 120.60)
Haiti	190.04 (171.54, 209.53)	Paraguay	1518.16 (1421.64, 1615.83)	Taiwan (Province of China)	67.51 (33.85, 114.61)
Taiwan (Province of China)	184.82 (166.06, 204.23)	Taiwan (Province of China)	1516.90 (1392.00, 1649.28)	Paraguay	67.10 (34.56, 112.20)
Guyana	184.74 (166.77, 203.81)	Türkiye	1510.36 (1386.98, 1631.14)	Türkiye	66.89 (34.22, 111.88)
Canada	184.61 (170.42, 199.55)	Brazil	1499.62 (1422.07, 1588.15)	Brazil	66.19 (34.42, 110.90)
Dominican Republic	184.01 (166.24, 203.11)	Belarus	1483.18 (1410.60, 1560.34)	Belarus	66.04 (33.33, 112.99)
Tonga	183.97 (165.29, 202.59)	Lithuania	1480.21 (1409.09, 1555.45)	Lithuania	65.80 (33.12, 110.40)
Samoa	183.79 (165.02, 202.48)	Poland	1440.15 (1366.67, 1525.41)	Poland	63.94 (33.37, 106.13)

Vanuatu	183.08 (164.32, 201.82)	Republic of Moldova	1432.21 (1362.41, 1506.10)	Czechia	63.73 (32.41, 107.82)
El Salvador	182.75 (166.34, 201.72)	Czechia	1431.50 (1340.58, 1519.75)	Republic of Moldova	63.58 (32.03, 105.77)
Solomon Islands	182.58 (163.98, 201.05)	Slovenia	1427.33 (1336.19, 1516.83)	Slovenia	63.42 (32.59, 107.69)
Nicaragua	181.55 (165.23, 200.37)	Ukraine	1422.39 (1355.62, 1495.38)	Ukraine	63.26 (32.01, 105.98)
Panama	181.02 (164.49, 200.20)	Slovakia	1422.30 (1332.17, 1509.42)	Slovakia	63.19 (32.16, 105.56)
Honduras	180.94 (164.79, 199.25)	Bulgaria	1397.74 (1308.77, 1485.15)	Bulgaria	62.06 (31.44, 104.74)
Slovakia	178.43 (163.37, 194.57)	Montenegro	1391.07 (1302.84, 1476.77)	Montenegro	61.86 (31.73, 105.20)
Poland	178.37 (165.79, 191.88)	Bosnia and Herzegovina	1387.60 (1299.48, 1474.21)	Bosnia and Herzegovina	61.69 (31.65, 105.27)
Czechia	178.33 (163.20, 194.57)	North Macedonia	1383.06 (1295.17, 1469.68)	North Macedonia	61.39 (31.58, 103.68)
Nauru	177.13 (158.68, 195.25)	Croatia	1377.92 (1290.38, 1463.58)	Croatia	61.33 (31.63, 105.34)
Kiribati	176.59 (158.10, 194.88)	Albania	1364.33 (1278.25, 1448.36)	Albania	60.65 (31.54, 103.84)
Guatemala	176.35 (160.25, 194.96)	Panama	1317.78 (1224.82, 1411.37)	Serbia	58.54 (29.64, 96.27)
Colombia	173.84 (158.14, 191.45)	Haiti	1316.25 (1226.21, 1404.15)	Panama	58.39 (29.86, 97.85)
Fiji	173.78 (155.50, 191.87)	El Salvador	1315.13 (1222.50, 1408.05)	El Salvador	58.27 (29.70, 98.67)

Slovenia	173.37 (158.43, 189.30)	Serbia	1313.53 (1229.60, 1395.08)	Nicaragua	58.16 (29.19, 96.92)
Suriname	172.85 (155.10, 191.11)	Nicaragua	1310.04 (1217.91, 1402.62)	Guatemala	57.84 (29.20, 96.93)
Costa Rica	172.31 (156.33, 190.41)	Guyana	1306.24 (1216.64, 1394.31)	Guyana	57.71 (29.58, 96.59)
Guam	172.18 (154.29, 189.51)	Guatemala	1304.36 (1212.79, 1397.01)	Haiti	57.64 (30.10, 97.78)
Tuvalu	172.16 (154.01, 189.86)	Honduras	1299.46 (1208.84, 1390.76)	Dominican Republic	57.61 (30.27, 98.29)
Türkiye	171.56 (153.78, 190.48)	Costa Rica	1299.13 (1207.95, 1392.59)	Honduras	57.51 (29.49, 99.03)
Montenegro	170.82 (156.29, 186.27)	Dominican Republic	1299.12 (1210.00, 1387.08)	Costa Rica	57.51 (29.61, 96.87)
Cuba	170.31 (152.56, 188.27)	Trinidad and Tobago	1292.11 (1201.29, 1384.14)	Trinidad and Tobago	57.12 (29.44, 95.76)
Trinidad and Tobago	168.83 (151.00, 186.94)	Suriname	1290.46 (1200.47, 1381.12)	Cuba	56.97 (29.53, 96.07)
Bulgaria	168.53 (154.03, 183.87)	Cuba	1286.85 (1196.38, 1378.10)	Suriname	56.94 (29.54, 94.93)
Grenada	168.44 (151.39, 186.61)	Saint Vincent and the Grenadines	1286.11 (1195.05, 1378.33)	Saint Vincent and the Grenadines	56.84 (29.28, 95.97)
Pakistan	168.05 (156.61, 180.74)	Colombia	1276.25 (1187.86, 1366.78)	Colombia	56.66 (28.75, 95.39)
Belize	167.94 (150.82, 186.05)	United States Virgin Islands	1270.38 (1179.02, 1362.04)	United States Virgin Islands	56.19 (28.99, 94.72)
Marshall Islands	167.45 (149.60, 184.71)	Bermuda	1269.26 (1178.13, 1360.18)	Bermuda	56.12 (28.65, 94.86)
Antigua and	167.31 (150.36, 185.33)	Belize	1268.78 (1177.94, 1359.03)	Belize	56.00 (29.29, 96.10)

Barbuda					
Bermuda	166.83 (149.61, 184.85)	Grenada	1263.08 (1172.37, 1353.36)	Antigua and Barbuda	55.77 (28.63, 96.03)
Saint Vincent and the Grenadines	165.78 (148.12, 183.97)	Antigua and Barbuda	1260.19 (1169.19, 1350.27)	Grenada	55.75 (28.72, 93.24)
Bosnia and Herzegovina	165.60 (151.29, 180.54)	Jamaica	1254.86 (1163.18, 1345.72)	Jamaica	55.42 (28.62, 95.61)
Albania	165.38 (151.26, 180.26)	Saint Lucia	1250.96 (1159.35, 1341.54)	Saint Lucia	55.34 (28.75, 94.27)
United States Virgin Islands	164.61 (147.26, 182.39)	Saint Kitts and Nevis	1250.74 (1159.18, 1340.48)	Saint Kitts and Nevis	55.33 (28.76, 95.68)
Croatia	164.58 (150.43, 179.41)	Vanuatu	1245.33 (1164.11, 1338.87)	Vanuatu	55.17 (28.43, 92.51)
North Macedonia	164.23 (149.98, 179.06)	Barbados	1244.04 (1152.00, 1334.94)	Samoa	55.16 (28.44, 93.46)
Saint Kitts and Nevis	163.82 (147.01, 181.67)	Papua New Guinea	1243.46 (1163.71, 1336.45)	Tonga	55.07 (27.85, 93.32)
Lao People's Democratic Republic	162.73 (148.57, 176.87)	Samoa	1242.01 (1161.44, 1334.96)	Barbados	55.06 (28.43, 93.83)

Jamaica	161.63 (144.66, 179.37)	Dominica	1241.08 (1148.22, 1333.16)	Papua New Guinea	54.91 (27.80, 93.37)
Saint Lucia	161.62 (144.73, 179.34)	Tonga	1239.49 (1159.51, 1332.20)	Dominica	54.72 (28.62, 92.58)
Micronesia (Federated States of)	160.54 (143.25, 177.10)	Kiribati	1238.10 (1156.26, 1331.41)	Kiribati	54.64 (27.57, 91.38)
Cambodia	159.16 (145.03, 173.40)	Solomon Islands	1234.16 (1154.21, 1326.41)	Fiji	54.59 (27.94, 91.72)
Timor-Leste	159.05 (145.13, 173.07)	Bahamas	1232.56 (1140.22, 1324.68)	Solomon Islands	54.59 (28.22, 92.41)
Barbados	158.97 (142.22, 176.62)	Fiji	1231.91 (1150.05, 1325.16)	Bahamas	54.48 (27.98, 91.62)
Viet Nam	158.61 (144.32, 172.96)	Nauru	1226.97 (1146.64, 1318.99)	Nauru	54.42 (27.47, 92.92)
Niue	158.12 (141.11, 174.60)	Puerto Rico	1216.06 (1124.62, 1306.73)	Puerto Rico	53.76 (27.72, 90.80)
Philippines	157.47 (145.96, 168.62)	Tokelau	1213.14 (1126.89, 1311.20)	Tokelau	53.76 (27.21, 90.46)
Seychelles	157.39 (143.36, 171.62)	Tuvalu	1210.72 (1131.21, 1302.90)	Tuvalu	53.70 (27.07, 89.19)
Northern Mariana Islands	156.25 (139.01, 172.82)	Marshall Islands	1210.30 (1129.45, 1304.42)	Marshall Islands	53.59 (27.46, 92.34)
Cook Islands	156.06 (139.13, 172.15)	Guam	1203.45 (1124.56, 1296.66)	Guam	53.42 (27.48, 90.91)
Nepal	155.38 (141.24, 170.79)	Northern Mariana Islands	1196.30 (1113.25, 1293.05)	Northern Mariana Islands	53.15 (26.57, 91.69)
Palau	155.35 (138.37, 171.61)	Micronesia	1193.05 (1111.27, 1288.40)	American Samoa	52.87 (26.90, 90.62)

		(Federated States of)			
Myanmar	154.86 (140.98, 168.86)	American Samoa	1192.77 (1107.47, 1289.24)	Micronesia (Federated States of)	52.83 (27.33, 90.34)
Indonesia	154.69 (144.14, 165.93)	Palau	1187.14 (1104.10, 1283.21)	Palau	52.69 (26.65, 88.93)
Maldives	153.90 (139.98, 168.12)	Niue	1186.53 (1104.78, 1281.74)	Niue	52.63 (26.93, 88.36)
Bolivia (Plurinational State of)	153.55 (142.37, 165.71)	Cook Islands	1184.49 (1101.61, 1279.21)	Cook Islands	52.60 (26.91, 87.76)
Mexico	153.45 (142.96, 165.25)	Pakistan	1148.49 (1083.66, 1219.52)	Pakistan	50.48 (26.01, 85.16)
Democratic People's Republic of Korea	152.97 (140.38, 166.33)	Ecuador	1131.00 (1062.83, 1202.49)	Democratic People's Republic of Korea	50.25 (25.82, 85.88)
Bangladesh	152.24 (138.39, 167.55)	Democratic People's Republic of Korea	1129.76 (1049.77, 1208.14)	Ecuador	50.22 (25.82, 84.41)
Ecuador	152.03 (140.62, 164.79)	Viet Nam	1129.62 (1053.84, 1200.99)	Viet Nam	50.18 (25.84, 86.72)
Peru	151.97 (139.96, 163.49)	Bangladesh	1120.82 (1044.01, 1205.48)	Iran (Islamic Republic of)	49.64 (25.47, 83.77)
Bhutan	151.68 (137.87, 166.67)	Iran (Islamic	1120.05 (1053.50, 1193.69)	Bangladesh	49.58 (25.01, 84.02)

		Republic of)		Lao People's	
Tokelau	151.34 (134.36, 168.54)	Philippines	1118.19 (1053.42, 1183.55)	Democratic Republic	49.56 (25.27, 86.53)
Qatar	151.27 (138.69, 164.52)	Cambodia	1117.87 (1042.88, 1188.27)	Philippines	49.48 (25.43, 83.63)
Malaysia	151.05 (137.36, 164.86)	Lao People's Democratic Republic	1117.71 (1043.64, 1186.78)	Seychelles	49.45 (25.71, 85.77)
Bahamas	150.25 (133.78, 167.54)	Maldives	1116.55 (1040.49, 1188.39)	Maldives	49.44 (25.36, 85.74)
Dominica	150.16 (133.46, 167.46)	Seychelles	1115.13 (1039.53, 1185.78)	Cambodia	49.42 (25.31, 84.37)
Russian Federation	150.09 (139.85, 161.75)	Bolivia (Plurinational State of)	1115.08 (1046.53, 1186.33)	Indonesia	49.33 (25.53, 82.73)
American Samoa	149.68 (132.80, 166.09)	Indonesia	1112.19 (1052.75, 1175.19)	Nepal	49.21 (25.48, 83.27)
Afghanistan	149.28 (137.13, 162.16)	Nepal	1109.47 (1033.92, 1192.00)	Bolivia (Plurinational State of)	49.21 (25.33, 85.13)

Serbia	149.07 (135.95, 162.39)	Myanmar	1106.50 (1031.90, 1176.05)	Myanmar	48.93 (25.41, 83.66)
India	148.00 (137.70, 159.49)	Timor-Leste	1103.78 (1030.56, 1172.44)	Sri Lanka	48.90 (25.25, 83.61)
Sri Lanka	147.87 (134.70, 163.01)	Bhutan	1103.41 (1027.89, 1185.94)	Timor-Leste	48.80 (25.39, 83.78)
Iran (Islamic Republic of)	147.64 (136.87, 160.29)	India	1103.29 (1040.58, 1171.75)	Malaysia	48.74 (24.44, 83.00)
Algeria	146.16 (129.59, 161.59)	Sri Lanka	1102.39 (1021.49, 1190.73)	Mexico	48.56 (25.00, 82.39)
Estonia	144.96 (129.72, 158.52)	Malaysia	1099.79 (1025.78, 1169.22)	India	48.55 (24.78, 80.58)
Oman	144.93 (130.20, 160.00)	Peru	1093.59 (1031.99, 1156.76)	Bhutan	48.55 (24.95, 81.77)
Mauritius	142.19 (129.30, 155.37)	Mexico	1093.34 (1029.48, 1154.13)	Peru	48.46 (24.73, 81.99)
Puerto Rico	141.82 (125.90, 158.59)	Thailand	1077.71 (1002.94, 1148.51)	Thailand	47.85 (24.45, 82.42)
Thailand	140.35 (127.32, 153.89)	Mauritius	1068.65 (995.44, 1138.10)	Mauritius	47.26 (24.06, 81.27)
Yemen	139.00 (127.35, 151.47)	Kuwait	1023.81 (928.81, 1132.26)	Kuwait	45.37 (22.90, 75.68)
Palestine	138.62 (125.05, 152.57)	Qatar	1013.60 (947.22, 1079.99)	Qatar	45.08 (23.21, 78.86)
United Arab Emirates	137.73 (125.78, 150.16)	Palestine	1013.05 (922.86, 1102.62)	Palestine	44.95 (22.90, 75.58)
Sudan	137.11 (125.60, 149.43)	Algeria	1011.11 (910.90, 1117.35)	Algeria	44.85 (22.79, 74.47)
Kuwait	136.88 (122.29, 151.49)	Oman	1005.42 (913.72, 1099.92)	Oman	44.63 (22.40, 76.36)

United Republic of Tanzania	136.57 (124.36, 148.66)	United Arab Emirates	1001.75 (935.66, 1069.35)	United Arab Emirates	44.42 (22.87, 75.47)
Gabon	136.56 (122.13, 150.72)	Afghanistan	994.03 (929.13, 1058.62)	Afghanistan	43.86 (22.26, 75.17)
China	134.37 (125.67, 144.35)	Yemen	984.03 (919.38, 1049.72)	Tunisia	43.25 (22.06, 72.10)
Tunisia	133.79 (122.24, 145.70)	Tunisia	976.59 (912.50, 1042.13)	Sudan	43.01 (22.29, 72.75)
Morocco	133.45 (122.11, 145.35)	Sudan	975.92 (912.20, 1040.81)	Yemen	42.93 (22.29, 75.13)
Iraq	131.70 (120.28, 143.25)	United Republic of Tanzania	968.89 (906.66, 1027.92)	Iraq	42.92 (21.47, 72.83)
Lebanon	131.67 (120.27, 143.24)	Iraq	968.46 (905.12, 1033.73)	Lebanon	42.83 (21.77, 73.82)
Saudi Arabia	130.11 (118.88, 141.35)	Lebanon	967.53 (904.29, 1032.62)	Morocco	42.74 (21.77, 72.84)
Bahrain	127.82 (116.66, 138.73)	Morocco	965.20 (902.37, 1029.58)	United Republic of Tanzania	42.68 (21.75, 72.06)
Uganda	127.39 (115.18, 140.47)	Gabon	959.03 (878.18, 1042.37)	China	42.54 (22.01, 71.35)
Jordan	123.75 (110.66, 137.50)	Saudi Arabia	957.29 (895.26, 1021.12)	Saudi Arabia	42.48 (21.96, 72.37)
Lithuania	122.25 (112.05, 133.42)	China	954.00 (900.31, 1007.88)	Gabon	42.31 (21.78, 72.34)
Romania	120.12 (109.65, 130.65)	Bahrain	952.11 (890.24, 1016.09)	Bahrain	42.26 (22.10, 72.71)
Angola	119.74 (108.36, 131.54)	Romania	940.68 (877.04, 1001.67)	Romania	41.83 (21.53, 71.12)

Mali	119.28 (109.20, 129.18)	Jordan	932.90 (844.59, 1019.78)	Jordan	41.38 (21.67, 69.89)
Cameroon	118.60 (109.82, 128.00)	Libya	928.77 (867.06, 991.24)	Libya	41.12 (20.86, 70.70)
Libya	118.43 (107.72, 128.84)	Syrian Arab Republic	888.99 (829.24, 949.11)	Syrian Arab Republic	39.19 (19.75, 67.00)
Belarus	118.26 (108.51, 128.96)	Uganda	855.85 (780.52, 932.67)	Uganda	37.74 (19.17, 62.89)
Zimbabwe	115.53 (103.93, 127.12)	Cameroon	844.16 (796.78, 898.88)	Cameroon	37.30 (18.90, 62.71)
Central African Republic	115.25 (104.35, 126.22)	Mali	784.43 (723.41, 848.86)	Mali	34.23 (17.93, 58.00)
Democratic Republic of the Congo	115.00 (104.04, 126.14)	Zimbabwe	751.79 (701.40, 806.86)	Zimbabwe	33.17 (17.03, 56.03)
Republic of Moldova	114.67 (105.28, 124.94)	South Africa	745.28 (702.83, 788.91)	Namibia	32.91 (16.68, 56.38)
Chad	114.32 (105.79, 122.96)	Namibia	742.88 (692.59, 798.63)	South Africa	32.91 (17.02, 55.75)
Niger	113.47 (105.05, 122.01)	Angola	742.80 (690.77, 792.81)	Angola	32.88 (16.78, 55.31)
Somalia	112.43 (103.75, 120.94)	Eswatini	742.03 (691.78, 797.02)	Eswatini	32.81 (16.38, 56.23)
Burkina Faso	112.09 (103.84, 120.51)	Botswana	738.64 (688.28, 794.07)	Botswana	32.60 (16.16, 56.77)

Eswatini	111.85 (100.71, 123.23)	Lesotho	734.59 (683.45, 790.85)	Lesotho	32.44 (16.55, 56.27)
		Democratic		Democratic	
Namibia	111.47 (100.37, 122.84)	Republic of the	730.37 (678.98, 779.06)	Republic of the	32.12 (16.14, 54.23)
		Congo		Congo	
Ukraine	111.01 (102.80, 120.68)	Chad	726.67 (685.35, 769.91)	Chad	31.94 (16.60, 55.13)
South Africa	110.83 (102.86, 118.40)	Niger	725.00 (683.79, 767.99)	Niger	31.91 (16.32, 54.62)
Benin	110.69 (102.57, 119.04)	Central African	724.43 (673.59, 772.72)	Central African	31.76 (16.22, 52.86)
		Republic		Republic	
Syrian Arab	110.56 (100.61, 120.12)	Nigeria	721.50 (679.85, 761.05)	Benin	31.72 (16.06, 55.13)
Republic					
Botswana	110.46 (99.51, 121.69)	Benin	721.09 (679.83, 763.04)	Guinea	31.70 (16.45, 54.20)
Burundi	109.12 (100.43, 117.42)	Guinea	720.73 (679.36, 762.56)	Côte d'Ivoire	31.69 (16.46, 54.78)
Côte d'Ivoire	108.97 (100.93, 117.18)	Burkina Faso	720.41 (679.36, 762.20)	Nigeria	31.68 (16.57, 53.56)
Guinea	108.89 (100.86, 117.11)	Côte d'Ivoire	717.80 (676.69, 759.44)	Guinea-Bissau	31.59 (16.47, 53.64)
Mozambique	108.51 (99.80, 116.80)	Guinea-Bissau	717.58 (676.49, 759.06)	Mauritania	31.57 (16.47, 53.10)
Nigeria	108.16 (101.23, 115.30)	Mauritania	714.01 (672.98, 755.35)	Burkina Faso	31.49 (16.16, 54.23)
Guinea-Bissau	108.08 (100.08, 116.26)	Equatorial Guinea	709.92 (659.42, 758.54)	Equatorial Guinea	31.28 (16.13, 54.03)

Lesotho	107.41 (96.69, 118.57)	Sierra Leone	709.08 (668.59, 749.66)	Sierra Leone	31.10 (15.91, 53.24)
Sierra Leone	106.96 (99.06, 115.03)	Gambia	706.15 (665.61, 746.38)	Gambia	31.07 (16.10, 53.75)
Eritrea	106.33 (97.85, 114.35)	Senegal	704.66 (664.34, 745.03)	Senegal	30.96 (16.17, 52.68)
Zambia	106.18 (97.59, 114.28)	Liberia	704.44 (664.05, 744.54)	Liberia	30.90 (15.90, 53.57)
Equatorial Guinea	105.63 (95.46, 116.05)	Togo	695.26 (637.38, 751.42)	Latvia	30.87 (15.76, 52.90)
Mauritania	105.22 (97.50, 113.17)	Sao Tome and Principe	694.78 (654.68, 734.01)	Sao Tome and Principe	30.75 (15.84, 52.73)
Madagascar	104.91 (96.34, 112.92)	Latvia	694.02 (659.83, 727.15)	Togo	30.50 (15.78, 53.75)
Gambia	104.65 (97.04, 112.50)	Mozambique	689.01 (647.09, 729.45)	Burundi	30.32 (15.70, 50.98)
South Sudan	104.62 (96.23, 112.62)	Burundi	687.23 (645.50, 727.31)	Cabo Verde	30.23 (15.49, 51.87)
Djibouti	104.52 (96.05, 112.49)	Zambia	684.23 (642.71, 724.78)	Mozambique	30.19 (15.55, 50.87)
Senegal	104.18 (96.56, 111.99)	Cabo Verde	684.07 (644.40, 722.40)	Zambia	30.04 (15.46, 51.36)
Togo	103.37 (94.64, 112.49)	Somalia	683.31 (641.87, 722.80)	Madagascar	30.03 (15.59, 52.64)
Liberia	103.22 (95.72, 111.01)	Madagascar	681.87 (640.64, 722.53)	Somalia	30.02 (15.40, 51.34)
Egypt	101.50 (91.22, 110.69)	Eritrea	678.64 (637.68, 718.45)	Eritrea	29.92 (15.22, 50.60)
Comoros	101.43 (93.00, 109.17)	Djibouti	674.99 (634.31, 714.57)	Djibouti	29.89 (15.37, 49.75)
Malawi	101.26 (92.79, 109.01)	Malawi	672.79 (632.80, 713.28)	Comoros	29.71 (15.30, 49.02)

Ethiopia	99.44 (92.96, 106.53)	Comoros	671.99 (631.88, 712.10)	Malawi	29.55 (15.21, 49.83)
Sao Tome and Principe	97.50 (90.33, 105.05)	South Sudan	667.27 (627.35, 706.34)	South Sudan	29.24 (14.98, 50.66)
Cabo Verde	93.99 (87.09, 101.25)	Egypt	643.59 (592.41, 690.84)	Egypt	28.64 (14.70, 47.44)
Congo	92.83 (83.40, 102.56)	Ethiopia	621.97 (585.41, 657.43)	Ethiopia	27.44 (14.12, 46.29)
Ghana	92.45 (86.22, 99.54)	Kenya	606.69 (571.54, 640.36)	Kenya	26.83 (13.84, 44.76)
Kenya	92.32 (85.60, 98.26)	Ghana	595.73 (562.59, 630.17)	Ghana	26.26 (13.42, 44.49)
Rwanda	81.37 (74.00, 88.85)	Congo	588.22 (531.62, 642.33)	Congo	25.92 (13.41, 44.43)
Latvia	71.66 (66.53, 76.83)	Rwanda	489.86 (451.69, 528.69)	Rwanda	21.63 (11.19, 36.60)

Supplementary Table 4. Cases and ASR of incidence and prevalence for global in 2022 and 2036, in children and adolescents.

(ASR, age-standardized rate; UI, uncertainty intervals)

	Cases			ASR (per 100, 000)		
	Both	Female	Male	Both	Female	Male
Incidence (95% UI)						
2022	10951109	5822416	5128693	159.88 (154.9,164.87)	175.69 (170.25,181.25)	145.08 (140.63,149.63)
	(10610604,11291615)	(5640697,6004135)	(4969906,5287480)			
2023	10935188	5813890	5121297	159.71 (153.29,166.13)	175.47 (168.49,182.64)	144.96 (139.21,150.85)
	(10497362,11373013)	(5580616,6047165)	(4916746,5325848)			
2024	10912092	5801697	5110395	159.55 (151.22,167.88)	175.27 (166.24,184.61)	144.84 (137.39,152.54)
	(10345182,11479002)	(5499989,6103405)	(4845192,5375597)			
2025	10881752	5785800	5095952	159.41 (148.79,170.03)	175.07 (163.62,187.04)	144.74 (135.27,154.62)
	(10161010,11602495)	(5402483,6169116)	(4758526,5433379)			
2026	10846250	5767261	5078988	159.29 (146.06,172.51)	174.9 (160.72,189.91)	144.65 (132.91,157.05)
	(9951020,11741479)	(5291329,6243193)	(4659691,5498285)			
2027	10806230	5746386	5059844	159.19 (143.06,175.31)	174.76 (157.59,193.17)	144.59 (130.36,159.83)

	(9718314,11894146)	(5168134,6324638)	(4550179,5569509)			
2028	10766776 (9470357,12063194)	5725590 (5036616,6414564)	5041185 (4433740,5648630)	159.11 (139.83,178.4)	174.64 (154.27,196.82)	144.55 (127.66,162.91)
2029	10725014 (9206370,12243658)	5703509 (4896519,6510499)	5021505 (4309852,5733159)	159.06 (136.38,181.74)	174.56 (150.81,200.83)	144.53 (124.83,166.3)
2030	10682570 (8929017,12436122)	5680997 (4749254,6612740)	5001572 (4179763,5823381)	159.04 (132.75,185.34)	174.5 (147.23,205.2)	144.54 (121.9,170)
2031	10641135 (8640410,12641861)	5658955 (4595945,6721965)	4982181 (4044465,5919896)	159.06 (128.94,189.18)	174.48 (143.55,209.94)	144.58 (118.89,173.99)
2032	10601181 (8341278,12861083)	5637634 (4436984,6838285)	4963546 (3904295,6022798)	159.11 (124.95,193.28)	174.51 (139.8,215.05)	144.66 (115.82,178.31)
2033	10563561 (8032899,13094223)	5617411 (4272993,6961829)	4946150 (3759906,6132393)	159.21 (120.79,197.62)	174.58 (135.99,220.55)	144.77 (112.7,182.95)
2034	10527517 (7714956,13340078)	5597924 (4103850,7091997)	4929593 (3611106,6248080)	159.34 (116.46,202.22)	174.69 (132.14,226.44)	144.92 (109.54,187.92)
2035	10494230 (7388473,13599986)	5579830 (3930132,7229528)	4914400 (3458341,6370458)	159.52 (111.97,207.06)	174.85 (128.26,232.74)	145.11 (106.36,193.23)

2036	10464539 (7053951,13875127)	5563591 (3752123,7375059)	4900948 (3301828,6500067)	159.74 (107.31,212.17)	175.06 (124.37,239.46)	145.34 (103.16,198.89)
Prevalence (95% UI)						
2022	83077047 (80724149,85429946)	44175977 (42925920,45426033)	38901071 (37798228,40003913)	1181.02 (1147.47,1214.57)	1297.71 (1261.18,1334.93)	1071.81 (1041.58,1102.61)
2023	83142320 (80154351,86130288)	44208565 (42621917,45795213)	38933754 (37532434,40335075)	1180.63 (1138,1223.25)	1297.1 (1250.77,1344.49)	1071.62 (1033.22,1110.87)
2024	83163749 (79317274,87010224)	44221452 (42179471,46263432)	38942298 (37137803,40746792)	1180.43 (1125.53,1235.34)	1296.73 (1237.17,1358.02)	1071.59 (1022.17,1122.39)
2025	83144654 (78259136,88030171)	44215622 (41622235,46809009)	38929032 (36636902,41221162)	1180.45 (1110.65,1250.25)	1296.59 (1221.1,1374.94)	1071.72 (1009.05,1136.7)
2026	83095227 (77011094,89179360)	44195272 (40965468,47425076)	38899956 (36045627,41754285)	1180.72 (1093.67,1267.77)	1296.73 (1203.03,1395.02)	1072.08 (994.25,1153.63)
2027	83014895 (75582706,90447085)	44159303 (40213409,48105197)	38855592 (35369297,42341888)	1181.27 (1074.74,1287.8)	1297.17 (1183.16,1418.25)	1072.7 (977.98,1173.19)
2028	82937985 (74029324,91846646)	44122659 (39392528,48852790)	38815326 (34636796,42993856)	1182.03 (1054.07,1309.98)	1297.85 (1161.86,1444.27)	1073.51 (960.5,1195.07)

2029	82821317	44065103	38756214	1182.97	1298.73	1074.47
	(72327215,93315420)	(38492748,49637458)	(33834467,43677961)	(1031.85,1334.09)	(1139.36,1472.91)	(942.02,1219.12)
2030	82674812	43991998	38682814	1184.12	1299.84	1075.62
	(70494997,94854627)	(37523993,50460004)	(32971005,44394623)	(1008.18,1360.05)	(1115.89,1504.14)	(922.7,1245.32)
2031	82515432	43912293	38603138	1185.54	1301.26	1077.01
	(68550983,96479880)	(36495838,51328749)	(32055146,45151130)	(983.13,1387.94)	(1091.58,1538.1)	(902.68,1273.8)
2032	82350365	43830040	38520325	1187.29	1303.04	1078.7
	(66501617,98199113)	(35411795,52248285)	(31089822,45950828)	(956.73,1417.85)	(1066.55,1574.96)	(882.05,1304.68)
2033	82200426	43753950	38446476	1189.34 (929,1449.69)	1305.16	1080.66
	(64369977,100030876)	(34282231,53225670)	(30087746,46805206)		(1040.92,1614.71)	(860.91,1337.97)
2034	82042258	43672852	38369407	1191.69	1307.6	1082.88
	(62140476,101944041)	(33099972,54245731)	(29040503,47698310)	(899.94,1483.44)	(1014.78,1657.37)	(839.34,1373.67)
2035	81886237	43592726	38293511	1194.32	1310.37	1085.36
	(59823446,103949028)	(31870898,55314554)	(27952548,48634473)	(869.55,1519.1)	(988.24,1703.03)	(817.42,1411.85)
2036	81743926	43520055	38223872	1197.28	1313.5	1088.13
	(57427249,106060603)	(30599666,56440443)	(26827583,49620160)	(837.82,1556.74)	(961.37,1751.81)	(795.22,1452.62)
