

Table S1 Incidence rate of pulmonary aspiration and foreign body in airway among children in Asian countries and regions from 1990 to 2021

Level	1990		2021		1990–2021	
	Number (95% UI)	Rate per 100,000 (95% UI)	Number (95% UI)	Rate per 100,000 (95% UI)	Rate change	Rate EAPC (95% CI)
Afghanistan	3166.344 (2236.655–4373.532)	73.498 (51.918–101.520)	5888.019 (4321.448–7934.269)	41.463 (30.431–55.873)	–0.436 (–0.520 to –0.342)	–2.48 (–2.75 to –2.21)
Algeria	7474.715 (5398.797–10281.290)	69.697 (50.340–95.866)	6265.791 (4539.103–8505.787)	47.105 (34.124–63.945)	–0.324 (–0.402 to –0.246)	–1.12 (–1.22 to –1.02)
Armenia	2755.301 (2054.068–3649.054)	264.118 (196.899–349.792)	872.767 (655.973–1162.383)	147.336 (110.738–196.227)	–0.442 (–0.508 to –0.362)	–1.94 (–2.04 to –1.84)
Azerbaijan	5833.432 (4472.942–7607.448)	240.362 (184.304–313.459)	4084.575 (3109.143–5223.925)	173.032 (131.711–221.298)	–0.280 (–0.369 to –0.171)	–1.14 (–1.31 to –0.96)
Bahrain	115.263 (81.082–164.433)	70.606 (49.668–100.726)	121.096 (84.017–174.409)	40.813 (28.316–58.781)	–0.422 (–0.498 to –0.346)	–1.49 (–1.66 to –1.33)
Bangladesh	38257.931 (27204.223–53870.086)	78.219 (55.619–110.138)	13636.618 (9392.689–20628.830)	29.796 (20.523–45.075)	–0.619 (–0.684 to –0.544)	–3.46 (–3.59 to –3.32)
Bhutan	159.287 (113.575–217.800)	60.751 (43.317–83.068)	52.807 (36.138–75.906)	28.214 (19.308–40.555)	–0.536 (–0.603 to –0.464)	–2.54 (–2.68 to –2.41)
Brunei Darussalam	84.514 (58.824–123.375)	93.304 (64.942–136.206)	66.785 (49.103–92.598)	70.599 (51.907–97.886)	–0.243 (–0.310 to –0.171)	–0.79 (–0.89 to –0.70)
Cambodia	1850.900 (1277.935–2686.405)	39.711 (27.418–57.637)	1014.634 (665.996–1481.137)	19.830 (13.016–28.948)	–0.501 (–0.562 to –0.431)	–2.18 (–2.29 to –2.06)
China	246914.885 (168281.189–353921.721)	77.554 (52.856–111.165)	62508.859 (41946.057–90356.767)	24.076 (16.156–34.802)	–0.690 (–0.716 to –0.660)	–4.74 (–5.66 to –3.81)
Democratic People's Republic of Korea	1840.192 (1230.303–2701.613)	30.931 (20.680–45.411)	821.478 (605.498–1107.080)	17.208 (12.684–23.191)	–0.444 (–0.530 to –0.325)	–2.18 (–2.43 to –1.94)
Egypt	13615.195 (9950.597–18635.754)	61.380 (44.859–84.014)	12297.539 (8553.610–17543.966)	33.367 (23.209–47.602)	–0.456 (–0.518 to –0.391)	–2.00 (–2.13 to –1.88)
Georgia	2397.430 (1669.706–3408.862)	175.160 (121.991–249.057)	1202.906 (840.797–1641.119)	163.453 (114.249–222.998)	–0.067 (–0.228 to 0.155)	0.35 (0.07 to 0.62)
India	232046.400 (159329.913–333273.680)	71.066 (48.796–102.068)	125922.044 (87661.908–181570.047)	34.367 (23.925–49.555)	–0.516 (–0.551 to –0.481)	–2.18 (–2.38 to –1.99)
Indonesia	28401.797 (19069.821–41153.225)	41.929 (28.153–60.754)	10965.778 (7278.189–16337.072)	16.297 (10.816–24.279)	–0.611 (–0.642 to –0.582)	–3.03 (–3.37 to –2.69)
Iran (Islamic Republic of)	19901.953 (14172.636–27687.708)	78.402 (55.832–109.073)	7096.534 (5015.357–9781.227)	35.167 (24.854–48.471)	–0.551 (–0.594 to –0.512)	–2.33 (–2.47 to –2.19)
Iraq	5701.322 (4119.382–7856.784)	69.221 (50.014–95.390)	5091.657 (3625.353–7110.693)	37.823 (26.930–52.821)	–0.454 (–0.524 to –0.380)	–2.19 (–2.34 to –2.05)
Japan	21720.725 (14907.476–30762.596)	94.074 (64.565–133.235)	8044.006 (5631.753–11386.606)	52.084 (36.465–73.727)	–0.446 (–0.472 to –0.418)	–1.71 (–1.90 to –1.52)
Jordan	1263.985 (919.570–1787.162)	77.384 (56.298–109.414)	1616.447 (1141.785–2298.134)	44.493 (31.428–63.257)	–0.425 (–0.496 to –0.355)	–1.89 (–2.07 to –1.72)
Kazakhstan	14978.919 (11496.594–19427.585)	288.265 (221.249–373.878)	8758.778 (6757.980–11380.304)	161.408 (124.537–209.718)	–0.440 (–0.501 to –0.371)	–2.27 (–2.55 to –1.99)
Kuwait	398.109 (282.183–564.233)	71.816 (50.904–101.784)	326.277 (224.285–484.338)	38.590 (26.527–57.285)	–0.463 (–0.530 to –0.391)	–1.73 (–1.88 to –1.57)
Kyrgyzstan	3562.546 (2702.605–4726.066)	212.363 (161.102–281.720)	2806.711 (2055.659–3703.784)	123.405 (90.383–162.847)	–0.419 (–0.479 to –0.339)	–1.84 (–2.03 to –1.64)
Lao People's Democratic Republic	956.992 (666.882–1347.371)	51.923 (36.182–73.103)	520.944 (360.691–757.938)	22.686 (15.707–33.006)	–0.563 (–0.625 to –0.506)	–3.08 (–3.22 to –2.93)
Lebanon	920.688 (653.462–1296.717)	88.030 (62.480–123.984)	668.071 (478.200–951.673)	52.272 (37.416–74.462)	–0.406 (–0.471 to –0.332)	–1.55 (–1.69 to –1.41)
Libya	1094.889 (767.276–1514.227)	60.460 (42.369–83.616)	570.552 (398.697–778.945)	38.251 (26.729–52.221)	–0.367 (–0.450 to –0.291)	–1.45 (–1.54 to –1.37)
Malaysia	4019.769 (2859.113–5699.219)	61.156 (43.498–86.706)	2466.599 (1801.868–3380.192)	32.397 (23.666–44.397)	–0.470 (–0.539 to –0.398)	–1.90 (–2.04 to –1.75)
Maldives	70.352 (50.389–97.677)	66.976 (47.971–92.989)	22.343 (16.012–31.106)	22.305 (15.985–31.054)	–0.667 (–0.718 to –0.612)	–3.33 (–3.59 to –3.08)
Mauritius	155.437 (114.310–218.882)	47.094 (34.634–66.317)	73.045 (55.593–96.036)	35.218 (26.804–46.304)	–0.252 (–0.325 to –0.165)	–1.26 (–1.58 to –0.94)
Mongolia	1650.608 (1240.031–2206.677)	183.400 (137.780–245.185)	1625.858 (1261.373–2122.356)	149.627 (116.084–195.320)	–0.184 (–0.283 to –0.048)	–0.23 (–0.49 to 0.04)
Morocco	7566.566 (5579.924–10015.109)	77.322 (57.021–102.344)	4366.047 (3134.355–5909.179)	44.589 (32.010–60.348)	–0.423 (–0.490 to –0.351)	–1.87 (–2.02 to –1.73)
Myanmar	6273.735 (4199.926–8935.861)	42.458 (28.423–60.474)	2744.767 (1885.595–3921.598)	17.578 (12.076–25.115)	–0.586 (–0.639 to –0.526)	–3.25 (–3.41 to –3.10)
Nepal	5323.082 (3767.888–7550.523)	63.181 (44.722–89.619)	2821.000 (1935.866–4156.353)	30.573 (20.980–45.044)	–0.516 (–0.598 to –0.430)	–2.54 (–2.66 to –2.42)
North Africa and Middle East	96577.867 (69541.005–130964.384)	68.746 (49.501–93.223)	70744.280 (50790.463–95630.846)	38.590 (27.706–52.166)	–0.439 (–0.484 to –0.395)	–1.88 (–1.98 to –1.78)
Oman	427.648 (280.486–656.111)	50.888 (33.376–78.074)	407.887 (270.908–614.305)	33.351 (22.151–50.229)	–0.345 (–0.419 to –0.270)	–1.13 (–1.31 to –0.95)
Pakistan	26686.815 (18132.353–38469.237)	54.195 (36.823–78.123)	28451.021 (19842.595–40601.601)	33.299 (23.223–47.519)	–0.386 (–0.431 to –0.334)	–1.25 (–1.45 to –1.04)
Palestine	598.798 (417.460–879.541)	61.841 (43.113–90.835)	756.544 (518.212–1071.291)	40.518 (27.754–57.375)	–0.345 (–0.427 to –0.264)	–1.18 (–1.34 to –1.02)
Philippines	9100.249 (6232.259–13046.942)	36.092 (24.717–51.744)	6345.209 (4355.698–8911.976)	18.663 (12.811–26.213)	–0.483 (–0.515 to –0.454)	–1.96 (–2.11 to –1.80)
Qatar	86.245 (63.102–115.393)	68.972 (50.464–92.283)	178.930 (123.428–258.167)	36.228 (24.991–52.271)	–0.475 (–0.544 to –0.393)	–2.03 (–2.15 to –1.91)
Republic of Korea	13149.219 (9514.203–18038.938)	115.643 (83.674–158.646)	3287.206 (2238.409–4907.595)	54.115 (36.849–80.790)	–0.532 (–0.595 to –0.461)	–2.47 (–2.61 to –2.34)
Saudi Arabia	3627.032 (2552.971–5041.986)	55.346 (38.957–76.937)	3006.479 (2119.207–4194.669)	39.741 (28.012–55.446)	–0.282 (–0.352 to –0.189)	–0.95 (–1.09 to –0.80)
Seychelles	9.117 (6.369–13.381)	38.423 (26.841–56.396)	5.328 (3.786–7.729)	22.761 (16.176–33.021)	–0.408 (–0.489 to –0.327)	–1.38 (–1.59 to –1.17)
Singapore	523.674 (347.331–808.523)	80.643 (53.487–124.508)	455.163 (298.351–692.273)	56.048 (36.739–85.246)	–0.305 (–0.362 to –0.228)	–1.15 (–1.23 to –1.07)
Sri Lanka	2220.699 (1570.788–3243.357)	40.135 (28.389–58.618)	1480.545 (1054.771–2044.455)	29.008 (20.666–40.056)	–0.277 (–0.358 to –0.190)	–0.93 (–1.60 to –0.26)
Sudan	7245.393 (5106.814–10168.047)	81.478 (57.429–114.345)	6892.673 (5151.048–9317.081)	41.549 (31.050–56.163)	–0.490 (–0.564 to –0.400)	–2.50 (–2.64 to –2.36)
Syrian Arab Republic	4921.285 (3563.828–6640.099)	83.100 (60.178–112.124)	1557.236 (1113.050–2134.684)	42.509 (30.384–58.272)	–0.488 (–0.552 to –0.423)	–2.38 (–2.46 to –2.30)
Taiwan	2525.884 (1796.774–3534.672)	45.857 (32.620–64.172)	445.319 (287.665–634.711)	15.112 (9.762–21.539)	–0.670 (–0.734 to –0.593)	–3.46 (–3.84 to –3.08)
Tajikistan	3760.022 (2650.883–5261.820)	161.927 (114.162–226.603)	3643.885 (2600.481–5127.231)	101.661 (72.551–143.044)	–0.372 (–0.431 to –0.314)	–1.42 (–1.61 to –1.24)
Thailand	8081.657 (5705.055–11842.439)	47.938 (33.841–70.246)	2262.741 (1621.249–3183.839)	23.169 (16.600–32.600)	–0.517 (–0.594 to –0.437)	–2.38 (–2.51 to –2.25)
Timor–Leste	153.591 (106.221–221.400)	46.175 (31.934–66.560)	103.979 (71.105–150.370)	19.971 (13.657–28.882)	–0.567 (–0.620 to –0.510)	–3.13 (–3.28 to –2.97)
Tunisia	2202.232 (1560.144–2986.949)	70.914 (50.238–96.183)	1147.772 (809.483–1629.746)	41.500 (29.268–58.927)	–0.415 (–0.470 to –0.350)	–1.50 (–1.65 to –1.36)
Turkmenistan	3047.602 (2309.616–3989.308)	203.057 (153.886–265.801)	1930.804 (1444.464–2587.755)	126.693 (94.781–169.800)	–0.376 (–0.452 to –0.300)	–1.65 (–1.90 to –1.41)
Turkey	10810.905 (7197.514–16875.261)	52.765 (35.129–82.364)	5990.983 (4134.954–8529.564)	32.348 (22.326–46.055)	–0.387 (–0.466 to –0.304)	–1.38 (–1.50 to –1.25)
United Arab Emirates	393.007 (274.668–549.140)	66.680 (46.602–93.171)	577.738 (405.075–838.599)	43.153 (30.257–62.638)	–0.353 (–0.419 to –0.284)	–1.18 (–1.32 to –1.04)
Uzbekistan	16359.407 (12158.580–22074.563)	191.212 (142.112–258.012)	12359.284 (9170.405–16485.687)	122.477 (90.876–163.369)	–0.359 (–0.439 to –0.274)	–1.51 (–1.58 to –1.43)
Viet Nam	14002.554 (9784.838–20168.754)	52.815 (36.907–76.073)	6559.447 (4648.948–9294.542)	26.489 (18.774–37.535)	–0.498 (–0.578 to –0.427)	–1.84 (–2.05 to –1.62)
Yemen	4993.461 (3554.699–6922.782)	70.386 (50.106–97.581)	5854.023 (4268.422–7935.468)	42.456 (30.956–57.551)	–0.397 (–0.473 to –0.318)	–1.71 (–1.78 to –1.64)

Table S2 Mortality rate of pulmonary aspiration and foreign body in airway among children in Asian countries and regions from 1990 to 2021

Level	1990		2021		1990–2021	
	Number (95% UI)	Rate per 100,000 (95% UI)	Number (95% UI)	Rate per 100,000 (95% UI)	Rate change	Rate EAPC (95% CI)
Afghanistan	311.091 (135.515–473.779)	7.221 (3.146–10.997)	353.805 (188.581–493.541)	2.491 (1.328–3.475)	–0.655 (–0.759 to –0.284)	–3.43 (–3.61 to –3.24)
Algeria	335.357 (163.068–492.427)	3.127 (1.520–4.592)	122.649 (71.209–165.668)	0.922 (0.535–1.245)	–0.705 (–0.806 to –0.531)	–2.87 (–3.20 to –2.53)
Armenia	79.232 (62.970–99.332)	7.595 (6.036–9.522)	17.678 (13.195–23.612)	2.984 (2.227–3.986)	–0.607 (–0.747 to –0.410)	–2.13 (–2.51 to –1.75)
Azerbaijan	136.076 (77.419–202.660)	5.607 (3.190–8.350)	45.327 (27.390–74.793)	1.920 (1.160–3.168)	–0.658 (–0.791 to –0.326)	–2.77 (–3.08 to –2.45)
Bahrain	1.934 (0.999–2.355)	1.185 (0.612–1.443)	0.925 (0.650–1.272)	0.312 (0.219–0.429)	–0.737 (–0.801 to –0.618)	–3.62 (–4.06 to –3.19)
Bangladesh	5.225 (3.008–7.171)	0.011 (0.006–0.015)	2.738 (1.712–4.566)	0.006 (0.004–0.010)	–0.440 (–0.674 to 0.198)	–1.33 (–1.96 to –0.70)
Bhutan	1.792 (0.145–2.694)	0.684 (0.055–1.028)	0.440 (0.080–0.644)	0.235 (0.043–0.344)	–0.656 (–0.788 to –0.208)	–3.64 (–3.76 to –3.51)
Brunei Darussalam	1.429 (0.980–1.950)	1.578 (1.082–2.153)	1.033 (0.701–1.495)	1.092 (0.741–1.581)	–0.308 (–0.535 to 0.069)	–0.65 (–0.87 to –0.42)
Cambodia	172.989 (59.427–279.936)	3.711 (1.275–6.006)	73.007 (47.818–114.734)	1.427 (0.935–2.242)	–0.616 (–0.751 to –0.040)	–3.23 (–3.32 to –3.13)
China	20167.473 (15802.424–31797.160)	6.334 (4.963–9.987)	4351.224 (2872.942–5545.187)	1.676 (1.107–2.136)	–0.735 (–0.826 to –0.630)	–3.67 (–3.93 to –3.41)
Democratic People's Republic of Korea	318.583 (204.912–526.723)	5.355 (3.444–8.854)	93.630 (55.581–171.554)	1.961 (1.164–3.594)	–0.634 (–0.785 to –0.387)	–2.71 (–3.04 to –2.38)
Egypt	621.726 (356.746–789.370)	2.803 (1.608–3.559)	183.121 (128.869–264.529)	0.497 (0.350–0.718)	–0.823 (–0.875 to –0.720)	–5.04 (–5.25 to –4.82)
Georgia	39.152 (31.534–47.921)	2.861 (2.304–3.501)	8.227 (6.232–10.683)	1.118 (0.847–1.452)	–0.609 (–0.729 to –0.429)	–2.33 (–2.68 to –1.99)
India	4570.101 (2097.832–5802.842)	1.400 (0.642–1.777)	2038.851 (1044.903–3128.101)	0.556 (0.285–0.854)	–0.602 (–0.711 to –0.287)	–2.74 (–2.88 to –2.59)
Indonesia	1525.830 (322.904–2039.224)	2.253 (0.477–3.010)	713.490 (153.740–954.472)	1.060 (0.228–1.418)	–0.529 (–0.675 to –0.042)	–2.69 (–2.87 to –2.50)
Iran (Islamic Republic of)	864.190 (431.538–1101.572)	3.404 (1.700–4.340)	82.955 (55.211–114.475)	0.411 (0.274–0.567)	–0.879 (–0.917 to –0.791)	–4.17 (–5.25 to –3.09)
Iraq	210.499 (119.073–284.862)	2.556 (1.446–3.459)	113.105 (75.790–161.678)	0.840 (0.563–1.201)	–0.671 (–0.786 to –0.464)	–3.19 (–3.46 to –2.91)
Japan	383.987 (369.598–399.521)	1.663 (1.601–1.730)	108.844 (95.387–121.498)	0.705 (0.618–0.787)	–0.576 (–0.632 to –0.519)	–2.89 (–3.19 to –2.59)
Jordan	37.378 (25.252–46.821)	2.288 (1.546–2.866)	30.239 (21.586–40.351)	0.832 (0.594–1.111)	–0.636 (–0.731 to –0.506)	–3.43 (–3.68 to –3.18)
Kazakhstan	341.950 (289.909–394.754)	6.581 (5.579–7.597)	224.691 (179.614–285.111)	4.141 (3.310–5.254)	–0.371 (–0.519 to –0.178)	–1.64 (–2.30 to –0.97)
Kuwait	10.558 (9.462–11.776)	1.905 (1.707–2.124)	3.009 (2.498–3.526)	0.356 (0.295–0.417)	–0.813 (–0.848 to –0.772)	–4.50 (–5.21 to –3.79)
Kyrgyzstan	99.265 (84.029–116.966)	5.917 (5.009–6.972)	52.075 (43.944–61.250)	2.290 (1.932–2.693)	–0.613 (–0.685 to –0.510)	–2.76 (–3.11 to –2.41)
Lao People's Democratic Republic	92.828 (26.055–159.569)	5.036 (1.414–8.658)	47.619 (28.631–79.385)	2.074 (1.247–3.457)	–0.588 (–0.737 to 0.140)	–2.95 (–3.01 to –2.88)
Lebanon	12.075 (6.991–16.565)	1.154 (0.668–1.584)	4.883 (3.083–7.195)	0.382 (0.241–0.563)	–0.669 (–0.778 to –0.480)	–3.44 (–3.78 to –3.10)
Libya	32.230 (18.069–43.087)	1.780 (0.998–2.379)	17.911 (10.168–25.012)	1.201 (0.682–1.677)	–0.325 (–0.565 to 0.002)	–0.43 (–0.80 to –0.06)
Malaysia	121.180 (71.645–161.113)	1.844 (1.090–2.451)	59.906 (41.830–86.369)	0.787 (0.549–1.134)	–0.573 (–0.715 to –0.349)	–2.47 (–3.03 to –1.92)
Maldives	8.170 (3.546–11.715)	7.778 (3.376–11.153)	1.958 (1.430–2.925)	1.954 (1.427–2.920)	–0.749 (–0.833 to –0.376)	–3.43 (–3.87 to –2.99)
Mauritius	3.020 (2.774–3.309)	0.915 (0.840–1.003)	1.222 (1.011–1.413)	0.589 (0.487–0.681)	–0.356 (–0.471 to –0.233)	–2.88 (–3.87 to –1.88)
Mongolia	120.348 (84.598–177.613)	13.372 (9.400–19.735)	48.535 (30.501–67.647)	4.467 (2.807–6.226)	–0.666 (–0.786 to –0.489)	–2.43 (–2.96 to –1.89)
Morocco	379.244 (172.635–551.455)	3.875 (1.764–5.635)	88.921 (50.270–126.956)	0.908 (0.513–1.297)	–0.766 (–0.851 to –0.569)	–4.31 (–4.62 to –3.99)
Myanmar	621.709 (191.170–1038.866)	4.207 (1.294–7.031)	336.141 (198.534–522.576)	2.153 (1.271–3.347)	–0.488 (–0.656 to 0.046)	–2.35 (–2.60 to –2.09)
Nepal	69.553 (8.331–102.052)	0.826 (0.099–1.211)	20.411 (3.278–32.652)	0.221 (0.036–0.354)	–0.732 (–0.832 to –0.399)	–4.28 (–4.37 to –4.20)
Oman	5.409 (3.062–7.647)	0.644 (0.364–0.910)	2.612 (1.686–3.433)	0.214 (0.138–0.281)	–0.668 (–0.776 to –0.488)	–1.89 (–2.66 to –1.11)
Pakistan	471.621 (54.937–651.412)	0.958 (0.112–1.323)	442.151 (71.756–598.708)	0.517 (0.084–0.701)	–0.460 (–0.624 to –0.178)	–1.08 (–1.56 to –0.61)
Palestine	14.863 (8.935–20.410)	1.535 (0.923–2.108)	8.935 (5.821–12.516)	0.479 (0.312–0.670)	–0.688 (–0.783 to –0.497)	–3.12 (–3.39 to –2.85)
Philippines	465.755 (282.513–600.726)	1.847 (1.120–2.382)	343.992 (220.504–443.139)	1.012 (0.649–1.303)	–0.452 (–0.574 to –0.102)	–1.29 (–1.59 to –0.98)
Qatar	0.631 (0.305–0.892)	0.505 (0.244–0.714)	0.839 (0.571–1.184)	0.170 (0.116–0.240)	–0.664 (–0.792 to –0.464)	–2.47 (–2.85 to –2.09)
Republic of Korea	412.221 (255.706–534.583)	3.625 (2.249–4.701)	31.859 (23.575–51.895)	0.524 (0.388–0.854)	–0.855 (–0.903 to –0.739)	–5.98 (–6.31 to –5.65)
Saudi Arabia	181.552 (104.666–259.804)	2.770 (1.597–3.964)	28.845 (19.168–48.706)	0.381 (0.253–0.644)	–0.862 (–0.914 to –0.730)	–6.14 (–6.22 to –6.07)
Seychelles	0.166 (0.105–0.228)	0.698 (0.443–0.960)	0.123 (0.088–0.184)	0.527 (0.374–0.785)	–0.244 (–0.487 to 0.087)	–0.18 (–0.52 to 0.16)
Singapore	5.685 (5.077–6.381)	0.875 (0.782–0.983)	1.678 (1.357–2.027)	0.207 (0.167–0.250)	–0.764 (–0.814 to –0.703)	–4.20 (–4.58 to –3.81)
Sri Lanka	112.425 (65.559–134.397)	2.032 (1.185–2.429)	35.747 (24.407–51.067)	0.700 (0.478–1.001)	–0.655 (–0.761 to –0.462)	–3.81 (–4.30 to –3.31)
Sudan	718.217 (278.315–1107.837)	8.077 (3.130–12.458)	318.201 (146.271–443.793)	1.918 (0.882–2.675)	–0.763 (–0.846 to –0.458)	–4.29 (–4.54 to –4.04)
Syrian Arab Republic	164.402 (96.816–226.437)	2.776 (1.635–3.824)	31.996 (22.263–46.856)	0.873 (0.608–1.279)	–0.685 (–0.782 to –0.513)	–3.27 (–3.95 to –2.58)
Taiwan	205.104 (190.603–221.931)	3.724 (3.460–4.029)	56.535 (47.055–65.891)	1.919 (1.597–2.236)	–0.485 (–0.582 to –0.383)	–1.73 (–2.38 to –1.07)
Tajikistan	150.069 (64.617–219.943)	6.463 (2.783–9.472)	108.936 (65.853–176.919)	3.039 (1.837–4.936)	–0.530 (–0.700 to –0.076)	–2.22 (–2.57 to –1.86)
Thailand	220.721 (153.671–326.883)	1.309 (0.912–1.939)	95.933 (71.514–128.739)	0.982 (0.732–1.318)	–0.250 (–0.469 to 0.079)	–0.70 (–1.18 to –0.23)
Timor–Leste	12.811 (4.123–21.003)	3.851 (1.239–6.314)	8.648 (5.373–14.026)	1.661 (1.032–2.694)	–0.569 (–0.703 to –0.066)	–3.03 (–3.35 to –2.71)
Tunisia	84.506 (44.007–119.931)	2.721 (1.417–3.862)	17.394 (10.050–25.979)	0.629 (0.363–0.939)	–0.769 (–0.847 to –0.616)	–4.00 (–4.26 to –3.74)
Türkiye	276.344 (153.234–415.631)	1.349 (0.748–2.029)	87.089 (57.693–119.502)	0.470 (0.312–0.645)	–0.651 (–0.776 to –0.453)	–2.51 (–2.81 to –2.21)
Turkmenistan	88.685 (72.043–107.389)	5.909 (4.800–7.155)	40.438 (31.947–50.204)	2.653 (2.096–3.294)	–0.551 (–0.663 to –0.378)	–2.65 (–2.83 to –2.48)
United Arab Emirates	5.496 (3.410–8.260)	0.932 (0.579–1.401)	2.617 (1.906–3.541)	0.195 (0.142–0.264)	–0.790 (–0.856 to –0.643)	–3.68 (–4.15 to –3.21)
Uzbekistan	435.340 (340.915–535.384)	5.088 (3.985–6.258)	320.190 (244.105–406.505)	3.173 (2.419–4.028)	–0.376 (–0.542 to –0.137)	–1.31 (–1.71 to –0.92)
Viet Nam	924.204 (348.998–1258.998)	3.486 (1.316–4.749)	399.208 (159.919–581.195)	1.612 (0.646–2.347)	–0.538 (–0.711 to –0.208)	–1.61 (–1.97 to –1.26)
Yemen	359.251 (151.637–547.906)	5.064 (2.137–7.723)	220.525 (121.160–299.874)	1.599 (0.879–2.175)	–0.684 (–0.788 to –0.349)	–3.60 (–3.82 to –3.38)

Table S3 DALY rate of pulmonary aspiration and foreign body in airway in male children in Asian countries and regions from 1990 to 2021

Level	1990		2021		1990–2021	
	Number (95% UI)	Rate per 100,000 (95% UI)	Number (95% UI)	Rate per 100,000 (95% UI)	Rate change	Rate EAPC (95% CI)
Afghanistan	27534.052 (12029.749–41949.099)	639.127 (279.238–973.733)	31248.526 (16587.335–43714.480)	220.050 (116.807–307.835)	−0.656 (−0.760 to −0.288)	−3.44 (−3.63 to −3.26)
Algeria	29617.033 (14468.727–43575.255)	276.159 (134.911–406.310)	10802.127 (6276.420–14492.668)	81.209 (47.185–108.953)	−0.706 (−0.806 to −0.531)	−2.86 (−3.20 to −2.52)
Armenia	7078.864 (5638.582–8878.187)	678.568 (540.505–851.048)	1570.500 (1171.187–2095.264)	265.123 (197.713–353.711)	−0.609 (−0.748 to −0.414)	−2.15 (−2.53 to −1.78)
Azerbaijan	12181.191 (6993.786–18112.063)	501.916 (288.173–746.293)	4045.690 (2488.111–6620.138)	171.385 (105.402–280.445)	−0.659 (−0.790 to −0.330)	−2.77 (−3.09 to −2.45)
Bahrain	170.721 (89.474–207.808)	104.578 (54.809–127.296)	80.774 (57.465–110.062)	27.223 (19.367–37.094)	−0.740 (−0.803 to −0.623)	−3.64 (−4.08 to −3.20)
Bangladesh	1489.255 (1117.749–1985.738)	3.045 (2.285–4.060)	546.523 (405.771–723.526)	1.194 (0.887–1.581)	−0.608 (−0.687 to −0.458)	−3.15 (−3.49 to −2.81)
Bhutan	163.834 (17.051–243.796)	62.485 (6.503–92.983)	40.156 (8.342–58.252)	21.455 (4.457–31.123)	−0.657 (−0.787 to −0.286)	−3.64 (−3.76 to −3.51)
Brunei Darussalam	127.073 (87.584–173.612)	140.290 (96.693–191.669)	92.571 (62.819–134.083)	97.857 (66.407–141.740)	−0.302 (−0.531 to 0.074)	−0.63 (−0.85 to −0.40)
Cambodia	15298.468 (5214.887–24812.598)	328.227 (111.885–532.351)	6423.644 (4188.913–10135.489)	125.546 (81.870–198.092)	−0.618 (−0.752 to −0.042)	−3.24 (−3.33 to −3.15)
China	1797091.841 (1408421.399–2826380.476)	564.455 (442.376–887.748)	385589.421 (255342.267–491041.728)	148.514 (98.348–189.130)	−0.737 (−0.827 to −0.632)	−3.69 (−3.95 to −3.43)
Democratic People’s Republic of Korea	28345.280 (18238.209–46880.539)	476.450 (306.563–788.006)	8280.433 (4927.669–15151.335)	173.459 (103.225–317.391)	−0.636 (−0.787 to −0.391)	−2.73 (−3.06 to −2.40)
Egypt	54253.259 (31393.133–68877.975)	244.585 (141.527–310.517)	15949.042 (11273.161–23092.700)	43.275 (30.588–62.658)	−0.823 (−0.875 to −0.722)s	−5.03 (−5.24 to −4.81)
Georgia	3501.870 (2814.850–4279.634)	255.852 (205.657–312.677)	743.834 (565.232–960.044)	101.073 (76.805–130.452)	−0.605 (−0.724 to −0.427)	−2.30 (−2.65 to −1.96)
India	412050.387 (193570.825–522831.084)	126.194 (59.283–160.122)	184352.290 (96882.114–281098.830)	50.315 (26.442–76.719)	−0.601 (−0.708 to −0.290)	−2.73 (−2.87 to −2.58)
Indonesia	136909.295 (29466.020–182974.339)	202.118 (43.500–270.124)	63883.023 (13732.177–85365.050)	94.939 (20.408–126.864)	−0.530 (−0.675 to −0.048)	−2.69 (−2.88 to −2.51)
Iran (Islamic Republic of)	76598.967 (38165.046–97309.707)	301.754 (150.348–383.342)	7107.743 (4748.211–9799.236)	35.223 (23.530–48.561)	−0.883 (−0.920 to −0.799)	−4.22 (−5.31 to −3.12)
Iraq	18285.263 (10461.657–24773.009)	222.004 (127.016–300.772)	9777.271 (6568.784–13999.933)	72.629 (48.795–103.997)	−0.673 (−0.785 to −0.467)	−3.22 (−3.49 to −2.94)
Japan	34161.645 (32897.501–35524.412)	147.956 (142.481–153.858)	9640.222 (8448.761–10774.623)	62.419 (54.705–69.764)	−0.578 (−0.634 to −0.521)	−2.90 (−3.19 to −2.60)
Jordan	3278.907 (2225.040–4115.832)	200.742 (136.222–251.981)	2620.564 (1874.122–3487.049)	72.131 (51.586–95.982)	−0.641 (−0.734 to −0.510)	−3.46 (−3.70 to −3.21)
Kazakhstan	30381.649 (25740.772–35084.478)	584.686 (495.374–675.191)	19986.955 (16025.622–25331.287)	368.323 (295.323–466.809)	−0.370 (−0.517 to −0.176)	−1.64 (−2.30 to −0.97)
Kuwait	915.620 (820.393–1023.383)	165.171 (147.993–184.611)	262.469 (218.292–307.242)	31.044 (25.819–36.339)	−0.812 (−0.847 to −0.771)	−4.48 (−5.19 to −3.77)
Kyrgyzstan	8841.858 (7485.665–10418.667)	527.061 (446.219–621.054)	4629.042 (3901.371–5442.006)	203.529 (171.535–239.273)	−0.614 (−0.686 to −0.512)	−2.76 (−3.12 to −2.41)
Lao People’s Democratic Republic	8224.222 (2300.143–14150.343)	446.215 (124.797–767.743)	4212.134 (2518.659–7038.250)	183.426 (109.680–306.495)	−0.589 (−0.738 to 0.131)	−2.95 (−3.02 to −2.89)
Lebanon	1071.153 (629.305–1462.187)	102.417 (60.170–139.805)	430.693 (276.525–630.496)	33.699 (21.636–49.332)	−0.671 (−0.778 to −0.483)	−3.46 (−3.79 to −3.12)
Libya	2848.689 (1602.402–3814.360)	157.305 (88.485–210.629)	1559.462 (888.517–2180.699)	104.548 (59.567–146.197)	−0.335 (−0.571 to −0.015)	−0.48 (−0.85 to −0.11)
Malaysia	10671.259 (6345.367–14190.980)	162.350 (96.537–215.898)	5251.213 (3663.085–7528.384)	68.971 (48.112–98.880)	−0.575 (−0.716 to −0.353)	−2.48 (−3.04 to −1.92)
Maldives	715.813 (309.816–1028.364)	681.458 (294.947–979.009)	171.314 (124.882–253.631)	171.025 (124.671–253.203)	−0.749 (−0.833 to −0.381)	−3.42 (−3.86 to −2.97)
Mauritius	267.088 (245.623–293.120)	80.922 (74.419–88.809)	108.485 (89.751–125.625)	52.306 (43.273–60.570)	−0.354 (−0.468 to −0.229)	−2.86 (−3.84 to −1.87)
Mongolia	10691.108 (7523.923–15740.721)	1187.892 (835.985–1748.956)	4313.576 (2719.743–6019.533)	396.978 (250.298–553.977)	−0.666 (−0.786 to −0.487)	−2.42 (−2.95 to −1.89)
Morocco	33664.987 (15375.103–48949.344)	344.020 (157.117–500.210)	7856.493 (4459.598–11225.939)	80.235 (45.544–114.646)	−0.767 (−0.852 to −0.571)	−4.32 (−4.64 to −4.00)
Myanmar	54776.726 (16752.179–91645.174)	370.706 (113.372–620.216)	29616.351 (17514.914–46189.539)	189.669 (112.169–295.807)	−0.488 (−0.657 to 0.040)	−2.34 (−2.60 to −2.09)
Nepal	6329.861 (880.907–9226.464)	75.130 (10.456–109.511)	1878.807 (350.482–2960.858)	20.362 (3.798–32.088)	−0.729 (−0.827 to −0.406)	−4.25 (−4.33 to −4.18)
Oman	478.659 (273.438–671.158)	56.958 (32.538–79.864)	231.655 (152.018–301.594)	18.941 (12.430–24.660)	−0.667 (−0.775 to −0.490)	−1.90 (−2.67 to −1.12)
Pakistan	42776.883 (5680.709–58776.168)	86.871 (11.536–119.362)	40001.410 (7108.706–53892.626)	46.817 (8.320–63.075)	−0.461 (−0.622 to −0.194)	−1.10 (−1.57 to −0.63)
Palestine	1308.517 (792.297–1795.029)	135.137 (81.825–185.382)	778.944 (513.251–1087.644)	41.718 (27.488–58.251)	−0.691 (−0.785 to −0.499)	−3.16 (−3.43 to −2.89)
Philippines	40611.452 (24675.182–52469.338)	161.065 (97.862–208.093)	29854.191 (19311.923–38549.788)	87.810 (56.802–113.387)	−0.455 (−0.576 to −0.105)	−1.30 (−1.60 to −0.99)
Qatar	56.302 (28.557–79.567)	45.026 (22.838–63.632)	74.486 (51.592–104.186)	15.081 (10.446–21.095)	−0.665 (−0.788 to −0.471)	−2.51 (−2.88 to −2.15)
Republic of Korea	36410.596 (22686.485–47232.542)	320.218 (199.519–415.393)	2825.080 (2087.518–4582.529)	46.507 (34.365–75.439)	−0.855 (−0.903 to −0.739)	−5.96 (−6.29 to −5.63)
Saudi Arabia	15870.730 (9192.781–22714.252)	242.176 (140.275–346.604)	2477.561 (1659.950–4156.713)	32.749 (21.942–54.945)	−0.865 (−0.915 to −0.736)	−6.19 (−6.27 to −6.11)
Seychelles	14.658 (9.416–20.148)	61.774 (39.682–84.916)	11.073 (7.890–16.470)	47.309 (33.707–70.365)	−0.234 (−0.478 to 0.093)	−0.18 (−0.49 to 0.14)
Singapore	508.415 (453.544–570.645)	78.293 (69.843–87.876)	151.811 (123.683–182.193)	18.694 (15.230–22.435)	−0.761 (−0.810 to −0.700)	−4.16 (−4.54 to −3.77)
Sri Lanka	9695.112 (5710.971–11617.352)	175.222 (103.216–209.963)	3125.278 (2136.838–4451.249)	61.232 (41.866–87.211)	−0.651 (−0.758 to −0.457)	−3.75 (−4.25 to −3.24)
Sudan	63386.825 (24596.957–97529.667)	712.817 (276.605–1096.771)	27930.740 (12855.923–38925.277)	168.366 (77.495–234.641)	−0.764 (−0.847 to −0.461)	−4.31 (−4.56 to −4.05)
Syrian Arab Republic	14353.809 (8469.182–19755.453)	242.377 (143.010–333.588)	2714.040 (1901.410–3945.906)	74.087 (51.904–107.714)	−0.694 (−0.788 to −0.526)	−3.34 (−4.02 to −2.66)
Taiwan	18186.039 (16878.344–19670.716)	330.167 (306.426–357.122)	5015.918 (4166.961–5852.887)	170.219 (141.409–198.623)	−0.484 (−0.583 to −0.382)	−1.72 (−2.38 to −1.06)
Tajikistan	13362.605 (5810.369–19533.441)	575.467 (250.226–841.217)	9711.044 (5904.604–15766.652)	270.928 (164.732–439.873)	−0.529 (−0.699 to −0.080)	−2.20 (−2.56 to −1.85)
Thailand	19808.941 (13866.376–28776.929)	117.501 (82.251–170.696)	8318.133 (6189.165–11214.479)	85.172 (63.373–114.828)	−0.275 (−0.488 to 0.044)	−0.85 (−1.32 to −0.37)
Timor-Leste	1133.938 (363.137–1863.923)	340.900 (109.171–560.358)	763.094 (470.197–1238.457)	146.568 (90.311–237.872)	−0.570 (−0.704 to −0.068)	−3.05 (−3.36 to −2.73)
Tunisia	7476.526 (3882.472–10621.314)	240.753 (125.020–342.018)	1527.509 (881.898–2274.234)	55.230 (31.887–82.229)	−0.771 (−0.848 to −0.618)	−4.02 (−4.28 to −3.75)
Türkiye	24232.469 (13524.742–36715.992)	118.272 (66.011–179.201)	7611.446 (5092.766–10416.914)	41.098 (27.498–56.246)	−0.653 (−0.778 to −0.457)	−2.51 (−2.82 to −2.20)
Turkmenistan	7920.933 (6464.257–9579.607)	527.759 (430.703–638.273)	3590.135 (2841.569–4459.095)	235.573 (186.454–292.591)	−0.554 (−0.665 to −0.383)	−2.66 (−2.83 to −2.49)
United Arab Emirates	481.917 (302.884–718.888)	81.766 (51.389–121.972)	232.907 (173.051–313.024)	17.397 (12.926–23.381)	−0.787 (−0.853 to −0.641)	−3.62 (−4.09 to −3.15)
Uzbekistan	38809.003 (30465.081–47616.012)	453.608 (356.082–556.546)	28470.588 (21748.988–36116.989)	282.136 (215.527–357.910)	−0.378 (−0.542 to −0.141)	−1.33 (−1.72 to −0.93)
Viet Nam	82951.590 (31241.539–112918.895)	312.878 (117.837–425.909)	35787.012 (14204.954–52109.041)	144.520 (57.364–210.434)	−0.538 (−0.711 to −0.209)	−1.62 (−1.98 to −1.26)
Yemen	31870.330 (13438.431–48610.714)	449.235 (189.424–685.202)	19457.643 (10759.336–26482.548)	141.115 (78.031–192.062)	−0.686 (−0.789 to −0.356)	−3.62 (−3.84 to −3.39)