

Appendix 1: methods

Age-standardized rates

ASIR, ASMR, and ASDR were calculated to enable comparable estimates across populations with differing age structures. These indicators were computed using the GBD world standard population as the reference age distribution.

For each metric, age-specific rates were first estimated for all age groups. These age-specific rates were then multiplied by the corresponding age weights from the GBD world standard population. The weighted values were summed to obtain the final age-standardized rate for each location and year.

This standardization approach minimizes the influence of population age composition and allows consistent comparison of the burden of URIs across countries, regions, and time periods. All age-standardized estimates were reported per 100,000 population.

EAPC

To quantify temporal trends in age-standardized rates, EAPC was computed. The EAPC provides a summary measure of the average change in a rate per year over a specified period and is derived from a log-linear regression model in which the natural logarithm of the age-standardized rate is regressed on time. A positive EAPC indicates an increasing trend, whereas a negative EAPC reflects a decreasing pattern. When the EAPC estimate and the lower bound of its 95% CI are both greater than 0, the trend is considered to be significantly increasing; when both values are below 0, the trend is regarded as significantly decreasing. If the CI overlaps 0, the rate is interpreted as stable over time.

APC and AAPC

To quantify temporal changes in disease burden indicators, this study calculated the APC using a log-linear regression model. For each indicator (ASIR, ASMR, and ASDR), a linear regression was fitted to the natural logarithm of the rate against calendar year. The APC for each segment was then derived by transforming the slope coefficient, representing the average yearly rate of change on a percentage scale. A positive APC indicates an increasing trend, whereas a negative APC reflects a declining trend.

Because long-term trends may contain multiple segments with different slopes, this study also estimated the AAPC. The AAPC provides a summary measure of the overall trend across a predefined interval by computing a weighted average of the APCs, with each weight proportional to the length of the corresponding segment. This summary approach ensures stability even when individual APC segments vary in length or direction. Clegg *et al.* (91,92) introduced the concept of AAPC, defining it as a weighted combination of segment-specific slopes across the selected time interval. If both the APC (or AAPC) estimate and the lower bound of its 95% CI exceed 0, the indicator demonstrates a statistically significant upward trend. Conversely, if the estimate and the upper confidence bound are below 0, the indicator is interpreted as significantly decreasing. When the 95% CI includes 0, the trend is considered stable.

BAPC forecasting

BAPC model was applied to forecast future trends in the disease burden of URIs among adolescents and young adults. This framework integrates historical age-specific, period-specific, and cohort-specific estimates into a unified Bayesian structure, allowing for robust long-term projections while explicitly quantifying uncertainty. To stabilize temporal variation, second-order random walk priors were imposed on age and period effects, assuming that adjacent time intervals share similar underlying risks.

Posterior distributions were approximated using the Integrated Nested Laplace Approximation, which improves computational efficiency and avoids the convergence and mixing limitations commonly encountered in Markov Chain Monte Carlo methods. This approach has been widely recognized for enhancing estimation accuracy and predictive performance in epidemiological forecasting.

Model outputs included projected ASIR, ASMR, and ASDR, each accompanied by 95% UI. Based on disease burden estimates from 1990 to 2021, projections were extended through 2036 to provide medium-term forecasts while mitigating excessive uncertainty associated with long-range prediction.

References

91. Clegg LX, Hankey BF, Tiwari R, Feuer EJ, Edwards BK. Estimating average annual per cent change in trend analysis. *Stat Med* 2009;28:3670-82.
92. Wu J, Che Y, Zhang Y, et al. Global, regional, national trends of femur fracture and machine learning prediction: Comprehensive findings and questions from global burden of disease 1990-2019. *J Orthop Translat* 2024;46:46-52.

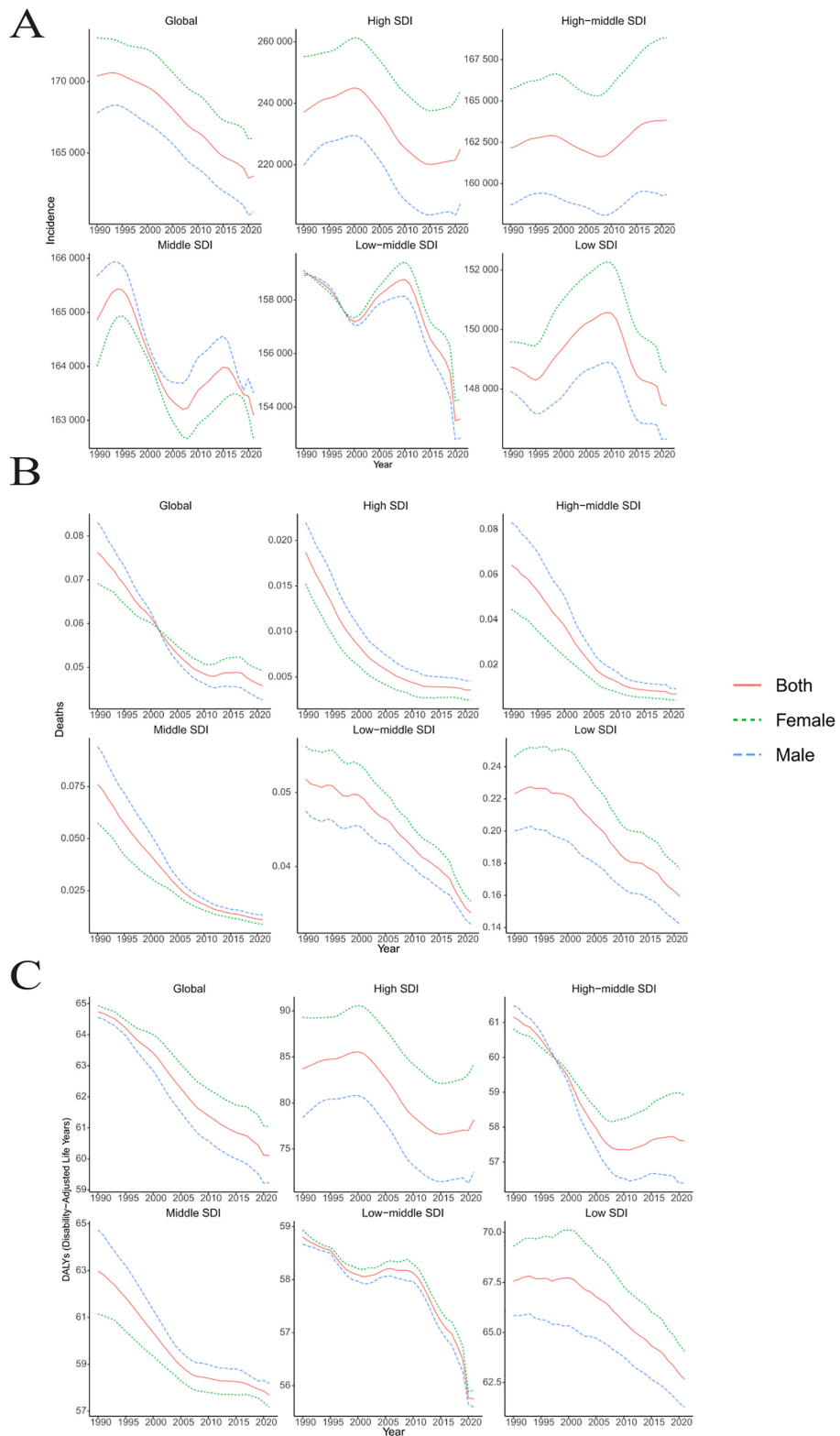


Figure S1 Trends in URIs incidence rates per 100,000 population by sex, globally and across five SDI regions, 1990–2021 (A); mortality rates per 100,000 population by sex (B); DALY rates per 100,000 population by sex (C). DALYs, disability-adjusted life years; SDI, socio-demographic index; URIs, upper respiratory infections.

Table S1 ASIR of URIs by sex across different SDI regions among individuals aged 10–24 years, 1990–2021 (per 100,000 population)

Sex	Global	High SDI	High-middle SDI	Low SDI	Low-middle SDI	Middle SDI
Both						
1990	170387.56 (231541.42, 119570.31)	237109.66 (319571.55, 166734.98)	162144.62 (220886.93, 113487.83)	148743.08 (204230.61, 103259.20)	159011.42 (216507.82, 111181.72)	164855.41 (224154.51, 115267.65)
1991	170485.37 (231632.49, 119639.73)	238269.15 (320799.90, 167621.70)	162252.45 (220921.93, 113579.76)	148689.30 (204142.74, 103260.63)	158943.19 (216445.82, 111137.02)	165038.44 (224337.43, 115452.58)
1992	170569.92 (231720.80, 119670.48)	239404.70 (322188.04, 168349.48)	162415.68 (221137.12, 113765.63)	148598.52 (203893.47, 103203.64)	158840.45 (216312.92, 111085.47)	165228.10 (224547.60, 115547.30)
1993	170614.93 (231764.07, 119678.34)	240479.27 (323661.74, 169114.55)	162583.35 (221339.82, 113930.72)	148496.91 (203602.33, 103149.42)	158716.06 (216197.51, 111035.25)	165370.97 (224813.47, 115591.21)
1994	170574.17 (231696.19, 119637.61)	241294.13 (324777.86, 169566.52)	162699.27 (221493.24, 114041.23)	148366.02 (203192.21, 103120.29)	158574.34 (216015.91, 110942.03)	165434.96 (224976.95, 115596.89)
1995	170436.90 (231519.17, 119520.06)	241716.48 (325279.79, 169737.21)	162754.29 (221548.17, 114092.23)	148295.16 (202927.50, 103209.18)	158420.30 (215957.41, 110802.20)	165418.04 (225037.23, 115581.22)
1996	170257.65 (231320.77, 119407.84)	242144.84 (325968.21, 170102.60)	162806.30 (221471.92, 114150.35)	148402.57 (203153.32, 103313.74)	158199.52 (215644.54, 110686.40)	165295.85 (224784.49, 115627.40)
1997	170096.45 (231158.53, 119314.73)	242921.88 (326961.77, 170689.91)	162870.22 (221353.32, 114212.82)	148630.85 (203619.65, 103599.96)	157891.46 (215404.08, 110401.36)	165078.64 (224427.52, 115581.10)
1998	169943.17 (231006.58, 119258.09)	243801.76 (328141.87, 171301.92)	162910.42 (221232.13, 114253.48)	148884.77 (204157.81, 103886.63)	157570.99 (215128.29, 110091.10)	164814.58 (224027.43, 115427.61)
1999	169780.36 (230831.76, 119167.88)	244607.29 (329307.84, 171819.80)	162874.55 (221009.60, 114164.44)	149108.52 (204747.43, 104013.45)	157312.96 (214766.33, 110015.29)	164532.20 (223710.37, 115292.07)
2000	169610.32 (230635.39, 119063.63)	245012.07 (329996.62, 172103.06)	162746.28 (220689.40, 114075.79)	149292.27 (205354.58, 103987.89)	157191.60 (214655.32, 110005.89)	164291.57 (223519.39, 115118.48)
2001	169404.46 (230403.01, 118921.55)	244641.41 (329397.41, 171816.46)	162562.28 (220543.11, 113985.50)	149499.34 (205496.02, 104074.35)	157250.04 (214754.34, 110032.94)	164075.44 (223089.45, 115009.94)
2002	169121.11 (230057.76, 118713.98)	243348.52 (327749.53, 170955.20)	162374.34 (220466.43, 113919.12)	149718.93 (205662.99, 104178.55)	157447.51 (214957.40, 110153.11)	163841.15 (222709.59, 114873.06)
2003	168785.82 (229640.75, 118453.43)	241465.18 (325381.09, 169700.38)	162202.93 (220491.07, 113812.55)	149903.60 (205781.10, 104291.50)	157718.78 (215166.95, 110315.19)	163627.39 (222432.42, 114675.61)
2004	168435.17 (229211.14, 118162.90)	239371.66 (322755.19, 168209.16)	162057.70 (220592.34, 113706.32)	150075.85 (205783.37, 104329.07)	157992.47 (215575.09, 110461.87)	163457.44 (222285.28, 114480.76)
2005	168078.26 (228823.53, 117856.16)	237339.86 (320182.76, 166643.03)	161932.53 (220686.69, 113599.78)	150206.37 (205807.54, 104524.59)	158188.53 (215822.03, 110530.05)	163350.59 (222291.72, 114306.98)
2006	167694.42 (228324.13, 117583.38)	235089.93 (317138.25, 165050.24)	161796.40 (220464.09, 113394.62)	150296.24 (205901.08, 104707.95)	158332.12 (215905.05, 110703.61)	163271.33 (222256.54, 114239.56)
2007	167284.15 (227760.85, 117294.90)	232378.82 (313336.38, 163035.89)	161666.92 (220122.79, 113254.12)	150407.69 (206094.90, 104968.85)	158486.06 (216089.60, 110833.56)	163201.69 (222293.62, 114199.69)
2008	166918.75 (227219.89, 117035.66)	229577.64 (309508.40, 160894.76)	161617.94 (219901.86, 113114.89)	150516.73 (206269.10, 105315.84)	158626.57 (216272.20, 110916.25)	163234.34 (222464.86, 114231.11)
2009	166647.39 (226817.02, 116839.76)	227144.22 (306252.76, 159047.07)	161709.65 (219884.30, 113049.79)	150567.84 (206285.99, 105421.23)	158729.84 (216384.27, 111010.94)	163400.04 (222811.24, 114278.29)
2010	166446.67 (226567.00, 116665.47)	225447.12 (304052.57, 157761.34)	161933.31 (220036.60, 113192.74)	150546.74 (206145.52, 105355.90)	158768.31 (216483.01, 111052.55)	163559.72 (223156.08, 114324.27)
2011	166184.25 (226256.27, 116508.23)	224056.11 (302319.67, 156851.34)	162212.05 (220612.95, 113466.41)	150332.63 (205789.57, 105226.90)	158600.41 (216193.48, 111014.58)	163637.94 (223143.95, 114386.95)
2012	165812.43 (225834.74, 116259.56)	222613.09 (300518.99, 155926.89)	162486.41 (221179.61, 113832.33)	149886.81 (205165.60, 104900.29)	158179.34 (215599.78, 110784.07)	163718.78 (223159.89, 114440.94)
2013	165404.39 (225348.65, 115966.16)	221325.56 (298981.68, 155139.26)	162769.32 (221746.07, 114186.90)	149345.80 (204429.58, 104421.18)	157616.09 (214822.13, 110420.67)	163819.39 (223262.25, 114544.09)
2014	165026.67 (224875.53, 115679.93)	220399.99 (297771.52, 154519.03)	163062.53 (222420.25, 114504.51)	148828.97 (203753.13, 103924.79)	157033.50 (214025.75, 109975.52)	163911.35 (223367.47, 114574.61)
2015	164754.48 (224533.92, 115470.07)	220084.71 (297341.02, 154265.11)	163360.85 (223043.85, 114788.59)	148462.21 (203294.24, 103572.55)	156566.07 (213465.64, 109568.14)	163985.37 (223414.81, 114599.67)
2016	164580.01 (224537.25, 115328.01)	220273.18 (297401.23, 154558.81)	163582.73 (222971.92, 114847.28)	148303.08 (203138.10, 103336.53)	156272.62 (213245.33, 109319.86)	163965.62 (223647.07, 114590.72)
2017	164411.07 (224530.71, 115227.02)	220601.90 (297838.48, 154901.09)	163703.90 (222602.15, 114797.28)	148240.66 (203087.65, 103225.57)	156041.24 (213209.01, 109078.99)	163826.31 (223693.85, 114381.73)
2018	164214.74 (224460.80, 115039.45)	220970.46 (298356.51, 155182.34)	163770.89 (222386.11, 114675.40)	148192.07 (203115.26, 103104.97)	155749.22 (213007.74, 108817.30)	163641.18 (223648.62, 114134.87)
2019	163951.36 (224286.51, 114770.06)	221252.17 (298756.03, 155395.53)	163811.29 (222437.20, 114582.79)	148087.17 (203217.52, 102968.68)	155284.14 (212585.16, 108384.64)	163482.27 (223612.85, 113919.33)
2020	163239.59 (222968.00, 114283.55)	221515.67 (299061.43, 155418.65)	163801.39 (223178.18, 115145.92)	147496.01 (202636.17, 102355.69)	153493.04 (210398.77, 107019.84)	163448.35 (222740.16, 114120.04)
2021	163388.21 (222730.77, 114433.40)	225027.44 (302982.57, 158378.23)	163849.11 (222967.25, 114815.91)	147426.97 (202807.21, 102093.77)	153551.34 (209348.31, 107011.51)	163092.04 (222462.67, 114067.49)
Female						
1990	173058.81 (235223.82, 121245.08)	255200.28 (343208.70, 179650.89)	165729.48 (225795.87, 115988.80)	149580.90 (204961.06, 103729.10)	159097.73 (216838.72, 111467.87)	164004.87 (223530.71, 114650.15)
1991	173023.93 (235182.23, 121283.92)	255378.76 (343329.70, 179711.66)	165809.11 (225602.55, 116088.67)	149576.71 (205177.01, 103915.01)	158948.91 (216759.94, 111203.67)	164280.64 (223736.90, 114909.86)

Table S1 (continued)

Table S1 (continued)

Sex	Global	High SDI	High-middle SDI	Low SDI	Low-middle SDI	Middle SDI
1992	173001.83 (235179.97, 121315.73)	255667.71 (343928.93, 179829.72)	165955.97 (225513.10, 116263.04)	149547.26 (205142.18, 104004.43)	158785.79 (216594.08, 110963.61)	164563.02 (223997.18, 115160.55)
1993	172964.37 (235154.90, 121285.22)	256078.60 (344539.62, 180034.69)	166105.69 (225542.63, 116448.19)	149513.32 (205295.91, 103837.04)	158619.12 (216480.58, 110771.50)	164786.32 (224206.26, 115350.04)
1994	172864.35 (235046.24, 121217.21)	256463.62 (345106.63, 180354.64)	166195.50 (225525.62, 116588.24)	149459.78 (205358.51, 103701.28)	158452.42 (216409.49, 110598.83)	164912.33 (224327.92, 115475.18)
1995	172699.77 (234850.78, 121102.71)	256748.86 (345669.93, 180632.00)	166223.10 (225280.03, 116682.34)	149452.23 (205482.18, 103709.76)	158290.14 (216360.28, 110558.10)	164936.28 (224430.35, 115503.25)
1996	172543.18 (234660.35, 121003.32)	257299.56 (346120.47, 180883.90)	166297.33 (225637.13, 116736.56)	149641.38 (205351.14, 104041.13)	158088.91 (216020.57, 110359.05)	164857.07 (224318.77, 115555.50)
1997	172459.01 (234546.46, 120971.27)	258348.17 (347368.59, 181536.86)	166446.18 (226010.05, 116829.88)	149988.30 (205698.94, 104472.29)	157831.44 (215716.34, 110156.52)	164706.29 (224195.24, 115527.30)
1998	172408.45 (234348.52, 121027.77)	259567.33 (348853.60, 182412.48)	166593.88 (226134.30, 116892.00)	150363.52 (206305.23, 104868.32)	157578.82 (215386.77, 110045.97)	164522.09 (224041.68, 115392.90)
1999	172344.71 (234131.54, 120979.47)	260685.59 (350365.09, 183182.88)	166646.13 (226199.67, 116765.15)	150685.52 (207003.20, 105221.79)	157392.61 (215018.34, 110138.79)	164320.24 (223787.86, 115222.43)
2000	172239.52 (233912.56, 120880.63)	261304.35 (351120.45, 183573.02)	166546.59 (226105.38, 116637.74)	150916.60 (207569.23, 105276.43)	157333.75 (214688.48, 110316.77)	164143.24 (223562.06, 115047.44)
2001	172049.61 (233854.16, 120760.16)	261046.95 (351042.64, 183429.15)	166323.99 (225986.75, 116528.05)	151123.31 (207851.86, 105302.57)	157439.63 (214721.48, 110165.42)	163942.28 (223058.81, 114933.89)
2002	171751.06 (233653.89, 120539.38)	259826.21 (349562.32, 182526.00)	166062.03 (225890.72, 116314.11)	151330.76 (208067.76, 105391.74)	157675.75 (214973.52, 110122.51)	163674.37 (222444.79, 114776.28)
2003	171385.17 (233215.49, 120242.13)	257997.88 (347232.73, 181178.98)	165809.10 (225921.33, 116219.51)	151503.41 (208137.94, 105559.36)	157982.41 (215370.62, 110163.44)	163398.78 (221924.53, 114605.16)
2004	171002.63 (232726.54, 119928.94)	255972.96 (344683.64, 179659.52)	165599.29 (226081.19, 116040.07)	151670.63 (208272.85, 105863.93)	158293.60 (215642.71, 110227.92)	163155.51 (221585.67, 114378.25)
2005	170626.02 (232331.03, 119629.87)	254043.55 (342434.83, 178325.32)	165454.84 (226207.63, 115818.30)	151815.33 (208463.35, 106012.72)	158534.61 (215750.36, 110344.07)	162978.14 (221452.84, 114129.84)
2006	170244.29 (231853.53, 119351.18)	251998.69 (339439.77, 177073.84)	165349.68 (225965.06, 115698.46)	151936.39 (208362.79, 106204.52)	158739.42 (216315.00, 110562.28)	162829.70 (221364.33, 114012.14)
2007	169854.60 (231355.70, 119069.31)	249602.28 (336215.31, 175525.38)	165291.35 (225433.52, 115691.26)	152075.99 (208263.35, 106378.83)	158967.76 (216876.53, 110918.40)	162692.28 (221328.64, 113900.09)
2008	169519.17 (230857.91, 118829.99)	247180.94 (332867.90, 173824.02)	165347.53 (225045.41, 115815.18)	152205.10 (208230.88, 106391.14)	159182.99 (217127.41, 111153.65)	162662.61 (221485.08, 113846.43)
2009	169277.59 (230485.01, 118694.78)	245066.83 (330104.18, 172170.60)	165568.76 (224890.40, 115961.13)	152266.89 (208104.89, 106532.48)	159347.14 (217388.83, 111312.74)	162776.66 (221844.35, 113860.49)
2010	169099.25 (230200.59, 118601.86)	243485.43 (328171.28, 170842.39)	165928.37 (224941.98, 116088.88)	152238.63 (208078.07, 106521.99)	159418.68 (217546.75, 111468.46)	162921.16 (222264.84, 113939.42)
2011	168837.84 (229888.39, 118457.37)	242073.59 (326131.28, 169851.23)	166304.13 (225473.87, 116537.60)	151998.79 (207695.08, 106363.68)	159255.97 (217109.68, 111555.53)	163007.73 (222328.90, 113962.26)
2012	168437.82 (229378.37, 118171.96)	240507.45 (323932.25, 168745.87)	166624.78 (225957.32, 116934.71)	151517.02 (207006.50, 106023.64)	158826.17 (216351.40, 111390.43)	163083.58 (222398.77, 114004.52)
2013	167988.49 (228728.50, 117817.87)	239057.13 (322012.14, 167795.60)	166934.64 (226586.22, 117270.06)	150933.18 (206298.78, 105631.74)	158250.37 (215481.30, 111042.80)	163174.44 (222545.26, 114066.67)
2014	167575.89 (228114.90, 117464.98)	237981.43 (320876.65, 167073.86)	167267.77 (227261.78, 117527.07)	150373.64 (205559.78, 105110.43)	157661.15 (214618.99, 110590.28)	163268.09 (222710.98, 114136.91)
2015	167289.07 (227705.63, 117210.22)	237572.63 (320425.88, 166829.22)	167647.69 (227949.15, 117809.69)	149969.75 (205169.83, 104593.87)	157203.20 (214211.26, 110190.42)	163366.57 (222776.23, 114193.57)
2016	167149.12 (227773.36, 117151.05)	237710.99 (320823.80, 166888.57)	168004.07 (228198.98, 117922.20)	149771.03 (204971.23, 104508.46)	156973.41 (214161.18, 110009.63)	163451.68 (222841.48, 114298.99)
2017	167054.32 (227898.50, 117117.42)	238010.65 (321509.44, 166997.25)	168284.81 (228309.53, 117876.71)	149661.02 (205324.89, 104441.95)	156854.58 (214543.40, 109864.93)	163492.75 (223078.20, 114203.65)
2018	166931.19 (227963.26, 117003.91)	238409.90 (322150.92, 167194.91)	168501.30 (228553.72, 117762.18)	149560.52 (205500.64, 104257.90)	156670.25 (214545.67, 109702.81)	163478.37 (223205.21, 114134.78)
2019	166700.04 (227885.32, 116759.27)	238821.25 (322809.06, 167373.93)	168653.09 (228545.18, 117613.89)	149402.92 (205646.32, 103947.57)	156253.87 (214190.03, 109394.50)	163398.69 (223183.74, 114044.61)
2020	165960.72 (226147.20, 116338.78)	240670.00 (325035.97, 169151.52)	168809.55 (229680.46, 118637.06)	148698.71 (204231.74, 103241.21)	154218.64 (210872.18, 108171.87)	163099.35 (222114.45, 113833.96)
2021	166029.97 (225876.53, 116342.92)	244107.33 (329508.77, 171877.07)	168819.74 (229643.31, 118218.62)	148545.60 (203667.34, 103252.12)	154291.77 (210619.46, 107590.89)	162645.61 (221659.12, 113611.80)
Male						
1990	167790.21 (228139.71, 117780.63)	219936.73 (296971.41, 154357.71)	158691.27 (215995.01, 111090.48)	147820.82 (202739.93, 102006.49)	158926.41 (215896.18, 111232.78)	165675.89 (225179.67, 115907.72)
1991	168018.93 (228402.82, 117912.78)	222037.05 (299242.06, 155964.77)	158827.74 (216230.59, 111244.08)	147670.19 (202329.49, 102149.75)	158934.87 (216210.58, 111333.40)	165767.04 (225486.84, 115927.74)
1992	168208.02 (228617.15, 118007.58)	223981.72 (301795.89, 157501.09)	159005.35 (216463.65, 111396.29)	147502.45 (201669.69, 102261.05)	158889.15 (216395.95, 111430.73)	165865.56 (225795.53, 115884.48)
1993	168332.51 (228750.56, 118067.99)	225683.51 (304317.50, 158654.64)	159186.46 (216751.06, 111494.52)	147294.15 (201025.01, 102253.64)	158804.16 (216223.74, 111458.18)	165929.63 (226039.51, 115755.30)

Table S1 (continued)

Table S1 (continued)

Sex	Global	High SDI	High-middle SDI	Low SDI	Low-middle SDI	Middle SDI
1994	168347.22 (228759.41, 118059.00)	226902.47 (305979.98, 159347.11)	159320.99 (216917.81, 111547.62)	147160.03 (200565.40, 102352.25)	158685.11 (215825.99, 111389.01)	165932.79 (226194.23, 115713.20)
1995	168234.35 (228607.58, 117955.83)	227449.90 (306496.84, 159607.63)	159394.55 (216995.86, 111553.03)	147186.13 (201025.55, 102356.49)	158537.74 (215679.58, 111291.32)	165875.65 (226161.69, 115659.87)
1996	168032.13 (228356.45, 117805.89)	227764.16 (307091.23, 160130.96)	159418.55 (216740.75, 111618.67)	147295.59 (201484.43, 102589.66)	158297.48 (215483.55, 110923.86)	165711.78 (225801.35, 115625.11)
1997	167796.57 (228045.43, 117645.65)	228284.85 (308104.24, 160508.94)	159396.62 (216555.60, 111639.11)	147428.18 (201835.62, 102788.11)	157941.16 (215096.34, 110508.87)	165430.98 (225173.06, 115511.75)
1998	167545.81 (227708.40, 117478.84)	228849.15 (308848.57, 160870.13)	159332.32 (216303.47, 111690.67)	147554.04 (202141.74, 102808.64)	157556.66 (214765.96, 110111.27)	165090.83 (224549.54, 115405.20)
1999	167290.42 (227412.62, 117272.21)	229362.95 (309449.67, 161245.82)	159214.21 (215978.51, 111700.85)	147691.07 (202532.91, 102903.73)	157231.20 (214521.04, 109706.01)	164731.86 (224183.24, 115263.17)
2000	167061.51 (227167.67, 117077.53)	229571.55 (309838.13, 161503.38)	159064.41 (215706.60, 111506.26)	147899.64 (202658.22, 102896.45)	157051.06 (214434.95, 109460.24)	164430.70 (224032.63, 115051.83)
2001	166843.99 (226918.54, 117024.12)	229100.81 (309129.32, 161014.83)	158926.45 (215575.61, 111494.82)	148133.28 (202955.71, 103056.76)	157065.21 (214496.19, 109669.20)	164200.30 (223646.90, 114995.94)
2002	166579.06 (226592.37, 116888.68)	227744.54 (307323.93, 160048.09)	158819.94 (215489.71, 111445.63)	148332.34 (203150.69, 103166.97)	157227.17 (214753.30, 109994.32)	163998.46 (223303.34, 114931.52)
2003	166276.77 (226212.41, 116686.03)	225811.66 (304709.50, 158502.30)	158737.64 (215381.77, 111322.94)	148511.46 (203028.94, 103212.89)	157465.88 (214977.93, 110283.08)	163844.31 (223177.50, 114812.62)
2004	165959.98 (225830.86, 116447.98)	223653.50 (301925.45, 156589.05)	158665.70 (215215.22, 111258.63)	148628.45 (203170.68, 103400.90)	157704.42 (215203.36, 110499.20)	163745.02 (223210.21, 114690.77)
2005	165624.52 (225445.45, 116185.44)	221524.42 (299221.06, 155049.03)	158570.67 (215061.65, 111131.97)	148686.60 (203219.48, 103570.21)	157857.51 (215466.39, 110610.44)	163706.11 (223164.40, 114605.40)
2006	165240.58 (224928.56, 115904.17)	219099.69 (296061.77, 153394.56)	158416.76 (215131.16, 110904.21)	148768.21 (203523.06, 103814.30)	157942.05 (215444.49, 110744.66)	163693.45 (223230.08, 114535.32)
2007	164812.24 (224346.30, 115595.97)	216137.52 (292027.45, 151275.42)	158232.34 (215008.52, 110662.29)	148854.81 (203541.35, 103922.08)	158024.04 (215327.95, 110822.58)	163688.84 (223214.69, 114511.70)
2008	164420.22 (223809.02, 115310.58)	213055.87 (287734.90, 149130.33)	158097.27 (214930.58, 110469.51)	148893.04 (203524.98, 103875.97)	158092.13 (215344.66, 110848.82)	163780.79 (223391.49, 114593.82)
2009	164122.38 (223429.09, 115047.13)	210382.75 (284023.00, 147270.76)	158080.83 (214998.42, 110437.61)	148877.63 (203922.58, 103794.68)	158136.12 (215267.01, 110812.74)	163995.06 (223780.66, 114677.72)
2010	163901.16 (223188.08, 114837.32)	208562.67 (281452.94, 146048.36)	158191.15 (215211.14, 110534.95)	148687.74 (203330.43, 103767.16)	158141.94 (215259.03, 110815.55)	164168.13 (224075.95, 114724.50)
2011	163638.32 (222863.52, 114653.07)	207169.21 (279738.35, 145061.31)	158393.54 (215788.95, 110755.11)	148275.85 (202761.88, 103601.59)	157967.96 (215026.36, 110626.48)	164236.55 (224074.33, 114805.75)
2012	163293.96 (222479.99, 114407.18)	205824.97 (278343.71, 144097.02)	158638.71 (216342.93, 110995.49)	147775.64 (202328.47, 103252.86)	157553.94 (214696.54, 110289.40)	164319.33 (223951.36, 114896.34)
2013	162926.17 (222106.57, 114127.41)	204683.06 (277251.10, 143273.97)	158910.88 (216972.39, 111212.30)	147299.62 (201879.01, 102722.75)	157001.46 (214230.99, 109898.71)	164426.11 (224007.36, 114938.74)
2014	162582.90 (221798.58, 113849.72)	203902.99 (276723.91, 142726.66)	159182.46 (217624.41, 111442.00)	146968.46 (201563.63, 102183.85)	156424.28 (213671.13, 109406.33)	164513.68 (224147.38, 114927.90)
2015	162326.40 (221576.70, 113623.69)	203688.22 (276767.08, 142485.30)	159421.05 (218178.98, 111687.26)	146847.86 (201463.63, 102141.24)	155947.33 (213270.83, 108976.06)	164562.62 (224275.97, 114767.96)
2016	162121.42 (221435.05, 113521.33)	203938.48 (276504.78, 142643.25)	159534.68 (218066.21, 111805.70)	146832.20 (201308.13, 102098.64)	155593.23 (212829.14, 108728.12)	164443.61 (224300.76, 114693.34)
2017	161884.40 (221211.99, 113415.23)	204305.86 (276437.10, 142824.33)	159523.86 (217531.77, 111802.82)	146834.93 (201102.02, 102230.89)	155254.96 (212251.02, 108540.79)	164135.38 (224142.45, 114477.43)
2018	161620.54 (220967.72, 113160.74)	204650.02 (276830.03, 143106.36)	159466.57 (217083.42, 111847.99)	146782.27 (201135.28, 102317.93)	154860.65 (211548.24, 108195.84)	163791.03 (223893.23, 114143.98)
2019	161328.02 (220661.14, 112830.73)	204811.41 (277277.83, 143242.95)	159414.73 (216727.96, 111548.74)	146301.08 (201468.61, 101515.41)	154349.30 (210922.88, 107598.15)	163558.58 (223734.03, 113885.18)
2020	160642.26 (220001.91, 112227.98)	203585.59 (276063.97, 142827.26)	159259.60 (216947.01, 111462.67)	146320.23 (202383.44, 101185.43)	152788.12 (210128.61, 106127.31)	163771.81 (223400.54, 114143.33)
2021	160870.14 (219696.55, 112548.24)	207153.40 (279799.69, 144970.71)	159344.50 (217332.09, 111097.63)	146630.15 (187244.58, 113857.02)	152837.22 (208374.21, 106655.71)	163507.77 (223278.47, 114422.56)

Data are presented as ASIR (95% CI). ASIR, age-standardized incidence rate; CI, confidence interval; SDI, socio-demographic index; URIs, upper respiratory infections.

Table S2 ASMR of URIs by sex across different SDI regions among individuals aged 10–24 years, 1990–2021 (per 100,000 population)

Sex	Global	High SDI	High-middle SDI	Low SDI	Low-middle SDI	Middle SDI
Both						
1990	0.08 (0.14, 0.02)	0.02 (0.02, 0.02)	0.06 (0.09, 0.02)	0.22 (0.62, 0.01)	0.05 (0.12, 0.01)	0.08 (0.12, 0.02)
1991	0.08 (0.14, 0.02)	0.02 (0.02, 0.01)	0.06 (0.09, 0.02)	0.22 (0.63, 0.01)	0.05 (0.11, 0.01)	0.07 (0.11, 0.02)
1992	0.07 (0.14, 0.02)	0.02 (0.02, 0.01)	0.06 (0.08, 0.02)	0.23 (0.62, 0.01)	0.05 (0.11, 0.01)	0.07 (0.10, 0.02)
1993	0.07 (0.13, 0.02)	0.02 (0.02, 0.01)	0.06 (0.08, 0.02)	0.23 (0.62, 0.01)	0.05 (0.11, 0.01)	0.07 (0.10, 0.02)
1994	0.07 (0.13, 0.02)	0.01 (0.02, 0.01)	0.06 (0.07, 0.03)	0.23 (0.61, 0.01)	0.05 (0.11, 0.01)	0.06 (0.09, 0.02)
1995	0.07 (0.13, 0.02)	0.01 (0.01, 0.01)	0.05 (0.07, 0.02)	0.23 (0.61, 0.01)	0.05 (0.11, 0.01)	0.06 (0.08, 0.02)
1996	0.07 (0.13, 0.01)	0.01 (0.01, 0.01)	0.05 (0.06, 0.02)	0.23 (0.62, 0.01)	0.05 (0.11, 0.01)	0.05 (0.08, 0.02)
1997	0.07 (0.12, 0.01)	0.01 (0.01, 0.01)	0.05 (0.06, 0.02)	0.22 (0.60, 0.01)	0.05 (0.10, 0.01)	0.05 (0.07, 0.02)
1998	0.06 (0.12, 0.01)	0.01 (0.01, 0.01)	0.04 (0.06, 0.02)	0.22 (0.60, 0.01)	0.05 (0.10, 0.01)	0.05 (0.07, 0.02)
1999	0.06 (0.12, 0.01)	0.01 (0.01, 0.01)	0.04 (0.05, 0.02)	0.22 (0.60, 0.01)	0.05 (0.10, 0.01)	0.04 (0.06, 0.02)
2000	0.06 (0.12, 0.01)	0.01 (0.01, 0.01)	0.04 (0.05, 0.02)	0.22 (0.60, 0.01)	0.05 (0.10, 0.01)	0.04 (0.06, 0.02)
2001	0.06 (0.12, 0.01)	0.01 (0.01, 0.01)	0.03 (0.04, 0.02)	0.22 (0.59, 0.01)	0.05 (0.10, 0.01)	0.04 (0.05, 0.02)
2002	0.06 (0.11, 0.01)	0.01 (0.01, 0.01)	0.03 (0.04, 0.02)	0.22 (0.57, 0.01)	0.05 (0.10, 0.01)	0.04 (0.05, 0.02)
2003	0.06 (0.11, 0.01)	0.01 (0.01, 0.01)	0.03 (0.03, 0.02)	0.21 (0.56, 0.01)	0.05 (0.09, 0.01)	0.03 (0.05, 0.02)
2004	0.05 (0.11, 0.01)	0.01 (0.01, 0.01)	0.02 (0.03, 0.01)	0.21 (0.55, 0.01)	0.05 (0.09, 0.01)	0.03 (0.04, 0.01)
2005	0.05 (0.11, 0.01)	0.01 (0.01, 0.01)	0.02 (0.03, 0.01)	0.20 (0.54, 0.01)	0.05 (0.09, 0.01)	0.03 (0.04, 0.01)
2006	0.05 (0.11, 0.01)	0.01 (0.01, 0.01)	0.02 (0.02, 0.01)	0.20 (0.53, 0.01)	0.05 (0.09, 0.01)	0.02 (0.04, 0.01)
2007	0.05 (0.11, 0.01)	0.01 (0.01, 0.00)	0.02 (0.02, 0.01)	0.20 (0.52, 0.01)	0.04 (0.09, 0.01)	0.02 (0.03, 0.01)
2008	0.05 (0.11, 0.01)	0.00 (0.01, 0.00)	0.01 (0.02, 0.01)	0.19 (0.51, 0.01)	0.04 (0.09, 0.01)	0.02 (0.03, 0.01)
2009	0.05 (0.11, 0.01)	0.00 (0.01, 0.00)	0.01 (0.02, 0.01)	0.19 (0.50, 0.01)	0.04 (0.09, 0.01)	0.02 (0.03, 0.01)
2010	0.05 (0.11, 0.01)	0.00 (0.00, 0.00)	0.01 (0.02, 0.01)	0.18 (0.49, 0.01)	0.04 (0.09, 0.01)	0.02 (0.03, 0.01)
2011	0.05 (0.11, 0.01)	0.00 (0.00, 0.00)	0.01 (0.02, 0.01)	0.18 (0.49, 0.01)	0.04 (0.09, 0.01)	0.02 (0.03, 0.01)
2012	0.05 (0.11, 0.01)	0.00 (0.00, 0.00)	0.01 (0.02, 0.01)	0.18 (0.48, 0.01)	0.04 (0.08, 0.01)	0.02 (0.02, 0.01)
2013	0.05 (0.11, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.01)	0.18 (0.48, 0.01)	0.04 (0.08, 0.01)	0.02 (0.02, 0.01)
2014	0.05 (0.11, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.01)	0.18 (0.49, 0.01)	0.04 (0.08, 0.01)	0.01 (0.02, 0.01)
2015	0.05 (0.11, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.01)	0.18 (0.48, 0.01)	0.04 (0.08, 0.01)	0.01 (0.02, 0.01)
2016	0.05 (0.11, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.01)	0.18 (0.48, 0.01)	0.04 (0.08, 0.01)	0.01 (0.02, 0.01)
2017	0.05 (0.11, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.01)	0.17 (0.47, 0.01)	0.04 (0.08, 0.01)	0.01 (0.02, 0.01)
2018	0.05 (0.11, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.01)	0.17 (0.46, 0.01)	0.04 (0.08, 0.01)	0.01 (0.02, 0.01)
2019	0.05 (0.11, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.01)	0.17 (0.45, 0.01)	0.04 (0.07, 0.01)	0.01 (0.02, 0.01)
2020	0.05 (0.11, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.01)	0.16 (0.44, 0.01)	0.03 (0.07, 0.01)	0.01 (0.02, 0.01)
2021	0.05 (0.11, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.01)	0.16 (0.43, 0.01)	0.03 (0.07, 0.01)	0.01 (0.02, 0.01)
Female						
1990	0.07 (0.15, 0.01)	0.02 (0.02, 0.01)	0.04 (0.07, 0.02)	0.25 (0.79, 0.01)	0.06 (0.14, 0.01)	0.06 (0.09, 0.02)

Table S2 (continued)

Table S2 (continued)

Sex	Global	High SDI	High-middle SDI	Low SDI	Low-middle SDI	Middle SDI
1991	0.07 (0.15, 0.01)	0.01 (0.02, 0.01)	0.04 (0.06, 0.02)	0.25 (0.79, 0.01)	0.06 (0.14, 0.01)	0.05 (0.08, 0.02)
1992	0.07 (0.15, 0.01)	0.01 (0.02, 0.01)	0.04 (0.06, 0.02)	0.25 (0.79, 0.01)	0.06 (0.14, 0.01)	0.05 (0.08, 0.02)
1993	0.07 (0.15, 0.01)	0.01 (0.01, 0.01)	0.04 (0.06, 0.02)	0.25 (0.77, 0.01)	0.06 (0.14, 0.01)	0.05 (0.07, 0.02)
1994	0.07 (0.14, 0.01)	0.01 (0.01, 0.01)	0.04 (0.05, 0.02)	0.25 (0.76, 0.01)	0.06 (0.14, 0.01)	0.05 (0.06, 0.02)
1995	0.06 (0.14, 0.01)	0.01 (0.01, 0.01)	0.04 (0.05, 0.02)	0.25 (0.75, 0.01)	0.06 (0.14, 0.01)	0.04 (0.06, 0.02)
1996	0.06 (0.14, 0.01)	0.01 (0.01, 0.01)	0.03 (0.04, 0.02)	0.25 (0.74, 0.01)	0.05 (0.13, 0.01)	0.04 (0.05, 0.01)
1997	0.06 (0.14, 0.01)	0.01 (0.01, 0.01)	0.03 (0.04, 0.01)	0.25 (0.72, 0.01)	0.05 (0.13, 0.01)	0.04 (0.05, 0.01)
1998	0.06 (0.14, 0.01)	0.01 (0.01, 0.01)	0.03 (0.04, 0.01)	0.25 (0.72, 0.01)	0.05 (0.13, 0.01)	0.03 (0.05, 0.01)
1999	0.06 (0.14, 0.01)	0.01 (0.01, 0.01)	0.03 (0.03, 0.01)	0.25 (0.72, 0.01)	0.05 (0.12, 0.01)	0.03 (0.04, 0.01)
2000	0.06 (0.13, 0.01)	0.01 (0.01, 0.01)	0.02 (0.03, 0.01)	0.25 (0.72, 0.01)	0.05 (0.12, 0.01)	0.03 (0.04, 0.01)
2001	0.06 (0.13, 0.01)	0.01 (0.01, 0.00)	0.02 (0.03, 0.01)	0.25 (0.72, 0.01)	0.05 (0.12, 0.01)	0.03 (0.04, 0.01)
2002	0.06 (0.13, 0.01)	0.01 (0.01, 0.00)	0.02 (0.03, 0.01)	0.24 (0.70, 0.01)	0.05 (0.12, 0.01)	0.03 (0.04, 0.01)
2003	0.06 (0.13, 0.01)	0.00 (0.01, 0.00)	0.02 (0.02, 0.01)	0.24 (0.70, 0.01)	0.05 (0.11, 0.01)	0.03 (0.04, 0.01)
2004	0.06 (0.13, 0.01)	0.00 (0.00, 0.00)	0.02 (0.02, 0.01)	0.23 (0.68, 0.01)	0.05 (0.11, 0.01)	0.02 (0.03, 0.01)
2005	0.05 (0.13, 0.01)	0.00 (0.00, 0.00)	0.01 (0.02, 0.01)	0.23 (0.66, 0.01)	0.05 (0.11, 0.01)	0.02 (0.03, 0.01)
2006	0.05 (0.13, 0.01)	0.00 (0.00, 0.00)	0.01 (0.02, 0.01)	0.23 (0.66, 0.01)	0.05 (0.11, 0.01)	0.02 (0.03, 0.01)
2007	0.05 (0.13, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.01)	0.22 (0.65, 0.01)	0.05 (0.11, 0.01)	0.02 (0.03, 0.01)
2008	0.05 (0.13, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.01)	0.21 (0.63, 0.01)	0.05 (0.11, 0.01)	0.02 (0.02, 0.01)
2009	0.05 (0.13, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.01)	0.21 (0.62, 0.01)	0.05 (0.11, 0.01)	0.02 (0.02, 0.01)
2010	0.05 (0.12, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.01)	0.20 (0.60, 0.01)	0.05 (0.11, 0.01)	0.02 (0.02, 0.01)
2011	0.05 (0.13, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.01)	0.20 (0.59, 0.01)	0.04 (0.11, 0.01)	0.01 (0.02, 0.01)
2012	0.05 (0.13, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.00)	0.20 (0.59, 0.01)	0.04 (0.11, 0.01)	0.01 (0.02, 0.01)
2013	0.05 (0.13, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.00)	0.20 (0.59, 0.01)	0.04 (0.11, 0.01)	0.01 (0.02, 0.01)
2014	0.05 (0.14, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.00)	0.20 (0.60, 0.01)	0.04 (0.11, 0.01)	0.01 (0.02, 0.01)
2015	0.05 (0.14, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.00)	0.20 (0.60, 0.01)	0.04 (0.11, 0.01)	0.01 (0.02, 0.01)
2016	0.05 (0.14, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.00)	0.19 (0.59, 0.01)	0.04 (0.11, 0.01)	0.01 (0.02, 0.01)
2017	0.05 (0.14, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.00)	0.19 (0.60, 0.01)	0.04 (0.11, 0.01)	0.01 (0.02, 0.01)
2018	0.05 (0.14, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.00)	0.19 (0.57, 0.01)	0.04 (0.10, 0.01)	0.01 (0.01, 0.01)
2019	0.05 (0.14, 0.01)	0.00 (0.00, 0.00)	0.00 (0.01, 0.00)	0.18 (0.56, 0.01)	0.04 (0.10, 0.01)	0.01 (0.01, 0.01)
2020	0.05 (0.14, 0.01)	0.00 (0.00, 0.00)	0.00 (0.01, 0.00)	0.18 (0.56, 0.01)	0.04 (0.09, 0.01)	0.01 (0.01, 0.01)
2021	0.05 (0.14, 0.01)	0.00 (0.00, 0.00)	0.00 (0.01, 0.00)	0.18 (0.55, 0.01)	0.04 (0.09, 0.01)	0.01 (0.01, 0.00)
Male						
1990	0.08 (0.15, 0.02)	0.02 (0.03, 0.02)	0.08 (0.13, 0.03)	0.20 (0.54, 0.01)	0.05 (0.11, 0.01)	0.09 (0.16, 0.02)
1991	0.08 (0.14, 0.02)	0.02 (0.02, 0.02)	0.08 (0.13, 0.03)	0.20 (0.55, 0.01)	0.05 (0.10, 0.01)	0.09 (0.16, 0.02)

Table S2 (continued)

Table S2 (continued)

Sex	Global	High SDI	High-middle SDI	Low SDI	Low-middle SDI	Middle SDI
1992	0.08 (0.14, 0.02)	0.02 (0.02, 0.02)	0.08 (0.11, 0.03)	0.20 (0.55, 0.01)	0.05 (0.10, 0.01)	0.08 (0.14, 0.02)
1993	0.08 (0.14, 0.02)	0.02 (0.02, 0.02)	0.08 (0.11, 0.03)	0.20 (0.55, 0.01)	0.05 (0.10, 0.01)	0.08 (0.13, 0.02)
1994	0.07 (0.13, 0.02)	0.02 (0.02, 0.01)	0.07 (0.10, 0.03)	0.20 (0.55, 0.01)	0.05 (0.10, 0.01)	0.08 (0.12, 0.02)
1995	0.07 (0.13, 0.02)	0.02 (0.02, 0.01)	0.07 (0.10, 0.03)	0.20 (0.55, 0.01)	0.05 (0.10, 0.01)	0.07 (0.11, 0.02)
1996	0.07 (0.13, 0.02)	0.01 (0.02, 0.01)	0.07 (0.09, 0.03)	0.20 (0.55, 0.01)	0.05 (0.10, 0.01)	0.07 (0.10, 0.02)
1997	0.07 (0.12, 0.02)	0.01 (0.02, 0.01)	0.06 (0.08, 0.03)	0.20 (0.55, 0.01)	0.05 (0.10, 0.01)	0.06 (0.10, 0.02)
1998	0.07 (0.12, 0.02)	0.01 (0.01, 0.01)	0.06 (0.08, 0.03)	0.20 (0.55, 0.01)	0.05 (0.09, 0.01)	0.06 (0.09, 0.02)
1999	0.06 (0.12, 0.01)	0.01 (0.01, 0.01)	0.05 (0.07, 0.02)	0.20 (0.54, 0.01)	0.05 (0.09, 0.01)	0.06 (0.09, 0.02)
2000	0.06 (0.12, 0.01)	0.01 (0.01, 0.01)	0.05 (0.07, 0.02)	0.19 (0.54, 0.01)	0.05 (0.09, 0.01)	0.05 (0.08, 0.02)
2001	0.06 (0.12, 0.01)	0.01 (0.01, 0.01)	0.04 (0.06, 0.02)	0.19 (0.53, 0.01)	0.04 (0.09, 0.01)	0.05 (0.07, 0.02)
2002	0.06 (0.11, 0.01)	0.01 (0.01, 0.01)	0.04 (0.05, 0.02)	0.19 (0.52, 0.01)	0.04 (0.09, 0.01)	0.04 (0.07, 0.02)
2003	0.05 (0.11, 0.01)	0.01 (0.01, 0.01)	0.03 (0.05, 0.02)	0.18 (0.51, 0.01)	0.04 (0.09, 0.01)	0.04 (0.06, 0.02)
2004	0.05 (0.11, 0.01)	0.01 (0.01, 0.01)	0.03 (0.04, 0.02)	0.18 (0.50, 0.01)	0.04 (0.09, 0.01)	0.03 (0.06, 0.02)
2005	0.05 (0.11, 0.01)	0.01 (0.01, 0.01)	0.03 (0.04, 0.02)	0.18 (0.50, 0.01)	0.04 (0.09, 0.01)	0.03 (0.05, 0.01)
2006	0.05 (0.10, 0.01)	0.01 (0.01, 0.01)	0.02 (0.03, 0.02)	0.18 (0.49, 0.01)	0.04 (0.09, 0.01)	0.03 (0.05, 0.01)
2007	0.05 (0.10, 0.01)	0.01 (0.01, 0.01)	0.02 (0.03, 0.01)	0.18 (0.48, 0.01)	0.04 (0.09, 0.01)	0.03 (0.04, 0.01)
2008	0.05 (0.10, 0.01)	0.01 (0.01, 0.01)	0.02 (0.03, 0.01)	0.17 (0.48, 0.01)	0.04 (0.09, 0.01)	0.02 (0.04, 0.01)
2009	0.05 (0.10, 0.01)	0.01 (0.01, 0.01)	0.02 (0.03, 0.01)	0.17 (0.47, 0.01)	0.04 (0.09, 0.01)	0.02 (0.04, 0.01)
2010	0.05 (0.10, 0.01)	0.01 (0.01, 0.01)	0.02 (0.03, 0.01)	0.17 (0.46, 0.01)	0.04 (0.09, 0.01)	0.02 (0.04, 0.01)
2011	0.05 (0.10, 0.01)	0.01 (0.01, 0.01)	0.01 (0.02, 0.01)	0.16 (0.45, 0.01)	0.04 (0.09, 0.01)	0.02 (0.03, 0.01)
2012	0.05 (0.10, 0.01)	0.01 (0.01, 0.00)	0.01 (0.02, 0.01)	0.16 (0.44, 0.01)	0.04 (0.09, 0.01)	0.02 (0.03, 0.01)
2013	0.05 (0.10, 0.01)	0.01 (0.01, 0.00)	0.01 (0.02, 0.01)	0.16 (0.44, 0.01)	0.04 (0.09, 0.01)	0.02 (0.03, 0.01)
2014	0.05 (0.10, 0.01)	0.01 (0.01, 0.00)	0.01 (0.02, 0.01)	0.16 (0.44, 0.01)	0.04 (0.09, 0.01)	0.02 (0.03, 0.01)
2015	0.05 (0.11, 0.01)	0.01 (0.01, 0.00)	0.01 (0.02, 0.01)	0.16 (0.44, 0.01)	0.04 (0.09, 0.01)	0.02 (0.03, 0.01)
2016	0.05 (0.11, 0.01)	0.00 (0.01, 0.00)	0.01 (0.02, 0.01)	0.16 (0.43, 0.01)	0.04 (0.09, 0.01)	0.02 (0.03, 0.01)
2017	0.05 (0.11, 0.01)	0.00 (0.01, 0.00)	0.01 (0.02, 0.01)	0.15 (0.43, 0.01)	0.04 (0.09, 0.01)	0.02 (0.03, 0.01)
2018	0.04 (0.11, 0.01)	0.00 (0.01, 0.00)	0.01 (0.02, 0.01)	0.15 (0.42, 0.01)	0.04 (0.08, 0.01)	0.01 (0.02, 0.01)
2019	0.04 (0.11, 0.01)	0.00 (0.01, 0.00)	0.01 (0.02, 0.01)	0.15 (0.42, 0.01)	0.03 (0.08, 0.01)	0.01 (0.02, 0.01)
2020	0.04 (0.10, 0.01)	0.00 (0.01, 0.00)	0.01 (0.02, 0.01)	0.15 (0.41, 0.01)	0.03 (0.08, 0.01)	0.01 (0.02, 0.01)
2021	0.04 (0.10, 0.01)	0.00 (0.01, 0.00)	0.01 (0.02, 0.01)	0.14 (0.41, 0.01)	0.03 (0.08, 0.01)	0.01 (0.02, 0.01)

Data are presented as ASMR (95% CI). ASMR, age-standardized mortality rate; CI, confidence interval; SDI, socio-demographic index; URIs, upper respiratory infections.

Table S3 ASDR of URIs by sex across different SDI regions among individuals aged 10–24 years, 1990–2021 (per 100,000 population)

Sex	Global	High SDI	High-middle SDI	Low SDI	Low-middle SDI	Middle SDI
Both						
1990	64.74 (103.31, 36.88)	83.70 (135.47, 45.78)	61.16 (97.81, 34.72)	67.58 (110.32, 33.11)	58.80 (94.90, 32.80)	62.97 (100.29, 35.76)
1991	64.68 (103.44, 36.80)	83.97 (135.79, 45.83)	61.07 (97.88, 34.43)	67.66 (110.12, 33.04)	58.73 (94.87, 32.91)	62.82 (100.04, 35.77)
1992	64.60 (103.19, 36.75)	84.24 (136.39, 45.82)	60.93 (97.69, 34.51)	67.78 (110.24, 33.04)	58.68 (94.69, 32.91)	62.59 (100.06, 35.66)
1993	64.52 (102.92, 36.67)	84.51 (137.18, 45.82)	60.87 (97.41, 34.32)	67.82 (110.40, 33.22)	58.62 (94.44, 32.91)	62.38 (100.07, 35.29)
1994	64.37 (102.70, 36.53)	84.68 (137.51, 46.10)	60.70 (97.14, 34.32)	67.69 (110.06, 33.28)	58.58 (94.10, 32.87)	62.10 (99.53, 34.97)
1995	64.22 (102.78, 36.38)	84.75 (137.82, 45.99)	60.52 (97.16, 33.98)	67.69 (109.80, 32.91)	58.56 (94.47, 32.92)	61.84 (99.59, 34.72)
1996	64.03 (102.52, 36.23)	84.79 (138.19, 46.09)	60.29 (96.91, 33.90)	67.70 (110.18, 33.18)	58.42 (94.25, 32.85)	61.56 (98.71, 34.52)
1997	63.84 (102.35, 36.08)	84.99 (138.69, 45.98)	60.09 (96.84, 33.64)	67.57 (110.08, 33.06)	58.29 (94.16, 32.61)	61.26 (98.84, 34.24)
1998	63.70 (102.21, 35.88)	85.26 (138.99, 46.11)	59.88 (96.38, 33.49)	67.67 (110.15, 32.89)	58.18 (94.64, 32.41)	60.94 (98.29, 33.97)
1999	63.57 (101.99, 35.79)	85.48 (139.26, 46.01)	59.67 (96.14, 33.18)	67.72 (110.29, 33.08)	58.13 (94.46, 32.36)	60.64 (98.00, 33.68)
2000	63.42 (101.93, 35.71)	85.55 (139.16, 46.08)	59.41 (95.98, 32.83)	67.73 (110.26, 32.93)	58.09 (94.21, 32.42)	60.35 (97.78, 33.49)
2001	63.21 (101.43, 35.58)	85.39 (139.17, 46.03)	59.06 (95.77, 32.49)	67.64 (110.31, 32.88)	58.05 (93.91, 32.57)	60.05 (96.86, 33.20)
2002	62.96 (101.33, 35.30)	84.89 (138.61, 45.81)	58.71 (95.14, 32.29)	67.38 (109.00, 33.01)	58.07 (94.18, 32.39)	59.75 (96.73, 33.00)
2003	62.71 (100.71, 35.10)	84.20 (137.38, 45.28)	58.44 (95.21, 32.12)	67.14 (108.52, 32.92)	58.09 (93.80, 32.36)	59.46 (96.26, 32.72)
2004	62.49 (100.63, 35.02)	83.45 (135.97, 44.94)	58.18 (95.23, 31.91)	67.02 (108.28, 33.11)	58.15 (94.24, 32.38)	59.17 (95.90, 32.61)
2005	62.27 (100.22, 34.84)	82.70 (134.54, 44.75)	57.96 (94.46, 31.68)	66.78 (107.59, 32.97)	58.19 (94.40, 32.38)	58.93 (95.86, 32.40)
2006	62.06 (99.84, 34.71)	81.93 (133.74, 44.39)	57.69 (93.90, 31.56)	66.61 (107.12, 32.88)	58.21 (94.00, 32.38)	58.74 (95.79, 32.20)
2007	61.84 (99.73, 34.63)	80.98 (131.70, 43.72)	57.51 (93.34, 31.26)	66.42 (106.83, 33.09)	58.18 (94.18, 32.20)	58.57 (95.32, 31.98)
2008	61.64 (99.18, 34.44)	79.97 (130.93, 43.05)	57.39 (93.54, 30.95)	66.09 (105.52, 32.85)	58.17 (94.12, 32.24)	58.47 (95.14, 31.93)
2009	61.51 (99.25, 34.35)	79.13 (128.88, 42.51)	57.36 (93.46, 31.24)	65.84 (105.33, 32.77)	58.18 (93.93, 32.15)	58.45 (95.15, 31.90)
2010	61.39 (98.97, 34.27)	78.51 (128.30, 42.07)	57.36 (93.46, 31.10)	65.53 (105.01, 32.80)	58.13 (93.91, 32.31)	58.40 (95.49, 31.76)
2011	61.27 (98.62, 34.10)	78.03 (127.65, 41.97)	57.34 (93.35, 30.90)	65.27 (104.16, 32.82)	58.02 (93.55, 31.97)	58.35 (95.06, 31.63)
2012	61.14 (98.52, 34.06)	77.51 (126.93, 41.62)	57.40 (93.67, 30.86)	65.02 (103.96, 32.73)	57.84 (93.67, 31.80)	58.30 (95.28, 31.56)
2013	61.03 (98.35, 33.98)	77.06 (126.27, 41.49)	57.45 (93.84, 30.84)	64.82 (103.53, 32.61)	57.62 (93.21, 31.77)	58.29 (95.18, 31.64)
2014	60.94 (98.27, 34.03)	76.71 (126.21, 41.24)	57.52 (94.34, 31.17)	64.64 (103.47, 32.69)	57.40 (93.13, 31.67)	58.28 (95.13, 31.57)
2015	60.85 (98.11, 34.05)	76.60 (125.82, 41.34)	57.63 (94.42, 31.12)	64.33 (103.69, 32.36)	57.22 (92.78, 31.50)	58.26 (95.07, 31.67)
2016	60.80 (97.92, 34.02)	76.65 (125.83, 41.34)	57.67 (94.87, 31.13)	64.17 (103.71, 32.26)	57.07 (92.43, 31.59)	58.23 (95.08, 31.55)
2017	60.73 (97.70, 34.04)	76.78 (126.00, 41.52)	57.69 (94.76, 30.94)	63.97 (103.16, 32.37)	56.98 (92.39, 31.42)	58.16 (94.97, 31.57)
2018	60.58 (97.49, 33.89)	76.92 (126.11, 41.52)	57.72 (94.87, 30.82)	63.60 (102.45, 32.15)	56.75 (92.05, 31.32)	58.04 (95.12, 31.48)
2019	60.44 (97.54, 33.89)	77.04 (126.35, 41.62)	57.73 (94.84, 31.11)	63.34 (101.63, 32.04)	56.49 (91.21, 31.17)	57.94 (95.26, 31.42)
2020	60.12 (96.71, 33.68)	77.00 (126.79, 41.68)	57.63 (93.46, 31.01)	62.95 (100.65, 31.96)	55.77 (90.19, 30.54)	57.86 (94.44, 31.37)
2021	60.11 (96.88, 33.62)	78.16 (128.23, 42.27)	57.60 (94.30, 31.11)	62.67 (100.28, 31.82)	55.75 (90.17, 30.65)	57.69 (94.53, 31.34)
Female						
1990	64.94 (103.40, 36.34)	89.29 (145.24, 48.74)	60.82 (97.83, 33.62)	69.31 (117.69, 32.89)	58.94 (94.86, 32.77)	61.15 (97.98, 34.20)

Table S3 (continued)

Table S3 (continued)

Sex	Global	High SDI	High-middle SDI	Low SDI	Low-middle SDI	Middle SDI
1991	64.86 (103.55, 36.23)	89.23 (144.60, 48.58)	60.71 (98.28, 33.43)	69.48 (117.97, 32.89)	58.83 (95.19, 32.94)	61.07 (98.05, 34.24)
1992	64.81 (103.15, 36.28)	89.22 (145.22, 48.42)	60.64 (97.85, 33.93)	69.68 (117.90, 33.08)	58.75 (94.54, 32.82)	60.98 (97.91, 34.15)
1993	64.74 (103.08, 36.19)	89.25 (145.30, 48.00)	60.60 (98.05, 33.64)	69.71 (118.41, 32.84)	58.68 (94.57, 32.94)	60.87 (97.81, 34.02)
1994	64.60 (102.80, 35.99)	89.28 (145.78, 48.53)	60.44 (97.25, 33.57)	69.68 (118.11, 33.05)	58.63 (93.73, 32.81)	60.65 (97.76, 33.75)
1995	64.47 (102.77, 35.95)	89.31 (145.73, 48.23)	60.29 (97.83, 33.31)	69.75 (117.77, 32.66)	58.61 (94.00, 32.51)	60.41 (97.63, 33.49)
1996	64.34 (102.74, 35.67)	89.39 (146.05, 48.17)	60.15 (97.81, 33.29)	69.81 (117.90, 32.91)	58.51 (94.25, 32.62)	60.19 (97.16, 33.42)
1997	64.22 (102.81, 35.68)	89.71 (146.71, 48.24)	60.03 (97.83, 32.78)	69.75 (117.36, 33.12)	58.36 (93.37, 32.53)	59.97 (97.19, 33.22)
1998	64.15 (102.83, 35.79)	90.10 (146.86, 48.35)	59.93 (97.20, 32.97)	69.92 (117.21, 32.80)	58.28 (94.12, 32.63)	59.74 (96.57, 32.89)
1999	64.10 (102.56, 35.59)	90.43 (147.28, 48.33)	59.77 (97.48, 32.75)	70.10 (117.10, 33.26)	58.26 (94.31, 32.30)	59.53 (96.62, 32.68)
2000	64.00 (102.38, 35.50)	90.57 (147.03, 48.56)	59.58 (96.63, 32.48)	70.12 (117.25, 33.07)	58.21 (93.96, 32.50)	59.35 (96.36, 32.69)
2001	63.87 (102.20, 35.50)	90.47 (146.97, 48.48)	59.34 (96.54, 32.27)	70.08 (115.69, 33.25)	58.19 (94.04, 32.56)	59.12 (95.47, 32.40)
2002	63.68 (102.01, 35.30)	90.00 (147.01, 48.42)	59.13 (96.27, 32.36)	69.79 (115.79, 33.29)	58.22 (94.10, 32.48)	58.91 (95.40, 32.25)
2003	63.47 (101.92, 35.26)	89.33 (145.45, 47.74)	58.93 (96.40, 32.14)	69.46 (115.33, 33.09)	58.22 (93.95, 32.45)	58.72 (95.21, 32.02)
2004	63.27 (101.67, 35.17)	88.63 (144.65, 47.73)	58.70 (96.00, 31.73)	69.25 (114.88, 33.12)	58.26 (94.45, 32.39)	58.52 (94.91, 32.11)
2005	63.05 (101.16, 35.09)	87.93 (143.28, 47.66)	58.54 (96.10, 31.65)	68.85 (114.43, 32.76)	58.33 (94.63, 32.58)	58.29 (94.98, 31.76)
2006	62.86 (101.08, 34.95)	87.21 (142.35, 47.13)	58.33 (94.87, 31.62)	68.68 (113.97, 32.76)	58.36 (94.05, 32.53)	58.12 (94.61, 31.74)
2007	62.66 (100.99, 34.79)	86.38 (140.55, 46.72)	58.19 (94.73, 31.38)	68.46 (112.23, 33.05)	58.33 (94.62, 32.36)	57.96 (94.43, 31.44)
2008	62.48 (100.74, 34.61)	85.50 (139.91, 46.07)	58.16 (94.80, 31.12)	68.04 (111.35, 32.66)	58.35 (93.99, 32.17)	57.87 (94.18, 31.38)
2009	62.37 (100.95, 34.47)	84.78 (138.20, 45.69)	58.21 (94.88, 31.54)	67.71 (111.33, 32.57)	58.38 (94.16, 32.48)	57.83 (94.14, 31.47)
2010	62.24 (100.56, 34.37)	84.20 (137.70, 45.25)	58.24 (94.63, 31.53)	67.30 (110.70, 32.61)	58.29 (94.10, 32.45)	57.80 (94.42, 31.13)
2011	62.14 (100.53, 34.28)	83.70 (137.61, 45.07)	58.30 (95.32, 31.41)	67.02 (109.03, 32.49)	58.20 (93.91, 32.10)	57.77 (93.99, 31.21)
2012	62.03 (100.10, 34.38)	83.17 (136.43, 44.58)	58.38 (95.52, 31.33)	66.79 (109.73, 32.48)	58.00 (94.16, 32.01)	57.73 (94.43, 31.22)
2013	61.91 (100.11, 34.27)	82.67 (135.87, 44.26)	58.44 (95.72, 31.22)	66.56 (110.12, 32.05)	57.79 (93.31, 31.96)	57.71 (94.00, 31.46)
2014	61.83 (100.01, 34.11)	82.26 (135.13, 44.02)	58.51 (96.12, 31.59)	66.37 (110.46, 32.26)	57.60 (93.61, 31.71)	57.72 (94.23, 31.11)
2015	61.73 (99.52, 34.10)	82.10 (134.75, 44.18)	58.66 (96.35, 31.63)	66.02 (110.25, 32.10)	57.40 (92.94, 31.43)	57.69 (94.35, 31.06)
2016	61.70 (99.58, 34.25)	82.15 (134.81, 44.19)	58.78 (97.52, 31.71)	65.86 (109.83, 32.05)	57.27 (92.58, 31.46)	57.70 (94.38, 31.10)
2017	61.68 (99.78, 34.24)	82.27 (134.77, 44.41)	58.85 (96.90, 31.30)	65.63 (109.96, 32.00)	57.20 (91.64, 31.43)	57.71 (94.51, 31.24)
2018	61.53 (99.02, 34.18)	82.45 (134.79, 44.28)	58.92 (96.55, 31.20)	65.15 (108.94, 32.18)	56.99 (92.35, 31.40)	57.63 (94.57, 31.17)
2019	61.41 (99.13, 34.18)	82.59 (135.32, 44.49)	58.97 (96.89, 31.49)	64.87 (108.66, 32.16)	56.73 (91.30, 31.23)	57.57 (94.51, 31.20)
2020	61.07 (98.26, 33.80)	83.11 (136.84, 45.03)	58.99 (96.10, 31.63)	64.40 (106.86, 31.89)	55.89 (90.78, 30.57)	57.38 (93.46, 31.11)
2021	61.04 (98.48, 33.93)	84.27 (137.49, 45.57)	58.92 (96.82, 32.03)	64.07 (106.10, 31.71)	55.91 (89.84, 30.66)	57.16 (93.37, 30.98)
Male						
1990	64.55 (102.42, 36.81)	78.40 (126.67, 42.85)	61.48 (97.55, 35.81)	65.84 (108.24, 32.68)	58.67 (95.26, 32.85)	64.74 (102.48, 37.16)
1991	64.50 (102.43, 36.81)	78.98 (127.99, 43.24)	61.41 (97.72, 35.36)	65.84 (108.74, 32.38)	58.63 (94.92, 32.75)	64.51 (101.67, 37.11)

Table S3 (continued)

Table S3 (continued)

Sex	Global	High SDI	High-middle SDI	Low SDI	Low-middle SDI	Middle SDI
1992	64.39 (102.44, 36.70)	79.52 (128.46, 43.41)	61.20 (97.46, 35.23)	65.88 (108.35, 32.43)	58.60 (94.37, 32.69)	64.14 (101.83, 37.07)
1993	64.30 (102.40, 36.69)	80.02 (129.48, 43.81)	61.12 (96.95, 34.99)	65.93 (107.77, 32.52)	58.56 (94.73, 32.73)	63.83 (102.01, 36.63)
1994	64.14 (101.90, 36.68)	80.32 (129.42, 43.94)	60.95 (97.01, 34.82)	65.70 (107.58, 32.33)	58.53 (94.28, 32.68)	63.50 (100.98, 36.16)
1995	63.98 (102.00, 36.56)	80.41 (130.33, 43.94)	60.73 (96.71, 34.59)	65.65 (106.54, 32.11)	58.50 (94.76, 32.84)	63.22 (100.84, 35.84)
1996	63.73 (101.78, 36.32)	80.42 (130.58, 44.04)	60.43 (96.34, 34.43)	65.60 (107.06, 32.41)	58.33 (94.08, 32.69)	62.87 (100.17, 35.42)
1997	63.48 (101.39, 36.11)	80.51 (131.41, 43.97)	60.14 (95.98, 34.25)	65.40 (106.05, 32.30)	58.21 (94.47, 32.46)	62.49 (100.29, 35.23)
1998	63.25 (101.29, 36.01)	80.68 (131.94, 44.01)	59.81 (95.80, 33.86)	65.42 (105.84, 32.66)	58.08 (94.25, 32.29)	62.09 (99.71, 34.94)
1999	63.04 (100.89, 35.88)	80.78 (132.22, 43.92)	59.55 (95.19, 33.71)	65.33 (106.84, 32.29)	58.00 (94.17, 32.22)	61.71 (99.34, 34.49)
2000	62.84 (100.81, 35.73)	80.80 (131.95, 43.80)	59.25 (95.43, 33.34)	65.34 (107.50, 32.38)	57.97 (94.14, 32.21)	61.31 (99.29, 34.30)
2001	62.57 (100.34, 35.58)	80.58 (131.98, 43.72)	58.79 (94.64, 32.79)	65.20 (106.77, 32.07)	57.92 (93.28, 32.35)	60.94 (98.26, 33.86)
2002	62.26 (100.08, 35.31)	80.06 (130.90, 43.36)	58.29 (94.41, 32.37)	64.97 (106.38, 32.27)	57.92 (94.03, 32.26)	60.55 (98.09, 33.67)
2003	61.98 (99.53, 35.19)	79.35 (130.09, 42.97)	57.97 (94.15, 32.15)	64.81 (105.09, 32.36)	57.97 (93.46, 32.34)	60.16 (97.34, 33.25)
2004	61.74 (99.49, 34.91)	78.54 (128.37, 42.37)	57.69 (94.14, 31.95)	64.80 (104.71, 32.51)	58.04 (93.84, 32.17)	59.79 (96.97, 33.04)
2005	61.51 (98.98, 34.75)	77.75 (126.96, 41.97)	57.41 (93.53, 31.59)	64.71 (104.14, 32.36)	58.06 (94.25, 32.29)	59.55 (97.04, 32.80)
2006	61.28 (98.68, 34.59)	76.93 (125.80, 41.71)	57.08 (92.96, 31.42)	64.54 (103.71, 32.36)	58.07 (93.88, 32.10)	59.32 (96.66, 32.47)
2007	61.05 (98.20, 34.39)	75.89 (123.86, 41.16)	56.86 (92.50, 31.04)	64.40 (103.27, 32.58)	58.03 (93.43, 32.01)	59.16 (96.54, 32.27)
2008	60.83 (97.97, 34.12)	74.79 (122.65, 40.14)	56.67 (92.49, 30.79)	64.15 (103.40, 32.31)	58.01 (93.89, 32.19)	59.05 (96.20, 32.26)
2009	60.69 (97.73, 34.07)	73.84 (120.55, 39.77)	56.56 (92.38, 30.89)	63.98 (102.83, 32.30)	57.97 (94.02, 32.00)	59.05 (96.30, 32.23)
2010	60.58 (97.39, 33.96)	73.19 (119.43, 39.35)	56.53 (92.38, 30.83)	63.78 (102.88, 32.25)	57.97 (93.41, 32.19)	58.98 (96.62, 32.21)
2011	60.44 (97.15, 33.89)	72.72 (118.98, 39.17)	56.45 (91.79, 30.57)	63.53 (102.72, 32.38)	57.85 (93.11, 32.02)	58.91 (96.13, 31.99)
2012	60.29 (97.06, 33.69)	72.20 (118.80, 38.81)	56.49 (91.99, 30.54)	63.25 (102.42, 32.17)	57.68 (93.69, 31.85)	58.84 (96.17, 31.96)
2013	60.19 (97.16, 33.66)	71.80 (117.76, 38.69)	56.53 (92.21, 30.49)	63.09 (102.00, 32.18)	57.46 (93.52, 31.83)	58.84 (96.08, 31.94)
2014	60.08 (97.08, 33.50)	71.50 (118.00, 38.48)	56.60 (92.63, 30.79)	62.90 (101.30, 32.25)	57.21 (92.65, 31.66)	58.81 (95.73, 32.06)
2015	60.00 (97.05, 33.53)	71.44 (118.02, 38.39)	56.68 (93.02, 30.63)	62.65 (100.92, 31.88)	57.03 (92.52, 31.65)	58.80 (95.93, 32.23)
2016	59.92 (96.90, 33.43)	71.51 (118.01, 38.49)	56.66 (92.87, 30.50)	62.50 (100.56, 31.76)	56.88 (92.53, 31.42)	58.73 (95.76, 32.02)
2017	59.83 (96.67, 33.39)	71.64 (118.05, 38.63)	56.64 (92.70, 30.55)	62.32 (100.53, 31.84)	56.76 (92.77, 31.38)	58.58 (95.61, 31.93)
2018	59.68 (96.38, 33.21)	71.75 (118.25, 38.49)	56.63 (92.89, 30.49)	62.06 (100.46, 31.55)	56.51 (91.80, 31.43)	58.43 (95.52, 31.86)
2019	59.52 (96.72, 33.13)	71.85 (118.37, 38.50)	56.59 (93.06, 30.85)	61.80 (100.94, 31.58)	56.26 (91.66, 31.08)	58.28 (95.96, 31.68)
2020	59.22 (95.51, 32.97)	71.28 (117.32, 38.18)	56.39 (91.66, 30.56)	61.50 (99.90, 31.45)	55.65 (89.75, 30.63)	58.32 (95.40, 31.56)
2021	59.23 (96.22, 32.81)	72.45 (119.56, 39.23)	56.40 (92.28, 30.35)	61.26 (99.80, 31.51)	55.59 (90.69, 30.72)	58.18 (95.38, 31.66)

Data are presented as ASDR (95% CI). ASDR, age-standardized DALYs rate; CI, confidence interval; DALYs, disability-adjusted life years; SDI, socio-demographic index; URIs, upper respiratory infections.

Table S4 ASIR of URIs by age group across different SDI regions among individuals aged 10–24 years, 1990–2021 (per 100,000 population)

Age	Global	High SDI	High-middle SDI	Low SDI	Low-middle SDI	Middle SDI
10–14 years						
1990	180639.24 (247689.65, 126030.89)	245900.39 (336597.90, 170938.15)	173902.54 (239614.27, 120809.54)	154564.43 (214629.87, 107105.09)	167668.07 (229750.76, 117020.09)	180723.73 (246525.48, 125573.57)
1991	180437.97 (247578.50, 125921.69)	245379.99 (336288.49, 170390.69)	173838.02 (239361.65, 120834.33)	154,357.33 (214391.71, 107033.90)	167448.43 (229591.94, 116951.00)	180814.48 (246803.93, 125806.90)
1992	180136.13 (247298.54, 125684.35)	244913.46 (335984.69, 169878.15)	173731.91 (239097.94, 120837.20)	154147.40 (214127.57, 106929.10)	167149.67 (229365.54, 116777.24)	180718.78 (246893.46, 125673.15)
1993	179740.16 (246869.02, 125419.50)	244631.81 (335879.71, 169498.69)	173541.15 (238628.80, 120781.79)	153981.47 (213844.35, 106830.34)	166800.53 (229091.85, 116479.63)	180412.30 (246793.79, 125366.21)
1994	179240.25 (246283.48, 125135.23)	244568.55 (336035.41, 169288.67)	173206.26 (237933.93, 120619.99)	153840.06 (213632.01, 106803.66)	166430.12 (228709.27, 116156.83)	179884.32 (246383.09, 125046.06)
1995	178649.68 (245567.09, 124771.84)	244717.48 (336473.75, 169257.77)	172717.00 (237024.23, 120332.85)	153744.52 (213522.81, 106989.73)	166069.49 (228517.36, 115838.33)	179158.81 (245704.44, 124704.19)
1996	178064.30 (244633.38, 124349.56)	245516.02 (337822.72, 169862.50)	172146.97 (236116.43, 119991.78)	153819.19 (213770.06, 107210.77)	165670.88 (227891.33, 115405.80)	178261.92 (244191.87, 124322.01)
1997	177553.81 (243789.71, 124017.20)	247055.80 (339682.56, 170971.00)	171576.40 (235199.75, 119664.84)	154040.22 (214183.42, 107526.05)	165220.40 (227411.28, 114917.60)	177310.75 (242589.31, 123846.24)
1998	177159.42 (243095.09, 123885.21)	248871.47 (341914.13, 172185.54)	171079.05 (234382.57, 119407.89)	154291.54 (214662.70, 107824.96)	164801.70 (226991.70, 114475.17)	176467.67 (241099.60, 123288.66)
1999	176927.81 (242619.59, 123832.14)	250725.86 (344221.78, 173342.34)	170747.72 (233800.79, 119159.95)	154508.77 (215280.33, 107793.77)	164490.21 (226720.25, 114658.68)	175854.93 (240132.91, 123036.48)
2000	176853.05 (242360.98, 123880.07)	251961.71 (345678.03, 174210.99)	170611.97 (233498.53, 119232.54)	154664.99 (216001.50, 107363.32)	164353.14 (226662.66, 114872.76)	175576.81 (239853.44, 122864.26)
2001	176863.57 (242678.28, 123819.17)	252121.06 (346030.94, 174251.87)	170690.28 (233848.82, 119261.04)	154810.31 (216059.74, 107733.22)	164403.79 (226875.97, 114943.29)	175596.26 (239834.00, 122747.86)
2002	176879.60 (243002.63, 123759.38)	251322.57 (345039.83, 173792.95)	170927.88 (234460.23, 119399.26)	154959.83 (216274.32, 108140.12)	164586.79 (226954.49, 115066.83)	175754.68 (240198.64, 122789.43)
2003	176865.28 (243296.45, 123666.23)	249845.33 (343107.64, 172837.62)	171309.37 (235315.41, 119636.64)	155069.63 (216501.49, 108485.69)	164837.20 (227039.18, 115210.38)	176040.31 (240943.07, 122754.54)
2004	176833.98 (243584.01, 123545.80)	247980.81 (340534.29, 171599.97)	171805.09 (236260.90, 119944.74)	155151.54 (216671.18, 108511.49)	165091.99 (227643.76, 115324.27)	176458.36 (241960.50, 122782.37)
2005	176792.12 (243874.57, 123406.79)	246162.15 (338053.84, 170388.56)	172364.65 (237308.82, 120275.88)	155195.76 (216800.36, 108452.11)	165294.01 (228200.43, 115352.07)	177005.42 (243171.69, 122900.60)
2006	176678.83 (243682.01, 123364.58)	244200.66 (335135.14, 168983.69)	172867.35 (238116.84, 120370.13)	155231.31 (216530.88, 108832.82)	165425.50 (228218.95, 115705.33)	177527.81 (243884.56, 123305.04)
2007	176464.67 (243268.36, 123258.43)	241888.80 (331634.26, 167301.91)	173318.43 (238527.18, 120593.34)	155311.94 (216268.89, 109253.81)	165499.12 (228163.20, 115922.22)	177918.25 (244584.23, 123693.69)
2008	176224.00 (242716.71, 123128.35)	239561.61 (328059.42, 165554.52)	173757.04 (238938.56, 120777.14)	155416.82 (216016.02, 109665.65)	165528.87 (228046.73, 116097.80)	178238.89 (245172.22, 124015.55)
2009	175982.63 (242205.75, 122989.05)	237335.18 (324633.58, 163842.73)	174207.61 (239399.74, 120959.43)	155500.01 (215746.39, 109835.54)	165533.87 (228070.06, 116231.29)	178511.46 (245664.66, 124157.32)
2010	175730.74 (241729.48, 122838.91)	235389.37 (321665.53, 162336.32)	174654.79 (239835.55, 121399.07)	155524.64 (215451.47, 109727.06)	165520.07 (228206.45, 116326.43)	178650.92 (245943.87, 124195.11)
2011	175324.99 (241234.64, 122563.56)	233484.03 (319428.93, 161171.66)	175002.41 (240407.59, 121587.17)	155357.22 (215130.29, 109652.44)	165345.28 (227889.14, 116299.87)	178579.21 (245659.03, 124092.42)
2012	174721.67 (240567.68, 122139.58)	231366.40 (316935.04, 159892.92)	175188.39 (240696.29, 121909.41)	154969.62 (214619.11, 109398.22)	164951.76 (227303.43, 116117.56)	178345.34 (245187.60, 123869.77)
2013	174036.93 (239744.86, 121642.51)	229327.30 (314709.32, 158672.95)	175250.87 (240825.66, 122139.82)	154490.82 (214027.61, 108963.40)	164440.66 (226566.05, 115789.46)	178016.73 (244745.80, 123717.66)
2014	173387.21 (238888.62, 121156.05)	227808.48 (313242.35, 157788.46)	175206.52 (241074.27, 122285.68)	154049.25 (213470.68, 108405.34)	163922.38 (225837.45, 115222.96)	177628.23 (244275.18, 123545.40)
2015	172878.34 (238203.60, 120764.62)	227208.04 (312947.27, 157501.05)	175053.27 (241298.66, 122348.47)	153773.12 (213069.23, 107966.75)	163521.72 (225416.99, 114604.93)	177213.64 (243716.76, 123365.45)
2016	172546.29 (237948.58, 120402.42)	227427.64 (312849.48, 157449.70)	174771.42 (240489.52, 121988.61)	153686.57 (212857.04, 107586.71)	163301.48 (224950.64, 114413.60)	176753.70 (243139.83, 122970.18)
2017	172289.07 (237778.29, 120197.31)	227908.16 (313409.54, 157556.87)	174391.85 (239523.67, 121531.05)	153681.06 (212728.63, 107244.99)	163152.33 (224752.66, 114071.63)	176228.49 (242440.93, 122449.77)
2018	172026.77 (237572.15, 119980.65)	228352.02 (313919.40, 157619.13)	173949.67 (238805.44, 121001.83)	153693.86 (212839.43, 106932.19)	162947.93 (224552.16, 113680.01)	175689.09 (241685.42, 122065.06)
2019	171691.27 (237263.24, 119716.71)	228493.95 (314030.24, 157463.19)	173521.64 (238106.08, 120410.70)	153654.02 (213148.07, 106600.39)	162556.93 (224303.39, 113291.09)	175221.70 (241025.16, 121743.28)
2020	170913.00 (236413.87, 118816.82)	227769.03 (312861.84, 157359.12)	173108.14 (237896.41, 120829.08)	153309.75 (213616.18, 106734.99)	160941.97 (223043.31, 112218.52)	174960.11 (240970.52, 121382.85)
2021	171067.25 (235587.82, 118997.44)	230725.46 (316374.70, 160185.34)	173125.12 (237184.48, 120308.46)	153263.53 (212484.26, 106203.85)	161187.29 (222736.86, 111832.70)	174574.03 (239611.75, 121445.53)
15–19 years						
1990	166940.66 (224656.04, 115883.42)	234768.25 (312265.39, 162388.65)	158920.27 (214051.21, 110209.44)	147142.36 (199894.14, 100846.54)	156524.37 (211438.57, 108297.71)	159318.78 (214760.09, 110519.44)

Table S4 (continued)

Table S4 (continued)

Age	Global	High SDI	High-middle SDI	Low SDI	Low-middle SDI	Middle SDI
1991	167143.19 (224811.45, 116045.38)	236192.29 (313458.86, 163560.52)	159413.50 (214714.19, 110455.29)	147148.97 (199620.80, 101031.46)	156519.10 (211384.41, 108152.99)	159777.76 (215221.85, 110841.57)
1992	167462.65 (225132.36, 116265.64)	237964.93 (315102.63, 164662.68)	159928.18 (215385.99, 110869.18)	147125.26 (199388.33, 101151.93)	156480.02 (211166.44, 108085.73)	160352.42 (215837.73, 111221.06)
1993	167822.63 (225513.23, 116491.71)	239799.79 (316837.21, 166216.38)	160406.82 (216026.30, 111184.35)	147105.52 (199189.00, 101236.48)	156409.54 (210991.33, 108190.27)	160955.35 (216748.57, 111604.36)
1994	168127.67 (225824.63, 116658.60)	241379.37 (318248.32, 167575.31)	160768.87 (216603.75, 111384.25)	147069.43 (198988.36, 101288.09)	156300.43 (210879.68, 108240.86)	161457.62 (217549.46, 111816.22)
1995	168324.68 (226048.72, 116739.16)	242402.11 (318942.71, 168549.12)	161007.08 (216998.03, 111474.78)	147097.24 (199076.83, 101362.34)	156155.98 (210853.60, 108139.93)	161801.15 (218152.70, 111890.07)
1996	168400.90 (226241.54, 116816.43)	243162.13 (320123.42, 169144.81)	161170.10 (216919.92, 111669.10)	147259.19 (199261.11, 101462.10)	155932.15 (210423.91, 108055.84)	161938.90 (218202.14, 112021.98)
1997	168331.87 (226300.05, 116772.16)	243722.27 (321144.09, 169595.44)	161302.82 (216980.22, 111833.53)	147479.99 (199714.81, 101611.53)	155611.71 (210066.68, 107739.59)	161848.76 (218038.29, 111963.58)
1998	168110.01 (226162.66, 116588.59)	244150.56 (322168.16, 169933.85)	161305.80 (216916.23, 111895.67)	147696.70 (200194.83, 101727.87)	155267.32 (209692.17, 107372.63)	161529.99 (217678.49, 111691.23)
1999	167708.35 (225789.00, 116241.38)	244414.78 (323080.57, 170128.48)	161044.79 (216493.35, 111753.92)	147873.02 (200676.02, 101794.55)	154975.15 (208985.61, 107017.29)	160998.93 (217134.24, 111220.91)
2000	167142.26 (225188.04, 115762.15)	244415.83 (323621.74, 170108.84)	160469.81 (215658.24, 111375.50)	147999.85 (201148.68, 101970.85)	154808.96 (208470.14, 106747.81)	160311.87 (216350.73, 110622.69)
2001	166465.29 (224168.53, 115301.87)	243782.21 (322635.65, 169552.31)	159660.26 (214517.91, 110748.00)	148179.51 (201126.47, 101910.81)	154845.44 (208537.37, 106783.25)	159477.19 (215050.00, 110144.92)
2002	165743.85 (223083.52, 114790.22)	242294.80 (320589.38, 168441.66)	158793.09 (213325.60, 110046.71)	148443.90 (201210.52, 102040.55)	155069.97 (208827.33, 106969.22)	158600.73 (213688.85, 109552.26)
2003	165091.05 (222085.47, 114313.27)	240271.90 (317884.16, 167076.28)	158008.46 (212419.60, 109384.55)	148718.61 (201292.60, 102113.92)	155405.45 (209247.92, 107235.10)	157842.48 (212487.05, 109030.00)
2004	164608.46 (221310.91, 113945.58)	238300.74 (315481.97, 165681.61)	157448.20 (211990.38, 108887.72)	148985.84 (201062.09, 102154.11)	155760.51 (209683.78, 107511.14)	157287.30 (211655.80, 108636.12)
2005	164303.05 (220769.06, 113707.74)	236509.53 (313488.07, 164393.84)	157143.56 (211854.92, 108607.05)	149188.17 (200921.11, 102555.71)	156023.51 (209816.16, 107723.97)	156987.33 (211239.79, 108419.32)
2006	164131.64 (220554.29, 113646.95)	234559.79 (311405.39, 163081.03)	157065.87 (211509.64, 108630.25)	149320.31 (201131.16, 102689.99)	156241.98 (210212.52, 107917.94)	156971.17 (211325.90, 108491.10)
2007	164039.23 (220442.74, 113643.32)	232163.10 (308670.03, 161204.16)	157129.52 (211358.85, 108768.59)	149436.83 (201482.43, 102803.31)	156512.57 (210730.94, 108095.36)	157173.32 (211734.29, 108731.97)
2008	163997.10 (220387.58, 113664.74)	229611.54 (305676.11, 159095.47)	157356.12 (211406.22, 109009.54)	149512.38 (201837.74, 102974.79)	156773.46 (211252.29, 108148.64)	157586.62 (212449.97, 109115.81)
2009	163998.76 (220376.64, 113700.06)	227267.54 (302930.80, 157245.72)	157747.75 (211657.14, 109348.82)	149508.81 (202138.98, 102976.03)	156965.86 (211441.06, 108122.60)	158177.15 (213422.97, 109515.68)
2010	163993.12 (220465.27, 113631.74)	225521.34 (300998.78, 155876.70)	158256.95 (212066.22, 109810.39)	149423.85 (202309.83, 102835.65)	157046.89 (211514.32, 107974.48)	158767.62 (214398.99, 109917.62)
2011	163834.91 (220385.23, 113575.97)	223944.51 (298636.24, 154743.16)	158757.44 (212950.15, 110194.44)	149131.27 (202064.47, 102697.99)	156870.91 (211240.34, 107988.64)	159208.80 (214888.86, 110308.46)
2012	163489.34 (220057.87, 113362.20)	222239.79 (296059.89, 153527.44)	159228.77 (213851.99, 110576.94)	148599.63 (201533.11, 102338.70)	156390.42 (210630.26, 107766.20)	159552.35 (215263.94, 110590.61)
2013	163078.87 (219641.85, 113072.32)	220795.68 (293762.41, 152567.94)	159687.24 (214755.66, 110903.43)	147987.96 (200873.96, 101849.81)	155745.41 (209858.01, 107406.26)	159827.79 (215550.10, 110779.57)
2014	162689.77 (219255.85, 112777.76)	219773.25 (291975.17, 151806.82)	160143.45 (215632.79, 111198.39)	147427.96 (200169.15, 101423.17)	155088.18 (209104.74, 107025.29)	160021.60 (215719.60, 110689.56)
2015	162421.68 (219026.55, 112576.43)	219411.66 (291043.94, 151446.38)	160620.80 (216489.75, 111527.75)	147052.75 (199742.50, 101155.10)	154563.34 (208627.41, 106674.42)	160133.20 (215762.14, 110548.31)
2016	162240.87 (218986.23, 112459.46)	219652.39 (291384.25, 152095.75)	161031.27 (216680.05, 111846.75)	146915.20 (199614.15, 101042.57)	154214.03 (208151.27, 106390.90)	160096.88 (216031.68, 110647.17)
2017	162035.34 (218915.65, 112315.48)	220078.90 (292100.93, 152876.53)	161297.13 (216650.43, 112005.60)	146881.76 (199601.30, 101139.95)	153928.89 (208121.48, 106068.44)	159901.72 (216075.19, 110494.16)
2018	161778.58 (218752.06, 112114.14)	220500.39 (292841.59, 153570.06)	161469.84 (216521.56, 112056.21)	146847.73 (199500.79, 101320.83)	153592.87 (208121.72, 105800.27)	159638.16 (216002.03, 110132.53)
2019	161441.73 (218444.23, 111832.57)	220837.69 (293414.09, 154160.82)	161551.96 (216686.97, 111980.09)	146730.22 (199585.77, 101391.53)	153098.71 (207725.38, 105408.41)	159378.45 (215893.83, 109797.79)
2020	160591.93 (217019.30, 111251.11)	220863.54 (293346.72, 153694.95)	161499.01 (217406.78, 112403.24)	146031.90 (197895.53, 100129.53)	151291.20 (205678.05, 103808.99)	159259.28 (214767.48, 110031.97)
2021	160574.24 (216450.94, 111176.95)	224374.72 (296601.69, 155875.20)	161173.62 (216900.37, 111273.81)	145916.83 (198854.93, 99622.74)	151240.49 (203628.14, 103910.77)	158671.22 (214300.32, 109918.96)
20–24 years						
1990	162231.43 (220240.99, 116039.73)	229463.16 (307705.89, 166507.52)	152015.55 (206560.43, 108530.44)	143732.79 (196849.55, 101389.03)	151674.23 (206627.06, 107515.36)	152444.56 (208346.19, 108431.69)
1991	162562.75 (220496.83, 116216.76)	232278.21 (310744.10, 168744.68)	151912.57 (206259.73, 108536.23)	143791.60 (197132.02, 101279.23)	151713.66 (206668.32, 107605.04)	152440.80 (208122.68, 108415.02)

Table S4 (continued)

Table S4 (continued)

Age	Global	High SDI	High-middle SDI	Low SDI	Low-middle SDI	Middle SDI
1992	162843.15 (220762.55, 116355.20)	234583.77 (313811.18, 170504.53)	152012.87 (206541.88, 108690.81)	143766.90 (196882.03, 101088.77)	151769.26 (206733.61, 107711.07)	152550.32 (208040.86, 108470.57)
1993	163061.87 (220992.18, 116445.58)	236414.01 (316827.64, 171751.13)	152263.34 (207054.11, 108950.61)	143652.46 (196484.20, 100938.48)	151846.70 (206864.10, 107781.63)	152722.40 (208042.85, 108558.33)
1994	163183.03 (221118.06, 116465.02)	237428.65 (318737.54, 172002.57)	152637.45 (207734.94, 109280.09)	143432.99 (195623.50, 100820.73)	151933.97 (206839.86, 107800.26)	153003.16 (208190.99, 108720.55)
1995	163213.16 (221136.67, 116420.40)	237528.26 (319108.28, 171552.33)	153125.32 (208541.38, 109678.92)	143285.74 (194804.24, 100813.13)	152007.90 (206900.73, 107825.09)	153420.13 (208526.22, 108985.84)
1996	163230.65 (221370.27, 116464.26)	237177.48 (318512.13, 171397.10)	153776.46 (209425.74, 110052.52)	143372.95 (195049.49, 100788.52)	151995.36 (207073.02, 108040.75)	153914.86 (209404.81, 109434.75)
1997	163374.20 (221759.07, 116595.10)	237305.65 (318478.20, 171528.77)	154498.75 (210037.13, 110455.57)	143617.51 (195590.31, 101186.57)	151864.66 (207232.83, 108023.07)	154408.79 (210278.59, 109896.42)
1998	163571.76 (222217.27, 116760.18)	237586.55 (318611.89, 171736.86)	155198.22 (210657.53, 110816.51)	143913.98 (196258.11, 101640.12)	151682.82 (207227.70, 107925.41)	154870.36 (211091.87, 110335.09)
1999	163742.04 (222600.35, 116900.23)	237758.08 (318731.08, 171861.63)	155742.20 (211062.01, 110966.66)	144195.64 (196930.66, 102012.98)	151522.73 (207127.57, 107847.66)	155233.07 (211765.12, 110689.75)
2000	163882.97 (222905.62, 117018.96)	237633.73 (318691.94, 171791.90)	156097.19 (211268.28, 111000.03)	144471.61 (197549.25, 102239.74)	151467.11 (207384.73, 107856.97)	155510.01 (212305.74, 110965.74)
2001	163928.24 (222875.91, 117121.39)	236931.47 (317406.15, 171414.58)	156275.48 (211605.71, 111343.59)	144778.99 (197960.49, 102155.09)	151557.85 (207385.75, 107825.00)	155679.53 (212327.82, 111258.60)
2002	163765.25 (222544.74, 117066.57)	235275.30 (315424.44, 170354.46)	156318.66 (211921.16, 111715.96)	145031.75 (198160.69, 101883.20)	151743.23 (207640.05, 107871.36)	155674.84 (212132.31, 111400.27)
2003	163397.29 (221925.62, 116842.97)	233072.08 (312910.91, 168871.84)	156161.39 (211977.16, 111803.21)	145207.06 (198191.37, 101770.01)	151970.34 (207769.32, 107944.50)	155463.93 (211659.87, 111360.54)
2004	162818.68 (221035.78, 116438.33)	230584.54 (309986.74, 166985.70)	155718.23 (211668.85, 111634.36)	145382.55 (198247.95, 101818.37)	152179.36 (207921.52, 107991.54)	155025.42 (210897.03, 111120.45)
2005	162043.83 (220030.20, 115865.00)	228051.35 (306693.55, 164714.86)	154994.38 (210908.06, 111208.26)	145536.24 (198326.55, 102088.79)	152297.44 (207933.12, 107952.57)	154369.89 (209963.46, 110655.76)
2006	161122.37 (218874.65, 115101.16)	225149.94 (302482.00, 162607.95)	154059.67 (209627.67, 110415.26)	145643.82 (198714.81, 102096.79)	152375.41 (207757.57, 107897.28)	153529.99 (208937.02, 109896.43)
2007	160148.30 (217658.88, 114299.83)	221644.47 (297199.92, 160064.11)	153055.68 (208217.42, 109559.18)	145785.42 (199266.79, 102329.91)	152497.98 (207864.41, 107876.56)	152641.14 (207815.71, 109064.26)
2008	159295.62 (216614.06, 113593.47)	218031.65 (292193.88, 157434.61)	152151.77 (206982.45, 108643.60)	145934.84 (199740.89, 102788.63)	152638.28 (208031.83, 107883.41)	151937.33 (206928.00, 108386.37)
2009	158699.56 (215919.35, 113086.63)	215264.57 (288592.22, 155432.41)	151511.11 (206127.71, 107863.63)	146007.06 (199785.97, 102930.33)	152760.14 (208164.72, 108061.66)	151528.44 (206440.20, 107949.78)
2010	158350.57 (215570.33, 112771.92)	213906.38 (286992.30, 154489.61)	151173.68 (205680.31, 107325.99)	146001.11 (199492.77, 102994.50)	152813.64 (208247.13, 108243.16)	151253.70 (206190.05, 107626.96)
2011	158142.65 (215226.73, 112643.01)	213305.75 (286509.11, 154110.71)	151137.40 (205934.82, 107581.04)	145816.54 (198979.24, 102812.02)	152662.27 (207973.11, 108136.65)	151119.10 (205958.89, 107531.59)
2012	158009.81 (214988.10, 112559.37)	212918.53 (286331.80, 153904.19)	151304.37 (206465.77, 107979.70)	145394.79 (198126.81, 102436.67)	152272.58 (207387.59, 107842.00)	151283.62 (206155.10, 107662.08)
2013	157923.37 (214815.73, 112497.02)	212663.81 (286395.82, 153797.59)	151654.86 (207177.84, 108507.24)	144857.15 (197142.54, 101916.90)	151736.07 (206557.81, 107434.22)	151693.29 (206689.48, 107968.33)
2014	157871.30 (214691.74, 112450.47)	212525.08 (286094.90, 153631.70)	152164.02 (208127.00, 109046.92)	144299.40 (196358.40, 101417.48)	151158.66 (205637.45, 107060.75)	152230.92 (207390.28, 108360.70)
2015	157867.60 (214626.68, 112440.88)	212587.74 (286040.34, 153529.59)	152792.71 (208962.86, 109538.00)	143837.16 (195799.05, 101075.37)	150675.26 (204828.38, 106836.20)	152828.29 (208141.07, 108798.79)
2016	157881.55 (214974.24, 112525.95)	212684.81 (285985.06, 153843.14)	153394.92 (209462.21, 109802.61)	143571.43 (195678.01, 100874.15)	150356.75 (205163.57, 106559.71)	153333.63 (209266.60, 109120.67)
2017	157853.24 (215224.53, 112590.66)	212734.61 (285983.81, 153990.57)	153939.62 (209418.18, 110000.56)	143412.59 (195677.47, 100807.86)	150087.71 (205306.66, 106522.08)	153698.54 (210176.50, 109211.23)
2018	157797.18 (215411.21, 112451.27)	212960.12 (286274.71, 154086.20)	154481.28 (209688.48, 110164.99)	143277.75 (195745.30, 100588.51)	149741.44 (204890.42, 106417.07)	154005.18 (210979.77, 109245.24)
2019	157695.02 (215534.00, 112188.55)	213343.93 (286823.24, 154323.78)	155017.39 (210483.23, 110629.57)	143111.24 (195628.02, 100457.65)	149221.83 (204239.56, 105890.63)	154308.99 (211740.91, 109278.83)
2020	157206.59 (213787.73, 112279.48)	214999.44 (289223.81, 155013.08)	155518.52 (212342.67, 111508.31)	142349.34 (195015.05, 99672.44)	147245.10 (200837.50, 104438.22)	154628.14 (210194.65, 110090.89)
2021	157525.41 (214581.15, 112631.88)	219152.04 (294323.44, 158954.48)	155998.11 (213023.28, 112247.47)	142302.90 (195850.51, 99981.04)	147203.62 (199991.28, 104748.09)	154552.40 (211365.25, 109969.73)

Data are presented as ASIR (95% CI). ASIR, age-standardized incidence rate; CI, confidence interval; SDI, socio-demographic index; URIs, upper respiratory infections.

Table S5 ASMR of URIs by age group across different SDI regions among individuals aged 10–24 years, 1990–2021 (per 100,000 population)

Age	Global	High SDI	High-middle SDI	Low SDI	Low-middle SDI	Middle SDI
10–14 years						
1990	0.09 (0.18, 0.02)	0.02 (0.02, 0.01)	0.07 (0.10, 0.03)	0.28 (0.81, 0.01)	0.06 (0.15, 0.01)	0.08 (0.12, 0.03)
1991	0.09 (0.18, 0.02)	0.02 (0.02, 0.01)	0.07 (0.10, 0.03)	0.28 (0.80, 0.01)	0.06 (0.15, 0.01)	0.08 (0.12, 0.02)
1992	0.09 (0.18, 0.02)	0.01 (0.02, 0.01)	0.07 (0.09, 0.03)	0.28 (0.79, 0.01)	0.06 (0.15, 0.01)	0.07 (0.10, 0.02)
1993	0.09 (0.17, 0.02)	0.01 (0.02, 0.01)	0.06 (0.09, 0.03)	0.28 (0.79, 0.01)	0.06 (0.15, 0.01)	0.07 (0.10, 0.02)
1994	0.08 (0.17, 0.02)	0.01 (0.02, 0.01)	0.06 (0.08, 0.03)	0.28 (0.77, 0.01)	0.06 (0.14, 0.01)	0.07 (0.09, 0.02)
1995	0.08 (0.17, 0.02)	0.01 (0.01, 0.01)	0.06 (0.08, 0.03)	0.28 (0.76, 0.01)	0.06 (0.14, 0.01)	0.07 (0.09, 0.02)
1996	0.08 (0.16, 0.02)	0.01 (0.01, 0.01)	0.06 (0.08, 0.02)	0.28 (0.75, 0.01)	0.06 (0.14, 0.01)	0.06 (0.09, 0.02)
1997	0.08 (0.16, 0.02)	0.01 (0.01, 0.01)	0.05 (0.07, 0.02)	0.27 (0.71, 0.01)	0.06 (0.13, 0.01)	0.06 (0.08, 0.02)
1998	0.08 (0.15, 0.01)	0.01 (0.01, 0.01)	0.05 (0.07, 0.02)	0.27 (0.71, 0.01)	0.06 (0.13, 0.01)	0.06 (0.08, 0.02)
1999	0.08 (0.15, 0.01)	0.01 (0.01, 0.01)	0.05 (0.06, 0.02)	0.27 (0.71, 0.01)	0.06 (0.13, 0.01)	0.05 (0.07, 0.02)
2000	0.08 (0.15, 0.01)	0.01 (0.01, 0.01)	0.04 (0.06, 0.02)	0.27 (0.70, 0.01)	0.06 (0.12, 0.01)	0.05 (0.07, 0.02)
2001	0.07 (0.14, 0.01)	0.01 (0.01, 0.01)	0.04 (0.05, 0.02)	0.26 (0.69, 0.01)	0.06 (0.12, 0.01)	0.05 (0.06, 0.02)
2002	0.07 (0.14, 0.01)	0.01 (0.01, 0.01)	0.03 (0.04, 0.02)	0.26 (0.67, 0.01)	0.06 (0.12, 0.01)	0.04 (0.06, 0.02)
2003	0.07 (0.14, 0.01)	0.01 (0.01, 0.01)	0.03 (0.04, 0.02)	0.25 (0.66, 0.01)	0.05 (0.11, 0.01)	0.04 (0.05, 0.02)
2004	0.07 (0.14, 0.01)	0.01 (0.01, 0.00)	0.02 (0.03, 0.01)	0.25 (0.65, 0.01)	0.05 (0.11, 0.01)	0.03 (0.05, 0.02)
2005	0.07 (0.14, 0.01)	0.00 (0.01, 0.00)	0.02 (0.03, 0.01)	0.25 (0.65, 0.01)	0.05 (0.11, 0.01)	0.03 (0.04, 0.01)
2006	0.07 (0.15, 0.01)	0.00 (0.00, 0.00)	0.02 (0.02, 0.01)	0.25 (0.64, 0.01)	0.05 (0.11, 0.01)	0.03 (0.04, 0.01)
2007	0.07 (0.15, 0.01)	0.00 (0.00, 0.00)	0.01 (0.02, 0.01)	0.24 (0.64, 0.01)	0.05 (0.11, 0.01)	0.02 (0.03, 0.01)
2008	0.06 (0.15, 0.01)	0.00 (0.00, 0.00)	0.01 (0.02, 0.01)	0.24 (0.62, 0.01)	0.05 (0.11, 0.01)	0.02 (0.03, 0.01)
2009	0.06 (0.15, 0.01)	0.00 (0.00, 0.00)	0.01 (0.02, 0.01)	0.23 (0.62, 0.01)	0.05 (0.11, 0.01)	0.02 (0.03, 0.01)
2010	0.06 (0.15, 0.01)	0.00 (0.00, 0.00)	0.01 (0.02, 0.01)	0.23 (0.62, 0.01)	0.05 (0.11, 0.01)	0.02 (0.03, 0.01)
2011	0.06 (0.15, 0.01)	0.00 (0.00, 0.00)	0.01 (0.02, 0.01)	0.23 (0.61, 0.01)	0.05 (0.11, 0.01)	0.02 (0.03, 0.01)
2012	0.06 (0.15, 0.01)	0.00 (0.00, 0.00)	0.01 (0.02, 0.01)	0.22 (0.60, 0.01)	0.05 (0.11, 0.01)	0.02 (0.03, 0.01)
2013	0.06 (0.15, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.01)	0.22 (0.61, 0.01)	0.05 (0.11, 0.01)	0.02 (0.03, 0.01)
2014	0.06 (0.15, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.01)	0.22 (0.62, 0.01)	0.05 (0.10, 0.01)	0.02 (0.02, 0.01)
2015	0.06 (0.16, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.01)	0.22 (0.61, 0.01)	0.05 (0.10, 0.01)	0.02 (0.02, 0.01)
2016	0.06 (0.16, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.01)	0.22 (0.62, 0.01)	0.05 (0.10, 0.01)	0.02 (0.02, 0.01)
2017	0.06 (0.16, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.01)	0.22 (0.61, 0.01)	0.05 (0.09, 0.01)	0.01 (0.02, 0.01)
2018	0.06 (0.15, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.01)	0.21 (0.57, 0.01)	0.04 (0.09, 0.01)	0.01 (0.02, 0.01)
2019	0.06 (0.14, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.01)	0.20 (0.55, 0.01)	0.04 (0.09, 0.01)	0.01 (0.02, 0.01)
2020	0.06 (0.14, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.01)	0.20 (0.54, 0.01)	0.04 (0.08, 0.01)	0.01 (0.02, 0.01)
2021	0.06 (0.14, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.01)	0.19 (0.52, 0.01)	0.04 (0.08, 0.01)	0.01 (0.02, 0.01)
15–19 years						
1990	0.06 (0.11, 0.01)	0.02 (0.02, 0.02)	0.06 (0.08, 0.02)	0.18 (0.44, 0.01)	0.04 (0.07, 0.01)	0.06 (0.10, 0.02)

Table S5 (continued)

Table S5 (continued)

Age	Global	High SDI	High-middle SDI	Low SDI	Low-middle SDI	Middle SDI
1991	0.06 (0.10, 0.01)	0.02 (0.02, 0.01)	0.05 (0.08, 0.02)	0.18 (0.45, 0.01)	0.04 (0.08, 0.01)	0.06 (0.10, 0.02)
1992	0.06 (0.10, 0.01)	0.02 (0.02, 0.01)	0.05 (0.07, 0.02)	0.18 (0.47, 0.01)	0.04 (0.07, 0.01)	0.06 (0.09, 0.02)
1993	0.06 (0.10, 0.01)	0.01 (0.02, 0.01)	0.05 (0.07, 0.02)	0.19 (0.48, 0.01)	0.04 (0.08, 0.01)	0.05 (0.08, 0.02)
1994	0.06 (0.10, 0.01)	0.01 (0.02, 0.01)	0.05 (0.06, 0.02)	0.19 (0.49, 0.01)	0.04 (0.07, 0.01)	0.05 (0.07, 0.02)
1995	0.06 (0.10, 0.01)	0.01 (0.01, 0.01)	0.05 (0.06, 0.02)	0.19 (0.51, 0.01)	0.04 (0.07, 0.01)	0.05 (0.07, 0.02)
1996	0.06 (0.10, 0.01)	0.01 (0.01, 0.01)	0.04 (0.06, 0.02)	0.19 (0.53, 0.01)	0.04 (0.07, 0.01)	0.04 (0.06, 0.02)
1997	0.05 (0.10, 0.01)	0.01 (0.01, 0.01)	0.04 (0.05, 0.02)	0.19 (0.51, 0.01)	0.04 (0.07, 0.01)	0.04 (0.06, 0.01)
1998	0.05 (0.10, 0.01)	0.01 (0.01, 0.01)	0.04 (0.05, 0.02)	0.19 (0.51, 0.01)	0.04 (0.07, 0.01)	0.04 (0.05, 0.01)
1999	0.05 (0.10, 0.01)	0.01 (0.01, 0.01)	0.03 (0.04, 0.02)	0.19 (0.51, 0.01)	0.04 (0.07, 0.01)	0.04 (0.05, 0.01)
2000	0.05 (0.10, 0.01)	0.01 (0.01, 0.01)	0.03 (0.04, 0.02)	0.18 (0.51, 0.01)	0.04 (0.07, 0.01)	0.03 (0.05, 0.01)
2001	0.05 (0.10, 0.01)	0.01 (0.01, 0.01)	0.03 (0.04, 0.02)	0.18 (0.51, 0.01)	0.04 (0.07, 0.01)	0.03 (0.05, 0.01)
2002	0.05 (0.09, 0.01)	0.01 (0.01, 0.01)	0.03 (0.03, 0.02)	0.18 (0.50, 0.01)	0.04 (0.07, 0.01)	0.03 (0.05, 0.01)
2003	0.05 (0.09, 0.01)	0.01 (0.01, 0.01)	0.02 (0.03, 0.01)	0.17 (0.48, 0.01)	0.04 (0.07, 0.01)	0.03 (0.04, 0.01)
2004	0.04 (0.09, 0.01)	0.01 (0.01, 0.01)	0.02 (0.03, 0.01)	0.17 (0.47, 0.01)	0.04 (0.07, 0.01)	0.03 (0.04, 0.01)
2005	0.04 (0.09, 0.01)	0.01 (0.01, 0.01)	0.02 (0.02, 0.01)	0.17 (0.46, 0.01)	0.04 (0.07, 0.01)	0.02 (0.04, 0.01)
2006	0.04 (0.08, 0.01)	0.01 (0.01, 0.01)	0.02 (0.02, 0.01)	0.16 (0.44, 0.00)	0.04 (0.07, 0.01)	0.02 (0.03, 0.01)
2007	0.04 (0.08, 0.01)	0.01 (0.01, 0.00)	0.01 (0.02, 0.01)	0.16 (0.42, 0.01)	0.04 (0.07, 0.01)	0.02 (0.03, 0.01)
2008	0.04 (0.08, 0.01)	0.00 (0.01, 0.00)	0.01 (0.02, 0.01)	0.16 (0.41, 0.00)	0.04 (0.07, 0.01)	0.02 (0.03, 0.01)
2009	0.04 (0.08, 0.01)	0.00 (0.01, 0.00)	0.01 (0.02, 0.01)	0.15 (0.39, 0.00)	0.04 (0.07, 0.01)	0.02 (0.02, 0.01)
2010	0.04 (0.08, 0.01)	0.00 (0.00, 0.00)	0.01 (0.02, 0.01)	0.15 (0.38, 0.00)	0.03 (0.07, 0.01)	0.01 (0.02, 0.01)
2011	0.04 (0.08, 0.01)	0.00 (0.00, 0.00)	0.01 (0.02, 0.01)	0.15 (0.38, 0.00)	0.03 (0.07, 0.01)	0.01 (0.02, 0.01)
2012	0.04 (0.08, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.01)	0.15 (0.37, 0.00)	0.03 (0.07, 0.01)	0.01 (0.02, 0.01)
2013	0.04 (0.08, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.01)	0.14 (0.37, 0.00)	0.03 (0.07, 0.01)	0.01 (0.02, 0.01)
2014	0.04 (0.09, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.01)	0.14 (0.37, 0.01)	0.03 (0.07, 0.01)	0.01 (0.02, 0.01)
2015	0.04 (0.09, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.01)	0.14 (0.37, 0.00)	0.03 (0.07, 0.01)	0.01 (0.02, 0.01)
2016	0.04 (0.09, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.01)	0.14 (0.36, 0.00)	0.03 (0.07, 0.01)	0.01 (0.02, 0.01)
2017	0.04 (0.09, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.01)	0.14 (0.37, 0.00)	0.03 (0.07, 0.01)	0.01 (0.02, 0.01)
2018	0.04 (0.09, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.01)	0.14 (0.37, 0.00)	0.03 (0.07, 0.01)	0.01 (0.01, 0.01)
2019	0.04 (0.09, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.01)	0.13 (0.36, 0.00)	0.03 (0.06, 0.01)	0.01 (0.01, 0.01)
2020	0.04 (0.09, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.01)	0.13 (0.36, 0.00)	0.03 (0.06, 0.01)	0.01 (0.01, 0.01)
2021	0.04 (0.09, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.01)	0.13 (0.36, 0.00)	0.03 (0.06, 0.01)	0.01 (0.01, 0.01)
20–24 years						
1990	0.07 (0.13, 0.02)	0.02 (0.03, 0.02)	0.07 (0.09, 0.02)	0.21 (0.60, 0.01)	0.05 (0.12, 0.01)	0.08 (0.13, 0.02)
1991	0.07 (0.13, 0.02)	0.02 (0.02, 0.02)	0.06 (0.09, 0.02)	0.21 (0.60, 0.01)	0.05 (0.12, 0.01)	0.08 (0.13, 0.02)

Table S5 (continued)

Table S5 (continued)

Age	Global	High SDI	High-middle SDI	Low SDI	Low-middle SDI	Middle SDI
1992	0.07 (0.13, 0.02)	0.02 (0.02, 0.01)	0.06 (0.08, 0.02)	0.21 (0.59, 0.01)	0.05 (0.11, 0.01)	0.07 (0.12, 0.02)
1993	0.07 (0.12, 0.02)	0.02 (0.02, 0.01)	0.06 (0.08, 0.02)	0.21 (0.58, 0.01)	0.05 (0.11, 0.01)	0.07 (0.11, 0.02)
1994	0.07 (0.12, 0.02)	0.02 (0.02, 0.01)	0.06 (0.07, 0.02)	0.21 (0.57, 0.01)	0.05 (0.11, 0.01)	0.06 (0.10, 0.02)
1995	0.06 (0.12, 0.02)	0.01 (0.02, 0.01)	0.05 (0.07, 0.02)	0.21 (0.55, 0.01)	0.05 (0.11, 0.01)	0.06 (0.09, 0.02)
1996	0.06 (0.11, 0.02)	0.01 (0.01, 0.01)	0.05 (0.06, 0.02)	0.21 (0.56, 0.01)	0.05 (0.11, 0.01)	0.05 (0.08, 0.02)
1997	0.06 (0.11, 0.01)	0.01 (0.01, 0.01)	0.04 (0.06, 0.02)	0.21 (0.56, 0.01)	0.05 (0.11, 0.01)	0.05 (0.08, 0.02)
1998	0.06 (0.11, 0.01)	0.01 (0.01, 0.01)	0.04 (0.05, 0.02)	0.21 (0.56, 0.01)	0.05 (0.11, 0.01)	0.05 (0.07, 0.02)
1999	0.06 (0.11, 0.01)	0.01 (0.01, 0.01)	0.04 (0.05, 0.02)	0.21 (0.56, 0.01)	0.05 (0.11, 0.01)	0.04 (0.06, 0.02)
2000	0.06 (0.11, 0.01)	0.01 (0.01, 0.01)	0.04 (0.04, 0.02)	0.21 (0.56, 0.01)	0.05 (0.10, 0.01)	0.04 (0.06, 0.02)
2001	0.06 (0.11, 0.01)	0.01 (0.01, 0.01)	0.03 (0.04, 0.02)	0.21 (0.56, 0.01)	0.05 (0.10, 0.01)	0.04 (0.05, 0.02)
2002	0.05 (0.10, 0.01)	0.01 (0.01, 0.01)	0.03 (0.04, 0.02)	0.20 (0.54, 0.01)	0.05 (0.10, 0.01)	0.04 (0.05, 0.02)
2003	0.05 (0.10, 0.01)	0.01 (0.01, 0.01)	0.03 (0.03, 0.02)	0.20 (0.54, 0.01)	0.05 (0.10, 0.01)	0.03 (0.05, 0.02)
2004	0.05 (0.10, 0.01)	0.01 (0.01, 0.01)	0.02 (0.03, 0.02)	0.20 (0.52, 0.01)	0.05 (0.09, 0.01)	0.03 (0.05, 0.02)
2005	0.05 (0.10, 0.01)	0.01 (0.01, 0.01)	0.02 (0.03, 0.02)	0.19 (0.51, 0.01)	0.05 (0.09, 0.01)	0.03 (0.04, 0.02)
2006	0.05 (0.09, 0.01)	0.01 (0.01, 0.01)	0.02 (0.03, 0.01)	0.19 (0.51, 0.01)	0.05 (0.09, 0.01)	0.03 (0.04, 0.02)
2007	0.05 (0.09, 0.01)	0.01 (0.01, 0.01)	0.02 (0.02, 0.01)	0.19 (0.49, 0.01)	0.04 (0.09, 0.01)	0.02 (0.04, 0.01)
2008	0.04 (0.09, 0.01)	0.01 (0.01, 0.01)	0.02 (0.02, 0.01)	0.18 (0.48, 0.01)	0.04 (0.08, 0.01)	0.02 (0.04, 0.01)
2009	0.04 (0.09, 0.01)	0.01 (0.01, 0.00)	0.01 (0.02, 0.01)	0.18 (0.47, 0.00)	0.04 (0.08, 0.01)	0.02 (0.04, 0.01)
2010	0.04 (0.08, 0.01)	0.01 (0.01, 0.00)	0.01 (0.02, 0.01)	0.17 (0.46, 0.00)	0.04 (0.08, 0.01)	0.02 (0.03, 0.01)
2011	0.04 (0.08, 0.01)	0.01 (0.01, 0.00)	0.01 (0.02, 0.01)	0.17 (0.46, 0.00)	0.04 (0.08, 0.01)	0.02 (0.03, 0.01)
2012	0.04 (0.08, 0.01)	0.00 (0.01, 0.00)	0.01 (0.02, 0.01)	0.17 (0.45, 0.01)	0.04 (0.08, 0.01)	0.02 (0.03, 0.01)
2013	0.04 (0.08, 0.01)	0.00 (0.01, 0.00)	0.01 (0.02, 0.01)	0.17 (0.44, 0.01)	0.04 (0.08, 0.01)	0.02 (0.03, 0.01)
2014	0.04 (0.09, 0.01)	0.00 (0.01, 0.00)	0.01 (0.02, 0.01)	0.17 (0.45, 0.01)	0.04 (0.08, 0.01)	0.02 (0.02, 0.01)
2015	0.04 (0.09, 0.01)	0.00 (0.01, 0.00)	0.01 (0.01, 0.01)	0.16 (0.44, 0.01)	0.04 (0.07, 0.01)	0.01 (0.02, 0.01)
2016	0.04 (0.09, 0.01)	0.00 (0.01, 0.00)	0.01 (0.01, 0.01)	0.16 (0.43, 0.01)	0.04 (0.07, 0.01)	0.01 (0.02, 0.01)
2017	0.04 (0.09, 0.01)	0.00 (0.01, 0.00)	0.01 (0.01, 0.01)	0.16 (0.43, 0.01)	0.04 (0.07, 0.01)	0.01 (0.02, 0.01)
2018	0.04 (0.09, 0.01)	0.00 (0.01, 0.00)	0.01 (0.01, 0.01)	0.16 (0.42, 0.01)	0.03 (0.07, 0.01)	0.01 (0.02, 0.01)
2019	0.04 (0.09, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.01)	0.15 (0.42, 0.01)	0.03 (0.07, 0.01)	0.01 (0.02, 0.01)
2020	0.04 (0.09, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.01)	0.15 (0.42, 0.01)	0.03 (0.07, 0.01)	0.01 (0.02, 0.01)
2021	0.04 (0.09, 0.01)	0.00 (0.00, 0.00)	0.01 (0.01, 0.01)	0.15 (0.41, 0.01)	0.03 (0.07, 0.01)	0.01 (0.02, 0.01)

Data are presented as ASMR (95% CI). ASMR, age-standardized mortality rate; CI, confidence interval; SDI, socio-demographic index; URIs, upper respiratory infections.

Table S6 ASDR of URIs by age group across different SDI regions among individuals aged 10–24 years, 1990–2021 (per 100,000 population)

Age	Global	High SDI	High-middle SDI	Low SDI	Low-middle SDI	Middle SDI
10–14 years						
1990	70.50 (113.35, 39.99)	87.97 (145.20, 46.53)	66.58 (109.02, 37.35)	75.28 (128.39, 34.60)	63.46 (103.49, 35.45)	70.18 (114.52, 39.40)
1991	70.31 (112.82, 39.75)	87.63 (144.64, 46.18)	66.33 (108.66, 37.26)	75.29 (128.22, 34.50)	63.30 (103.36, 35.41)	69.93 (113.04, 39.43)
1992	69.31 (110.91, 39.21)	87.31 (144.15, 45.83)	66.75 (108.54, 38.08)	75.38 (128.56, 34.25)	63.20 (102.86, 35.52)	69.56 (113.48, 39.04)
1993	69.86 (111.84, 39.54)	87.08 (143.92, 45.76)	66.14 (107.58, 36.90)	75.42 (128.54, 34.50)	63.05 (102.11, 35.20)	69.18 (113.36, 38.53)
1994	70.08 (112.47, 39.53)	86.95 (143.77, 45.85)	65.86 (107.60, 36.86)	75.25 (128.12, 34.41)	62.93 (101.76, 35.06)	68.77 (112.77, 38.08)
1995	68.97 (110.90, 38.95)	86.90 (144.03, 45.74)	64.67 (106.33, 35.66)	75.12 (127.19, 34.12)	62.86 (101.82, 35.28)	68.37 (112.48, 38.00)
1996	69.58 (111.47, 39.36)	87.07 (144.50, 45.68)	64.26 (105.55, 35.53)	74.88 (127.06, 34.20)	62.65 (101.51, 35.02)	67.86 (110.64, 37.65)
1997	68.37 (109.96, 38.34)	87.53 (145.63, 45.67)	65.08 (105.91, 36.03)	74.52 (126.74, 34.14)	62.36 (100.91, 34.78)	67.34 (110.83, 37.22)
1998	67.65 (109.28, 37.63)	88.14 (145.45, 45.94)	63.89 (104.87, 35.06)	74.50 (125.24, 33.83)	62.21 (102.19, 34.60)	66.82 (109.67, 36.90)
1999	68.61 (110.41, 38.68)	88.72 (146.78, 46.20)	65.52 (106.76, 36.29)	74.53 (125.67, 34.05)	62.13 (101.97, 34.43)	66.38 (108.91, 36.37)
2000	67.84 (109.19, 37.96)	89.06 (147.50, 46.27)	63.53 (104.80, 34.41)	74.59 (124.98, 33.71)	62.10 (101.77, 34.42)	65.96 (108.92, 35.98)
2001	68.19 (109.55, 38.28)	88.77 (147.46, 46.27)	63.20 (104.34, 34.02)	74.38 (124.97, 33.60)	62.03 (101.46, 34.78)	65.59 (107.81, 35.51)
2002	68.04 (109.83, 38.05)	89.06 (148.09, 46.64)	62.88 (103.87, 33.77)	74.05 (122.78, 33.74)	62.03 (101.64, 34.49)	65.28 (108.05, 35.10)
2003	67.48 (109.17, 37.57)	88.22 (146.76, 46.04)	62.66 (104.90, 33.44)	73.69 (121.96, 33.77)	61.97 (101.02, 34.32)	65.09 (107.89, 34.90)
2004	67.38 (109.02, 37.39)	87.52 (146.05, 45.45)	62.51 (104.89, 33.58)	73.52 (121.18, 33.98)	62.06 (101.94, 34.42)	64.92 (107.53, 34.94)
2005	67.27 (108.85, 37.29)	86.85 (144.52, 45.53)	62.41 (103.94, 33.03)	73.25 (120.30, 33.79)	62.10 (102.13, 34.54)	64.83 (107.84, 34.72)
2006	67.22 (108.54, 37.42)	86.18 (144.15, 45.35)	62.36 (104.20, 32.80)	73.21 (120.57, 33.88)	62.11 (100.93, 34.54)	64.82 (108.12, 34.60)
2007	67.06 (108.88, 37.44)	85.37 (142.52, 44.56)	62.35 (104.15, 32.89)	72.94 (120.19, 33.95)	61.99 (101.30, 34.00)	64.75 (107.98, 34.43)
2008	66.94 (108.04, 37.40)	84.52 (141.69, 43.84)	62.36 (104.28, 32.52)	72.55 (118.63, 33.77)	61.97 (101.03, 34.33)	64.79 (107.85, 34.39)
2009	66.86 (108.34, 37.37)	83.74 (139.77, 43.45)	62.53 (104.40, 32.85)	72.27 (117.99, 33.54)	61.90 (100.24, 34.22)	64.84 (107.77, 34.35)
2010	66.73 (108.17, 37.37)	83.05 (139.04, 42.66)	62.62 (104.30, 32.79)	71.90 (118.05, 33.69)	61.84 (100.72, 34.16)	64.79 (108.79, 34.34)
2011	66.56 (107.65, 37.13)	82.41 (138.58, 42.69)	62.60 (104.95, 32.53)	71.57 (117.15, 33.67)	61.72 (101.02, 33.85)	64.67 (107.71, 34.06)
2012	66.37 (107.58, 36.96)	81.66 (136.89, 42.36)	62.65 (105.62, 32.84)	71.37 (117.55, 33.78)	61.55 (100.82, 33.42)	64.51 (108.39, 33.98)
2013	66.19 (107.09, 36.87)	80.93 (136.13, 41.81)	62.64 (105.57, 32.49)	71.24 (118.12, 33.45)	61.38 (100.37, 33.57)	64.34 (107.88, 33.94)
2014	65.99 (106.50, 36.87)	80.35 (135.68, 41.43)	62.56 (106.01, 32.66)	71.15 (118.18, 33.94)	61.15 (100.11, 33.32)	64.13 (107.59, 33.63)
2015	65.81 (105.98, 36.87)	80.15 (135.02, 41.46)	62.51 (105.10, 32.74)	70.83 (117.65, 33.62)	61.03 (100.23, 33.32)	63.92 (106.46, 33.78)
2016	65.69 (105.99, 36.75)	80.22 (135.16, 41.60)	62.41 (105.87, 32.53)	70.68 (117.90, 33.15)	60.90 (100.22, 33.58)	63.75 (106.76, 33.63)
2017	65.56 (105.38, 36.72)	80.41 (135.75, 41.73)	62.22 (105.02, 32.26)	70.47 (116.57, 33.38)	60.82 (100.07, 33.11)	63.53 (106.56, 33.36)
2018	65.30 (105.55, 36.33)	80.62 (136.04, 41.65)	62.08 (105.23, 31.98)	69.91 (115.34, 32.78)	60.56 (100.15, 33.01)	63.27 (106.35, 33.22)
2019	65.06 (105.71, 36.24)	80.70 (136.44, 41.86)	61.92 (104.51, 32.40)	69.48 (113.68, 32.80)	60.30 (99.70, 32.97)	63.03 (106.23, 33.22)
2020	64.68 (104.61, 36.05)	80.42 (135.43, 41.95)	61.68 (102.50, 32.11)	69.12 (112.43, 32.77)	59.60 (97.54, 32.11)	62.86 (105.24, 33.04)
2021	64.62 (104.77, 35.92)	81.39 (137.63, 42.47)	61.67 (103.98, 32.35)	68.59 (111.47, 32.72)	59.63 (97.30, 32.16)	62.69 (105.19, 33.33)
15–19 years						
1990	62.23 (98.40, 35.47)	82.27 (130.70, 45.85)	59.15 (94.96, 33.16)	63.40 (101.39, 32.31)	56.88 (91.08, 31.17)	59.89 (94.80, 33.95)

Table S6 (continued)

Table S6 (continued)

Age	Global	High SDI	High-middle SDI	Low SDI	Low-middle SDI	Middle SDI
1991	62.21 (98.80, 35.41)	82.61 (131.26, 45.82)	59.17 (94.76, 33.16)	63.56 (100.93, 32.54)	56.87 (90.96, 31.37)	59.85 (95.28, 34.05)
1992	62.19 (98.85, 35.01)	83.02 (132.42, 46.07)	59.12 (94.77, 32.89)	63.77 (101.47, 32.78)	56.79 (91.01, 31.21)	59.76 (95.38, 34.00)
1993	62.24 (98.50, 35.23)	83.55 (132.86, 46.19)	59.18 (94.50, 33.23)	63.87 (101.79, 32.83)	56.78 (90.68, 31.46)	59.72 (95.17, 33.89)
1994	62.20 (98.62, 35.38)	83.93 (133.92, 46.50)	59.14 (93.79, 33.32)	63.88 (102.02, 33.19)	56.73 (90.12, 31.48)	59.59 (94.97, 33.69)
1995	62.10 (98.47, 34.93)	84.21 (134.84, 46.64)	58.72 (94.06, 33.04)	63.99 (101.70, 32.65)	56.68 (90.15, 31.60)	59.47 (95.56, 33.35)
1996	62.22 (98.24, 35.12)	84.36 (135.47, 46.70)	58.55 (93.65, 32.78)	64.12 (102.60, 33.08)	56.53 (90.37, 31.58)	59.27 (95.02, 33.29)
1997	61.85 (98.33, 34.79)	84.48 (135.46, 46.62)	58.89 (95.08, 33.37)	64.08 (102.15, 32.82)	56.45 (90.59, 31.10)	59.03 (95.25, 33.20)
1998	60.69 (96.60, 34.26)	84.62 (136.08, 46.74)	58.31 (93.35, 32.46)	64.21 (103.59, 32.57)	56.38 (91.07, 31.27)	58.75 (94.35, 33.02)
1999	61.97 (98.45, 34.79)	84.65 (135.54, 46.45)	59.04 (95.03, 33.36)	64.24 (103.72, 33.09)	56.30 (90.42, 31.22)	58.44 (94.05, 32.78)
2000	61.08 (97.10, 34.43)	84.61 (135.63, 46.53)	57.98 (93.17, 32.43)	64.21 (104.27, 32.65)	56.23 (90.78, 31.18)	58.09 (93.47, 32.63)
2001	61.66 (98.05, 34.64)	83.82 (135.30, 46.13)	57.47 (92.07, 32.13)	64.08 (103.53, 32.71)	56.24 (90.89, 31.31)	57.69 (92.51, 32.34)
2002	61.40 (97.73, 34.60)	84.39 (135.95, 45.99)	56.91 (91.69, 31.86)	63.82 (103.13, 32.89)	56.28 (90.25, 31.32)	57.26 (91.58, 32.34)
2003	60.33 (95.68, 33.87)	83.10 (134.22, 45.42)	56.51 (90.87, 31.71)	63.68 (101.73, 32.81)	56.34 (90.25, 31.17)	56.77 (91.12, 31.93)
2004	60.07 (95.49, 33.84)	82.40 (132.09, 45.61)	56.15 (90.05, 31.10)	63.69 (102.56, 32.90)	56.46 (91.11, 31.22)	56.38 (90.59, 31.58)
2005	59.86 (95.11, 33.65)	81.75 (131.35, 45.30)	55.88 (89.71, 31.21)	63.46 (101.29, 32.71)	56.55 (90.91, 31.17)	56.10 (90.53, 31.46)
2006	59.69 (95.01, 33.52)	81.07 (130.26, 44.93)	55.63 (89.14, 31.33)	63.19 (100.67, 32.41)	56.60 (90.79, 31.02)	55.92 (90.57, 31.31)
2007	59.60 (94.70, 33.47)	80.26 (128.56, 44.56)	55.51 (88.36, 31.08)	63.06 (99.51, 32.65)	56.65 (91.11, 31.11)	55.87 (90.18, 31.02)
2008	59.51 (94.74, 33.21)	79.36 (128.11, 44.09)	55.52 (89.27, 30.57)	62.73 (98.20, 32.40)	56.68 (90.92, 31.02)	55.89 (90.05, 31.23)
2009	59.48 (94.68, 33.19)	78.57 (125.26, 43.33)	55.53 (88.96, 31.09)	62.48 (98.76, 32.62)	56.72 (91.14, 30.94)	56.01 (90.51, 31.37)
2010	59.45 (94.61, 33.14)	77.93 (125.09, 43.03)	55.63 (89.37, 30.91)	62.24 (98.23, 32.56)	56.71 (90.78, 31.38)	56.12 (90.41, 31.12)
2011	59.41 (94.43, 32.98)	77.37 (123.96, 42.87)	55.76 (89.51, 30.71)	61.99 (97.33, 32.54)	56.61 (90.45, 31.20)	56.24 (90.83, 31.13)
2012	59.28 (94.35, 32.92)	76.74 (123.10, 42.27)	55.84 (89.51, 30.52)	61.71 (96.40, 32.37)	56.40 (90.29, 31.00)	56.29 (90.89, 31.17)
2013	59.16 (94.34, 32.72)	76.25 (122.56, 42.32)	55.92 (89.95, 30.75)	61.45 (95.09, 32.35)	56.17 (90.61, 30.87)	56.34 (91.11, 31.46)
2014	59.06 (94.30, 32.69)	75.85 (122.11, 41.85)	56.09 (90.18, 31.26)	61.22 (95.12, 32.22)	55.92 (89.61, 30.93)	56.38 (91.44, 31.56)
2015	58.98 (94.15, 32.57)	75.70 (121.84, 41.88)	56.26 (90.54, 31.13)	60.94 (95.85, 31.87)	55.72 (89.53, 30.63)	56.40 (91.37, 31.53)
2016	58.94 (94.05, 32.68)	75.80 (121.53, 42.02)	56.37 (90.98, 31.18)	60.82 (96.45, 32.09)	55.59 (89.96, 30.60)	56.38 (91.33, 31.36)
2017	58.87 (94.16, 32.65)	75.95 (122.04, 42.46)	56.46 (91.41, 31.02)	60.64 (96.18, 32.11)	55.47 (89.61, 30.65)	56.29 (91.16, 31.58)
2018	58.75 (93.62, 32.63)	76.09 (121.91, 42.38)	56.51 (91.44, 30.92)	60.41 (95.59, 32.38)	55.30 (88.79, 30.37)	56.15 (90.94, 31.29)
2019	58.61 (93.49, 32.69)	76.23 (122.74, 42.53)	56.58 (91.72, 31.15)	60.23 (95.25, 32.07)	55.03 (87.88, 30.08)	56.04 (91.10, 31.20)
2020	58.27 (93.12, 32.43)	76.03 (123.04, 42.26)	56.50 (90.94, 30.93)	59.89 (93.60, 31.74)	54.35 (88.01, 29.80)	55.94 (90.44, 31.07)
2021	58.22 (92.86, 32.31)	77.26 (123.94, 43.12)	56.28 (91.15, 31.07)	59.70 (93.88, 31.47)	54.29 (87.86, 29.80)	55.68 (89.96, 30.82)
20–24 years						
1990	60.79 (96.94, 34.81)	80.30 (129.34, 44.86)	56.74 (88.13, 32.42)	63.14 (98.98, 32.24)	55.48 (89.08, 31.50)	57.93 (89.71, 33.49)
1991	60.82 (97.58, 34.88)	81.20 (130.39, 45.42)	56.57 (88.17, 32.78)	63.22 (99.01, 31.88)	55.44 (89.24, 31.67)	57.78 (90.10, 33.38)

Table S6 (continued)

Table S6 (continued)

Age	Global	High SDI	High-middle SDI	Low SDI	Low-middle SDI	Middle SDI
1992	60.51 (97.60, 34.58)	82.00 (131.65, 45.55)	56.88 (88.65, 32.80)	63.28 (98.43, 31.93)	55.47 (89.20, 31.70)	57.57 (89.56, 33.51)
1993	60.79 (97.32, 34.88)	82.57 (134.00, 45.49)	56.58 (88.79, 32.50)	63.25 (98.64, 32.16)	55.47 (89.60, 31.80)	57.37 (89.94, 33.03)
1994	60.81 (97.35, 34.99)	82.85 (134.11, 45.98)	56.41 (88.63, 32.44)	63.01 (97.77, 32.06)	55.54 (89.49, 31.82)	57.08 (89.11, 32.75)
1995	60.39 (97.14, 34.47)	82.83 (133.83, 45.58)	56.27 (88.84, 31.94)	63.07 (98.36, 31.79)	55.59 (90.58, 31.60)	56.84 (89.00, 32.39)
1996	60.65 (97.31, 34.77)	82.61 (133.80, 45.91)	56.23 (88.70, 31.88)	63.23 (98.76, 32.10)	55.55 (90.00, 31.71)	56.72 (88.88, 32.23)
1997	60.28 (97.41, 34.21)	82.60 (134.12, 45.68)	56.26 (88.49, 32.00)	63.27 (99.30, 32.07)	55.54 (90.17, 31.71)	56.61 (88.84, 31.90)
1998	59.96 (97.18, 33.72)	82.63 (134.64, 45.64)	56.24 (89.05, 31.78)	63.47 (99.72, 32.16)	55.45 (89.72, 31.10)	56.49 (89.36, 31.61)
1999	60.33 (97.20, 34.47)	82.62 (134.55, 45.32)	56.31 (88.36, 31.98)	63.56 (99.55, 31.97)	55.46 (90.08, 31.17)	56.38 (89.61, 31.52)
2000	60.14 (97.07, 34.05)	82.51 (133.31, 45.39)	56.19 (88.80, 31.42)	63.56 (99.66, 32.34)	55.43 (89.13, 31.43)	56.30 (89.49, 31.54)
2001	60.26 (97.46, 34.15)	81.57 (131.94, 44.92)	56.00 (89.82, 31.11)	63.65 (100.61, 32.25)	55.40 (88.42, 31.34)	56.18 (88.85, 31.46)
2002	60.23 (97.30, 34.18)	82.21 (132.30, 45.38)	55.80 (88.73, 31.03)	63.46 (99.34, 32.31)	55.41 (89.75, 31.11)	56.03 (89.15, 31.27)
2003	59.75 (96.30, 33.57)	80.74 (129.93, 44.25)	55.64 (88.67, 31.04)	63.25 (100.25, 32.05)	55.48 (89.26, 31.36)	55.82 (88.32, 31.05)
2004	59.43 (96.42, 33.54)	79.87 (128.45, 43.63)	55.36 (89.60, 30.85)	63.06 (99.48, 32.34)	55.43 (88.69, 31.26)	55.50 (88.13, 31.02)
2005	59.07 (95.69, 33.27)	78.93 (126.43, 43.28)	55.05 (88.58, 30.62)	62.83 (99.63, 32.29)	55.44 (89.18, 31.18)	55.14 (87.71, 30.72)
2006	58.63 (94.96, 32.83)	77.92 (125.42, 42.72)	54.49 (87.07, 30.38)	62.62 (98.46, 32.22)	55.43 (89.42, 31.32)	54.71 (87.14, 30.36)
2007	58.20 (94.52, 32.64)	76.69 (122.55, 41.87)	54.05 (86.18, 29.56)	62.49 (99.20, 32.55)	55.40 (89.24, 31.28)	54.31 (86.20, 30.17)
2008	57.79 (93.69, 32.33)	75.38 (121.53, 41.04)	53.66 (85.70, 29.55)	62.23 (98.18, 32.27)	55.39 (89.57, 31.13)	53.94 (85.89, 29.85)
2009	57.50 (93.61, 32.08)	74.40 (120.18, 40.56)	53.33 (85.64, 29.53)	61.99 (97.70, 32.04)	55.42 (89.61, 31.06)	53.69 (85.52, 29.64)
2010	57.29 (92.98, 31.91)	73.90 (119.32, 40.36)	53.12 (85.30, 29.35)	61.70 (97.20, 32.03)	55.36 (89.40, 31.18)	53.46 (85.55, 29.46)
2011	57.16 (92.66, 31.80)	73.69 (118.98, 40.19)	52.97 (84.06, 29.24)	61.50 (96.43, 32.15)	55.25 (88.24, 30.60)	53.31 (84.99, 29.35)
2012	57.09 (92.51, 31.94)	73.56 (119.53, 40.07)	52.99 (84.33, 28.93)	61.20 (96.32, 31.91)	55.08 (89.03, 30.78)	53.28 (84.83, 29.19)
2013	57.09 (92.52, 32.00)	73.48 (118.85, 40.24)	53.09 (84.45, 29.03)	61.00 (95.69, 31.92)	54.84 (87.73, 30.67)	53.38 (84.87, 29.18)
2014	57.11 (93.00, 32.19)	73.43 (119.65, 40.38)	53.23 (85.31, 29.36)	60.75 (95.38, 31.74)	54.66 (88.81, 30.55)	53.55 (84.70, 29.21)
2015	57.12 (93.24, 32.37)	73.46 (119.45, 40.62)	53.44 (86.23, 29.23)	60.45 (95.92, 31.41)	54.42 (87.64, 30.32)	53.71 (85.89, 29.39)
2016	57.13 (92.73, 32.29)	73.45 (119.63, 40.32)	53.60 (86.32, 29.47)	60.24 (95.06, 31.42)	54.24 (86.07, 30.34)	53.84 (85.59, 29.34)
2017	57.15 (92.62, 32.43)	73.48 (118.98, 40.28)	53.78 (86.48, 29.32)	60.03 (95.12, 31.47)	54.14 (86.49, 30.27)	53.95 (85.66, 29.49)
2018	57.09 (92.32, 32.42)	73.53 (119.12, 40.44)	53.99 (86.58, 29.36)	59.72 (94.88, 31.19)	53.89 (86.18, 30.39)	54.03 (86.62, 29.66)
2019	57.06 (92.41, 32.44)	73.69 (118.53, 40.39)	54.12 (87.02, 29.58)	59.54 (94.52, 31.12)	53.65 (84.97, 30.27)	54.08 (87.03, 29.60)
2020	56.82 (91.42, 32.27)	74.09 (120.81, 40.74)	54.16 (85.71, 29.81)	59.09 (94.56, 31.27)	52.86 (84.03, 29.53)	54.14 (86.26, 29.76)
2021	56.93 (92.06, 32.35)	75.41 (121.95, 41.12)	54.31 (86.48, 29.73)	59.00 (94.18, 31.15)	52.82 (84.40, 29.82)	54.05 (87.07, 29.59)

Data are presented as ASDR (95% CI). ASDR, age-standardized DALYs rate; CI, confidence interval; DALYs, disability-adjusted life years; SDI, socio-demographic index; URIs, upper respiratory infections.

Table S7 AAPC of URIs incidence by SDI regions

Location	AAPC (95% CI), %
Global	-0.142 (-0.152 to -0.132)
High-middle SDI	0.032 (0.027 to 0.038)
High SDI	-0.198 (-0.250 to -0.146)
Low-middle SDI	-0.135 (-0.158 to -0.112)
Low SDI	-0.034 (-0.046 to -0.023)
Middle SDI	-0.034 (-0.041 to -0.027)

AAPC, average annual percentage change; CI, confidence interval; SDI, socio-demographic index; URIs, upper respiratory infections.

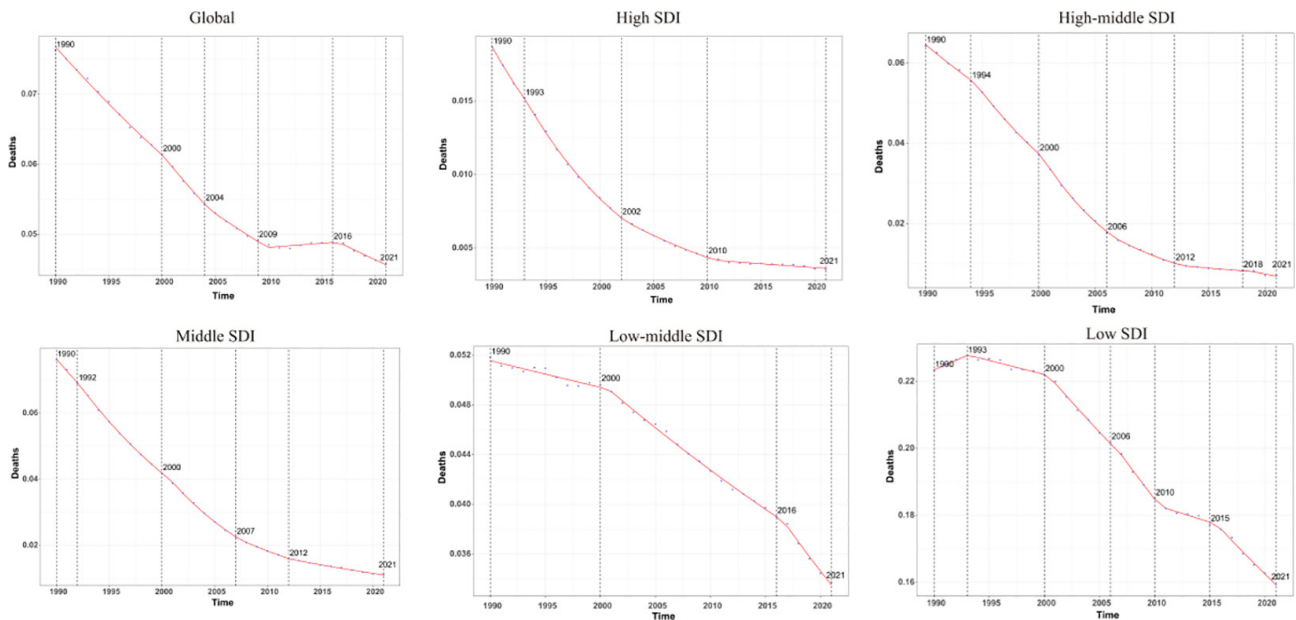


Figure S2 APCs in death rate among individuals aged 10–24 years in global and five different SDI regions, 1990–2021. APCs, annual percent changes; SDI, socio-demographic index.

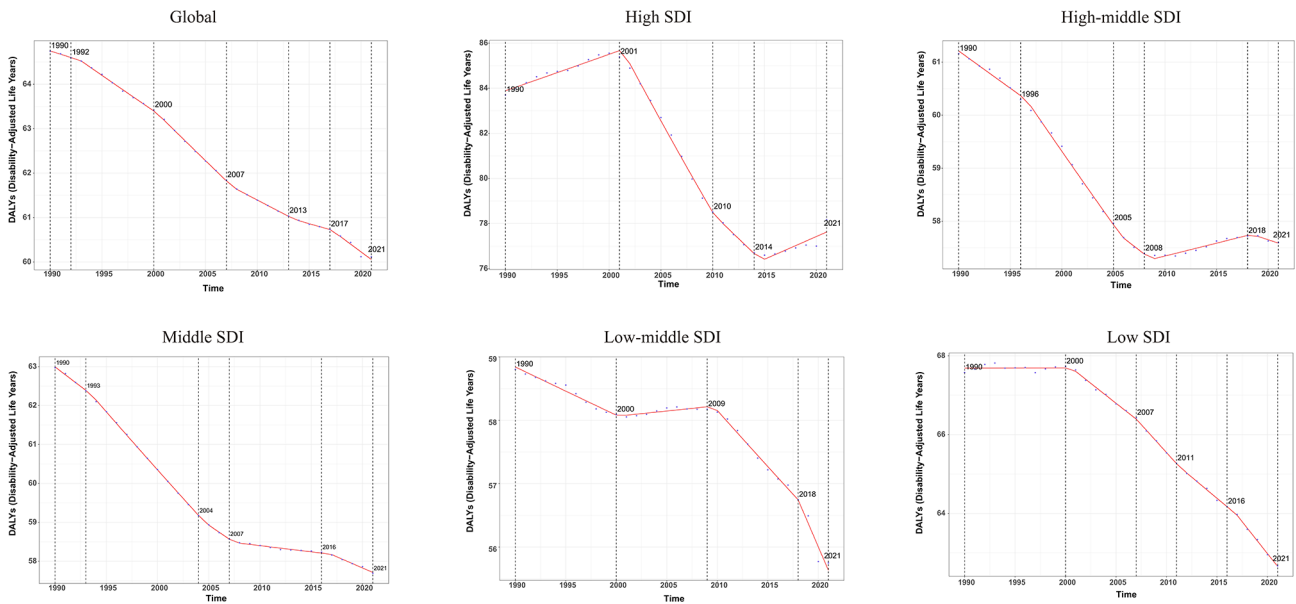


Figure S3 APCs in DALYs rate among individuals aged 10–24 years in global and five different SDI regions, 1990–2021. APCs, annual percent changes; DALYs, disability-adjusted life years; SDI, socio-demographic index.

Table S8 Predicted values of URIs ASIR, ASMR, and ASDR for global individuals aged 10–24 years [1990–2035]

Year	ASIR, per 100,000 population (95% CI)	ASMR, per 100,000 population (95% CI)	ASDR, per 100,000 population (95% CI)
2022	162,915.75 (159,860.87, 165,970.63)	0.05 (0.04, 0.05)	59.84 (58.70, 60.98)
2023	162,589.89 (158,981.64, 166,198.15)	0.04 (0.04, 0.05)	59.64 (58.30, 60.99)
2024	162,257.22 (157,964.82, 166,549.62)	0.04 (0.04, 0.05)	59.43 (57.83, 61.03)
2025	161,926.16 (156,785.48, 167,066.83)	0.04 (0.04, 0.05)	59.22 (57.31, 61.14)
2026	161,608.93 (155,423.51, 167,794.35)	0.04 (0.04, 0.05)	59.01 (56.70, 61.31)
2027	161,299.44 (153,853.29, 168,745.59)	0.04 (0.04, 0.05)	58.79 (56.02, 61.56)
2028	160,993.65 (152,085.82, 169,901.48)	0.04 (0.04, 0.05)	58.58 (55.27, 61.88)
2029	160,688.81 (150,119.30, 171,258.32)	0.04 (0.03, 0.05)	58.36 (54.44, 62.27)
2030	160,384.99 (147,944.79, 172,825.19)	0.04 (0.03, 0.05)	58.14 (53.54, 62.73)
2031	160,085.30 (145,553.33, 174,617.28)	0.04 (0.03, 0.05)	57.92 (52.56, 63.27)
2032	159,786.18 (142,938.91, 176,633.45)	0.04 (0.03, 0.05)	57.70 (51.51, 63.89)
2033	159,487.62 (140,130.18, 178,845.06)	0.04 (0.03, 0.05)	57.48 (50.39, 64.58)
2034	159,189.61 (137,149.12, 181,230.10)	0.04 (0.03, 0.05)	57.27 (49.21, 65.32)
2035	158,892.17 (134,012.80, 183,771.54)	0.04 (0.02, 0.05)	57.05 (47.99, 66.12)

ASDR, age-standardized DALYs rate; ASIR, age-standardized incidence rate; ASMR, age-standardized mortality rate; CI, confidence interval; DALYs, disability-adjusted life years; URIs, upper respiratory infections.

Table S9 Predicted data of URIs incidence, mortality, DALYs by age and year [1990–2035]

Age	Year	Incidence, per 100,000 population (95% CI)	Mortality, per 100,000 population (95% CI)	DALYs, per 100,000 population (95% CI)
10-14 years	2022	1,125,364,444.69 (1,087,231,773.55, 1,163,497,115.84)	380.85 (326.44, 435.26)	424,414.78 (409,802.05, 439,027.50)
	2023	1,129,791,744.32 (1,082,013,161.05, 1,177,570,327.59)	376.92 (317.51, 436.34)	425,282.90 (407,056.64, 443,509.16)
	2024	1,133,599,114.66 (1,073,688,687.88, 1,193,509,541.43)	372.89 (307.34, 438.44)	425,913.62 (403,145.77, 448,681.46)
	2025	1,136,580,479.46 (1,062,498,067.64, 1,210,662,891.28)	368.69 (296.05, 441.34)	426,231.03 (398,166.80, 454,295.25)
	2026	1,138,508,567.33 (1,048,565,776.72, 1,228,451,357.94)	364.28 (283.73, 444.82)	426,151.88 (392,173.79, 460,129.98)
	2027	1,140,505,743.51 (1,033,163,553.06, 1,247,847,933.96)	360.02 (270.83, 449.20)	426,097.79 (385,648.52, 466,547.06)
	2028	1,137,659,534.35 (1,012,063,913.62, 1,263,255,155.07)	354.39 (256.32, 452.45)	424,236.78 (377,019.99, 471,453.57)
	2029	1,133,548,509.06 (988,743,604.17, 1,278,353,413.96)	348.55 (241.24, 455.86)	421,911.03 (367,593.99, 476,228.07)
	2030	1,128,736,571.04 (963,843,324.69, 1,293,629,817.39)	342.69 (225.82, 459.57)	419,332.71 (357,613.46, 481,051.96)
	2031	1,123,633,340.75 (937,818,228.33, 1,309,448,453.17)	336.95 (210.21, 463.69)	416,655.20 (347,250.55, 486,059.84)
	2032	1,117,530,156.22 (910,168,494.70, 1,324,891,817.74)	331.12 (194.32, 467.91)	413,616.82 (336,323.07, 490,910.57)
	2033	1,114,876,731.79 (884,536,839.45, 1,345,216,624.13)	326.51 (178.94, 474.07)	411,863.51 (326,177.93, 497,549.10)
	2034	1,111,581,093.62 (857,582,577.86, 1,365,579,609.38)	321.90 (163.32, 480.48)	409,879.29 (315,580.89, 504,177.68)
	2035	1,107,541,062.07 (829,300,081.52, 1,385,782,042.62)	317.27 (147.45, 487.09)	407,627.88 (304,532.68, 510,723.09)
15-19 years	2022	1,016,840,769.78 (989,564,318.59, 1,044,117,220.98)	237.93 (203.09, 272.77)	367,695.04 (357,661.29, 377,728.79)
	2023	1,022,071,475.60 (993,279,175.84, 1,050,863,775.36)	236.21 (201.05, 271.38)	368,969.48 (358,415.84, 379,523.11)
	2024	1,027,877,732.96 (997,591,428.84, 1,058,164,037.08)	234.36 (198.68, 270.04)	370,394.76 (359,328.59, 381,460.94)
	2025	1,033,813,930.22 (1,001,630,896.97, 1,065,996,963.47)	232.39 (195.89, 268.89)	371,840.63 (360,113.87, 383,567.39)
	2026	1,039,501,853.15 (1,004,102,470.93, 1,074,901,235.37)	230.31 (192.51, 268.11)	373,182.81 (360,317.85, 386,047.76)
	2027	1,044,424,589.97 (1,003,401,637.99, 1,085,447,541.95)	228.10 (188.40, 267.80)	374,244.56 (359,377.52, 389,111.60)
	2028	1,048,589,513.49 (999,359,028.75, 1,097,819,998.22)	225.77 (183.52, 268.01)	375,030.12 (357,239.02, 392,821.22)
	2029	1,052,180,808.50 (992,380,434.82, 1,111,981,182.19)	223.37 (177.95, 268.79)	375,606.87 (354,054.38, 397,159.35)
	2030	1,055,003,722.30 (982,623,113.80, 1,127,384,330.81)	220.87 (171.70, 270.04)	375,906.63 (349,886.24, 401,927.01)
	2031	1,056,847,103.78 (970,204,464.57, 1,143,489,742.99)	218.24 (164.82, 271.67)	375,855.92 (344,782.74, 406,929.10)
	2032	1,058,752,769.63 (956,322,207.18, 1,161,183,332.07)	215.71 (157.54, 273.87)	375,826.57 (339,174.76, 412,478.38)
	2033	1,056,155,144.30 (937,079,693.21, 1,175,230,595.39)	212.35 (149.26, 275.43)	374,200.91 (331,686.39, 416,715.44)
	2034	1,052,382,510.80 (915,717,567.42, 1,189,047,454.17)	208.86 (140.60, 277.12)	372,164.98 (323,474.01, 420,855.95)
	2035	1,047,957,172.78 (892,841,679.12, 1,203,072,666.45)	205.37 (131.69, 279.04)	369,905.50 (314,755.81, 425,055.19)
20-24 years	2022	962,621,774.20 (936,941,659.92, 988,301,888.47)	240.30 (205.14, 275.46)	347,825.43 (338,378.46, 357,272.40)
	2023	965,237,342.01 (938,219,253.27, 992,255,430.74)	240.20 (204.69, 275.71)	348,641.35 (338,725.37, 358,557.33)
	2024	968,130,330.90 (939,846,111.70, 996,414,550.09)	239.83 (204.01, 275.66)	349,509.66 (339,151.16, 359,868.15)
	2025	971,459,870.47 (941,908,422.81, 1,001,011,318.13)	239.14 (203.02, 275.25)	350,450.74 (339,651.55, 361,249.92)
	2026	975,383,924.86 (944,463,110.49, 1,006,304,739.23)	238.07 (201.69, 274.45)	351,492.82 (340,219.91, 362,765.72)
	2027	979,830,782.46 (947,409,545.07, 1,012,252,019.85)	236.63 (199.99, 273.27)	352,598.88 (340,810.37, 364,387.38)
	2028	984,940,178.42 (951,063,500.62, 1,018,816,856.22)	234.94 (197.98, 271.91)	353,845.79 (341,561.56, 366,130.02)

Table S9 (continued)

Table S9 (continued)

Age	Year	Incidence, per 100,000 population (95% CI)	Mortality, per 100,000 population (95% CI)	DALYs, per 100,000 population (95% CI)
	2029	990,610,482.63 (955,293,864.08, 1,025,927,101.18)	233.12 (195.67, 270.57)	355,239.54 (342,465.90, 368,013.19)
	2030	996,405,914.37 (959,326,789.24, 1,033,485,039.50)	231.18 (192.95, 269.40)	356,652.89 (343,271.90, 370,033.89)
	2031	1,001,962,111.87 (962,035,116.75, 1,041,889,106.99)	229.13 (189.68, 268.58)	357,966.71 (343,586.29, 372,347.14)
	2032	1,006,778,926.75 (961,939,924.06, 1,051,617,929.43)	226.94 (185.69, 268.20)	359,010.79 (342,891.68, 375,129.89)
	2033	1,010,862,215.27 (958,750,805.63, 1,062,973,624.90)	224.64 (180.96, 268.32)	359,788.75 (341,091.48, 378,486.02)
	2034	1,014,391,665.90 (952,721,668.74, 1,076,061,663.06)	222.27 (175.55, 268.99)	360,365.98 (338,283.41, 382,448.56)
	2035	1,017,179,933.55 (943,933,282.90, 1,090,426,584.20)	219.80 (169.46, 270.14)	360,677.24 (334,502.93, 386,851.55)

CI, confidence interval; DALYs, disability-adjusted life years; URIs, upper respiratory infections.