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Supplementary methods

GBD 2021 classifies causes into a four-level hierarchy. Level 1 causes encompass aggregates of non-communicable diseases; injuries; and a combined category of maternal and neonatal disorders, infectious diseases, and nutritional deficiencies. At Level 2, there are 22 aggregated groupings of diseases and injuries, such as tuberculosis, cardiovascular diseases, respiratory infections, and transport injuries. Level 3 includes specific causes like stroke and road injuries. For some, Level 3 is the most detailed classification, while others have further detailed categories at Level 4, such as hemorrhagic stroke, latent tuberculosis infection, and pedestrian road injuries. Detailed levels of causes are explained at the GBD 2021 website (https://www.healthdata.org/research-analysis/diseases-injuries/factsheets-overview/about-disease-injury-impairment). Based on these criteria, headache disorders are classified as Level 3, while migraine and TTH are classified as Level 4.

Search Terms

The procedures for collecting data on non-fatal outcomes and mortality have been thoroughly explained in earlier research. Estimates for Disability-adjusted life years (DALYs) and years lived with disability (YLDs) related to headache disorders, migraine, and TTH were obtained from population-based data, survey microdata, registries, surveillance systems, and Systematic evaluations of reports, regardless of publication status. The IHME at the University of Washington conducted searches in various databases including Embase, PubMed, System for Information on Gray Literature in Europe, CAP abstracts, Medline, CINAHL, and the World Health Organization Library Information System to gather GBD data. The search string for migraine was: (("migraine disorders"[MeSH Terms] OR “migraine” [All Fields]) AND (“prevalence”[Title/Abstract] OR “incidence”[Title/Abstract] OR “remission”[Title/Abstract] OR epidemiology[Title/Abstract])). For TTH, the search

string was: (("headache"[MeSH Terms]) OR ("headache"[Title/Abstract] AND "tension" [Title/Abstract])) AND ("epidemiology"[Title/Abstract] OR "prevalence" [Title/Abstract] OR "incidence"[Title/Abstract] OR "remission"[Title/Abstract])). For medication overuse headache, the search string was: (("headache"[MeSH Terms] OR "headache"[Title/Abstract]) AND ("pharmaceutical preparations"[MeSH Terms] OR "pharmaceutical preparations" [Title/Abstract] OR "medication"[Title/Abstract]) AND ("epidemiology"[Title/Abstract] OR "prevalence"[Title/Abstract] OR "incidence" [Title/Abstract] OR "remission" [Title/Abstract])) without language restrictions. Estimates for medication overuse headache were combined with those for migraine and TTH.

Then, IHME excluded studies or datasets with small sample sizes (<150), review articles, non-population sample studies, or those lacking clear subpopulation definition. These datasets were then incorporated into the Global Health Data Exchange, where they were analyzed using DisMod-MR 2.1, a Bayesian meta-regression tool.

Supplementary Tables

Table S1a: Prevalence, DALY, incidence, and YLD counts and age-standardized rates of headache disorders in 1990 and 2021, and percentage changes of age-standardized rate from 1990 to 2021, in global and Europe

	Global					Europe				
	Absolute number, 1990	**Age-standardized rate, per 100 000 people, 1990**	**Absolute number, 2021**	**Age-standardized rate, per 100 000 people, 2021**	**Percentage Change, 1990-2021**	**Absolute number, 1990**	**Age-standardized rate, per 100 000 people, 1990**	**Absolute number, 2021**	**Age-standardized rate, per 100 000 people, 2021**	**Percentage Change, 1990-2021**
Prevalence	1787302945.09 (1648822201.72 to 1937346555.85)	34486.61 (31872.81 to 37187.63)	2808876481.80 (2599555367.51 to 3028767343.34)	34574.00 (32017.69 to 37318.55)	0.00% (0.00% to 0.01%)	345029404.43 (318156326.29 to 371460760.12)	40799.81 (37726.20 to 44018.84)	370591630.52 (340862080.96 to 397397185.77)	40685.82 (37620.80 to 43852.02)	0.00% (-0.01% to 0.00%)
DALYs	30260883.92 (5963391.97 to 64833434.46)	583.75 (122.49 to 1231.64)	47975675.06 (9800212.26 to 100667852.52)	588.39 (117.58 to 1245.36)	0.01% (-0.04% to 0.02%)	5891748.16 (1583812.42 to 12128651.80)	693.03 (177.31 to 1449.58)	6345063.09 (1796988.70 to 12906373.08)	696.22 (173.05 to 1449.93)	0.00% (-0.02% to 0.02%)
Incidence	533794823.90 (472464996.93 to 591430931.57)	10097.25 (8965.19 to 11186.25)	809226480.19 (717818771.04 to 895990201.46)	10084.51 (8956.48 to 11170.76)	0.00% (-0.01% to 0.00%)	100053721.33 (88528726.15 to 111403577.39)	12143.81 (10689.35 to 13495.53)	104292837.24 (92399738.42 to 115349658.98)	12070.27 (10635.74 to 13416.36)	-0.01% (-0.01% to 0.00%)
YLDs	30260883.92 (5963391.97 to 64833434.46)	583.75 (122.49 to 1231.64)	47975675.06 (9800212.26 to 100667852.52)	588.39 (117.58 to 1245.36)	0.01% (-0.04% to 0.02%)	5891748.16 (1583812.42 to 12128651.80)	693.03 (177.31 to 1449.58)	6345063.09 (1796988.70 to 12906373.08)	696.22 (173.05 to 1449.93)	0.00% (-0.02% to 0.02%)

Table S1b: Prevalence, DALY, incidence, and YLD counts and age-standardized rates of migraine in 1990 and 2021, and percentage changes of age-standardized rate from 1990 to 2021, in global and Europe

	Global					Europe				
	Absolute number, 1990	**Age-standardized rate, per 100 000 people, 1990**	**Absolute number, 2021**	**Age-standardized rate, per 100 000 people, 2021**	**Percentage Change, 1990-2021**	**Absolute number, 1990**	**Age-standardized rate, per 100 000 people, 1990**	**Absolute number, 2021**	**Age-standardized rate, per 100 000 people, 2021**	**Percentage Change, 1990-2021**
Prevalence	732564462.68 (624559243.92 to 847058436.26)	14027.65 (12063.37 to 16078.07)	1158432823.82 (995861966.38 to 1331312506.13)	14246.55 (12194.12 to 16378.70)	0.02% (0.00% to 0.03%)	134693058.36 (116329423.36 to 155047785.69)	16783.83 (14495.57 to 19320.19)	143542170.14 (124859309.64 to 165307694.92)	16916.64 (14714.84 to 19481.74)	0.01% (0.00% to 0.02%)
DALYs	27412196.29 (4076605.01 to 60325805.84)	526.76 (83.36 to 1145.92)	43378889.81 (6732642.21 to 95079454.09)	532.70 (80.57 to 1167.71)	0.01% (-0.04% to 0.03%)	5203117.75 (1068484.67 to 11017419.82)	648.35 (133.14 to 1372.86)	5577086.08 (1234081.57 to 11719998.01)	657.27 (145.44 to 1381.22)	0.01% (-0.02% to 0.02%)
Incidence	63496590.82 (55194751.45 to 72208003.40)	1136.90 (995.14 to 1287.76)	90183386.87 (78857600.46 to 101838162.48)	1153.20 (1006.07 to 1304.49)	0.01% (0.01% to 0.02%)	9470368.50 (8249961.74 to 10780895.79)	1180.08 (1028.01 to 1343.39)	9057610.76 (7881493.51 to 10303044.20)	1067.45 (928.84 to 1214.23)	0.01% (0.01% to 0.02%)
YLDs	27412196.29 (4076605.01 to 60325805.84)	526.76 (83.36 to 1145.92)	43378889.81 (6732642.21 to 95079454.09)	532.70 (80.57 to 1167.71)	0.01% (-0.04% to 0.03%)	5203117.75 (1068484.67 to 11017419.82)	648.35 (133.14 to 1372.86)	5577086.08 (1234081.57 to 11719998.01)	657.27 (145.44 to 1381.22)	0.01% (-0.02% to 0.02%)

Table S1c: Prevalence, DALY, incidence, and YLD counts and age-standardized rates of tension-type headache in 1990 and 2021, and percentage changes of age-standardized rate from 1990 to 2021, in global and Europe

	Global					Europe				
	Absolute number, 1990	**Age-standardized rate, per 100 000 people, 1990**	**Absolute number, 2021**	**Age-standardized rate, per 100 000 people, 2021**	**Percentage Change, 1990-2021**	**Absolute number, 1990**	**Age-standardized rate, per 100 000 people, 1990**	**Absolute number, 2021**	**Age-standardized rate, per 100 000 people, 2021**	**Percentage Change, 1990-2021**
Prevalence	1286366671.75 (1122503420.79 to 1467160187.52)	24904.85 (21960.05 to 28038.80)	2011612877.49 (1776544390.83 to 2270860638.85)	24764.77 (21863.62 to 27954.74)	-0.01% (-0.01% to 0.00%)	263085772.75 (234474303.61 to 296486651.56)	31057.91 (27533.49 to 35153.24)	282494328.80 (252165015.17 to 313416190.31)	30810.85 (27241.14 to 34786.17)	-0.01% (-0.02% to 0.00%)
DALYs	2848687.62 (820890.75 to 9563745.41)	56.99 (16.79 to 186.13)	4596785.25 (1347300.84 to 15012932.75)	55.69 (16.13 to 185.07)	-0.02% (-0.05% to 0.01%)	688630.41 (213826.80 to 2188953.53)	78.70 (23.92 to 257.25)	767977.02 (245879.07 to 2405182.64)	77.79 (23.49 to 256.54)	-0.01% (-0.06% to 0.02%)
Incidence	470298233.07 (408471892.00 to 527847536.34)	8960.34 (7815.06 to 10074.35)	719043093.32 (629219079.87 to 804949048.83)	8931.31 (7788.21 to 10020.83)	0.00% (-0.01% to 0.00%)	90583352.83 (78895825.05 to 101724244.72)	10911.18 (9459.09 to 12276.46)	95235226.48 (83299117.39 to 105938467.33)	10822.21 (9430.78 to 12181.47)	-0.01% (-0.02% to 0.00%)
YLDs	2848687.62 (820890.75 to 9563745.41)	56.99 (16.79 to 186.13)	4596785.25 (1347300.84 to 15012932.75)	55.69 (16.13 to 185.07)	-0.02% (-0.05% to 0.01%)	688630.41 (213826.80 to 2188953.53)	78.70 (23.92 to 257.25)	767977.02 (245879.07 to 2405182.64)	77.79 (23.49 to 256.54)	-0.01% (-0.06% to 0.02%)

Table S2a: Counts and age-standardized prevalence rates of headache disorders from 1990 to 2021, by sex

	Both		Male		Female	
	Absolute number	**Age-standardized rate, per 100 000 people**	**Absolute number**	**Age-standardized rate, per 100 000 people**	**Absolute number**	**Age-standardized rate, per 100 000 people**
1990	345029404.43 (318156326.29 to 371460760.12)	40799.81 (37726.20 to 44018.84)	151259857.61 (138369342.54 to 165391544.40)	36978.04 (33874.21 to 40379.84)	193769546.82 (180151061.59 to 206759578.38)	44454.94 (41361.06 to 47620.92)
1991	346626513.07 (319601998.41 to 373190305.10)	40761.64 (37702.06 to 43966.34)	151995279.01 (139061345.73 to 166145099.87)	36929.53 (33818.52 to 40344.72)	194631234.07 (180983551.62 to 207613181.77)	44432.82 (41341.92 to 47587.16)
1992	348249199.72 (321208313.63 to 374822145.32)	40726.71 (37678.48 to 43913.05)	152724606.65 (139804830.68 to 166929468.90)	36885.37 (33757.28 to 40298.30)	195524593.07 (181875046.64 to 208585781.37)	44411.97 (41320.02 to 47555.39)
1993	349788938.01 (322655595.41 to 376339064.08)	40694.70 (37635.86 to 43866.03)	153394923.14 (140506483.14 to 167729798.91)	36846.05 (33702.85 to 40261.43)	196394014.87 (182781374.93 to 209543753.50)	44390.39 (41290.26 to 47522.40)
1994	351050034.24 (324040073.15 to 377568788.58)	40667.11 (37595.96 to 43836.01)	153915340.43 (141052198.04 to 168245615.58)	36813.36 (33661.51 to 40235.35)	197134693.81 (183529615.26 to 210345783.99)	44369.52 (41261.75 to 47483.22)
1995	352213677.79 (325390779.63 to 378792899.91)	40643.67 (37558.85 to 43812.01)	154385616.01 (141351736.16 to 168670461.66)	36787.98 (33652.44 to 40237.99)	197828061.78 (184211880.46 to 211072466.62)	44349.04 (41238.85 to 47439.25)
1996	353427808.86 (326933525.04 to 379735445.55)	40625.94 (37604.62 to 43749.02)	154882180.87 (142046802.37 to 169117996.73)	36767.62 (33666.62 to 40195.55)	198545627.99 (185015893.82 to 211545034.80)	44335.90 (41275.52 to 47407.87)
1997	354679041.81 (328575889.11 to 380753811.40)	40612.70 (37659.75 to 43712.13)	155393762.64 (142700753.73 to 169437909.05)	36748.43 (33655.25 to 40133.08)	199285279.16 (185767516.69 to 212036019.54)	44331.66 (41335.57 to 47360.85)
1998	356005997.95 (329973494.04 to 381839602.95)	40598.34 (37714.29 to 43678.84)	155951197.79 (143323829.81 to 169711002.49)	36727.64 (33650.31 to 40065.42)	200054800.16 (186672548.18 to 212633823.57)	44327.49 (41360.23 to 47314.00)
1999	357260534.85 (331309130.80 to 382813015.19)	40581.09 (37754.70 to 43627.01)	156486021.89 (143919438.89 to 170039293.55)	36705.42 (33642.11 to 40010.46)	200774512.96 (187623288.38 to 213287790.34)	44319.25 (41383.26 to 47265.16)
2000	358424126.86 (332759115.50 to 383668425.53)	40562.53 (37779.67 to 43555.38)	156989992.24 (144453365.15 to 170357173.06)	36685.86 (33633.35 to 39956.38)	201434134.63 (188324999.56 to 214111518.08)	44305.30 (41385.62 to 47244.09)

2001	359577565.34 (333610619.93 to 384870887.88)	40548.80 (37774.20 to 43534.63)	157513023.17 (144891012.25 to 170903147.55)	36676.32 (33624.91 to 39946.24)	202064542.17 (188928108.59 to 214884639.83)	44291.08 (41372.61 to 47232.44)
2002	360705152.96 (334368669.41 to 386037381.97)	40545.23 (37778.64 to 43538.98)	158038949.89 (145318551.30 to 171489169.02)	36679.48 (33635.59 to 39950.75)	202666203.07 (189432594.15 to 215625707.02)	44284.17 (41388.31 to 47227.05)
2003	361737176.65 (335073905.29 to 387133458.74)	40545.16 (37775.08 to 43554.35)	158521923.86 (145635769.80 to 171992250.17)	36686.75 (33651.43 to 39939.04)	203215252.79 (189878621.86 to 216299672.12)	44279.55 (41398.86 to 47223.44)
2004	362711721.90 (335962698.18 to 388021628.59)	40543.82 (37760.88 to 43561.96)	158979899.15 (145915133.42 to 172480691.48)	36691.74 (33664.02 to 39926.05)	203731822.75 (190509000.88 to 216939040.24)	44275.11 (41387.26 to 47220.40)
2005	363581098.50 (336966859.53 to 388988263.11)	40539.15 (37740.55 to 43568.32)	159371237.83 (146135799.55 to 172906660.82)	36690.34 (33669.62 to 39935.58)	204209860.67 (191000944.66 to 217535967.86)	44270.56 (41374.87 to 47219.55)
2006	364240076.33 (337585234.65 to 389878511.90)	40533.66 (37734.50 to 43564.98)	159652385.56 (146363597.40 to 173209731.58)	36685.94 (33668.75 to 39923.87)	204587690.78 (191300746.49 to 217868837.65)	44267.22 (41371.75 to 47216.79)
2007	364780840.52 (338121161.69 to 390604845.94)	40531.77 (37731.76 to 43564.48)	159880562.45 (146538887.24 to 173384907.52)	36684.98 (33668.63 to 39914.39)	204900278.06 (191562558.26 to 218162296.98)	44267.38 (41371.45 to 47217.95)
2008	365237557.44 (338591973.07 to 391063349.02)	40529.93 (37727.48 to 43563.43)	160065484.23 (146697949.78 to 173504441.98)	36683.17 (33665.62 to 39903.87)	205172073.21 (191779458.37 to 218481752.99)	44267.89 (41370.77 to 47219.97)
2009	365554662.47 (338917912.79 to 391394445.38)	40527.36 (37722.48 to 43561.18)	160188230.90 (146882715.86 to 173553394.47)	36680.41 (33661.33 to 39903.19)	205366431.57 (191915043.10 to 218701726.22)	44267.93 (41369.44 to 47222.08)
2010	365751188.67 (339124717.79 to 391617131.43)	40524.29 (37717.75 to 43557.35)	160253684.38 (147041009.41 to 173548519.47)	36676.89 (33655.82 to 39903.40)	205497504.29 (191988482.21 to 218848437.66)	44267.66 (41368.40 to 47223.77)
2011	366002843.63 (339302796.74 to 391979039.39)	40536.51 (37718.03 to 43561.95)	160372273.73 (147244157.83 to 173785757.39)	36693.85 (33664.01 to 39939.30)	205630569.90 (192069483.14 to 219042679.18)	44277.94 (41357.08 to 47227.16)
2012	366500923.64 (339629128.79 to 392490890.57)	40571.66 (37738.25 to 43589.04)	160664304.14 (147607135.24 to 174218969.12)	36741.23 (33699.92 to 40011.17)	205836619.50 (192107974.07 to 219313156.01)	44304.75 (41361.28 to 47247.41)
2013	367181022.70 (340343591.26 to 393152631.13)	40614.38 (37759.45 to 43642.53)	161086362.11 (147996407.68 to 174693488.54)	36799.58 (33745.65 to 40096.57)	206094660.59 (192222620.64 to 219639312.86)	44336.82 (41369.04 to 47271.52)

2014	367964853.03 (341176970.18 to 393900414.02)	40650.97 (37769.72 to 43682.45)	161583562.82 (148294530.51 to 175249979.54)	36851.41 (33785.22 to 40172.26)	206381290.20 (192463797.66 to 219988128.22)	44364.63 (41370.36 to 47296.01)
2015	368704555.60 (341583167.34 to 394775380.24)	40669.27 (37759.42 to 43707.53)	162062053.68 (148667814.81 to 175748367.23)	36880.73 (33807.10 to 40211.66)	206642501.92 (192594476.86 to 220275689.18)	44379.24 (41357.99 to 47305.17)
2016	369576512.63 (341959487.47 to 395969745.80)	40701.00 (37777.81 to 43735.93)	162612734.61 (149102230.69 to 176508773.50)	36924.39 (33841.56 to 40260.01)	206963778.02 (192720028.22 to 220641001.06)	44406.09 (41371.19 to 47387.47)
2017	370759059.40 (342510232.15 to 397726853.21)	40764.42 (37797.23 to 43821.77)	163330485.54 (149589415.17 to 177392289.52)	37004.13 (33889.36 to 40350.85)	207428573.86 (193007219.62 to 221187625.68)	44459.68 (41384.99 to 47491.27)
2018	371853446.33 (342910680.55 to 399248074.73)	40824.38 (37807.20 to 43932.02)	163993984.39 (149969433.92 to 178113884.38)	37078.95 (33962.64 to 40491.23)	207859461.94 (193270942.48 to 221724702.21)	44510.67 (41407.76 to 47575.53)
2019	372479909.52 (342923655.26 to 400136871.68)	40849.67 (37790.15 to 44004.21)	164397247.00 (150184114.38 to 178475962.47)	37112.42 (33967.50 to 40509.96)	208082662.52 (193271917.22 to 221918509.77)	44533.65 (41410.52 to 47624.76)
2020	370984933.99 (341242252.89 to 397802710.38)	40695.10 (37626.38 to 43853.81)	163559470.69 (149293711.01 to 177194953.50)	36919.38 (33781.03 to 40328.81)	207425463.31 (192744015.77 to 221130859.77)	44421.50 (41282.94 to 47498.23)
2021	370591630.52 (340862080.96 to 397397185.77)	40685.82 (37620.80 to 43852.02)	163430491.08 (149177588.93 to 177041537.85)	36910.27 (33762.87 to 40317.43)	207161139.44 (192553758.31 to 220826723.58)	44416.59 (41290.00 to 47491.58)
Percentage Change, 1990-2021	0.07% (0.06% to 0.09%)	0.00% (-0.01% to 0.00%)	0.08% (0.06% to 0.10%)	0.00% (-0.01% to 0.01%)	0.07% (0.05% to 0.09%)	0.00% (-0.01% to 0.01%)
Statistical Analysis	Spearman's ρ = 0.995 p-value < 0.001	Spearman's ρ = 0.044 p-value = 0.810	Spearman's ρ = 0.997 p-value < 0.001	Spearman's ρ = 0.193 p-value = 0.289	Spearman's ρ = 0.994 p-value < 0.001	Spearman's ρ = 0.102 p-value = 0.580
	Wilcoxon rank sum test between sex (count): p-value < 0.001 Wilcoxon rank sum test between sex (rate): p-value < 0.001					

Table S2b: Counts and age-standardized DALY rates of headache disorders from 1990 to 2021, by sex

	Both		Male		Female	
	Absolute number	**Age-standardized rate, per 100 000 people**	**Absolute number**	**Age-standardized rate, per 100 000 people**	**Absolute number**	**Age-standardized rate, per 100 000 people**
1990	5891748.16 (1583812.42 to 12128651.80)	693.03 (177.31 to 1449.58)	1974899.70 (515608.89 to 4145375.64)	477.96 (121.47 to 1008.77)	3916848.46 (1057242.13 to 7963031.06)	901.61 (227.71 to 1866.95)
1991	5925687.24 (1596400.37 to 12178527.82)	693.07 (176.66 to 1447.90)	1986907.86 (518629.78 to 4162960.00)	477.79 (121.01 to 1007.18)	3938779.38 (1063829.54 to 8007156.55)	902.19 (227.07 to 1867.78)
1992	5960165.39 (1607845.20 to 12253171.75)	693.22 (176.19 to 1449.69)	1998848.71 (522590.82 to 4195238.66)	477.72 (120.89 to 1010.83)	3961316.68 (1068232.90 to 8041800.81)	902.79 (226.06 to 1867.08)
1993	5992159.43 (1621479.44 to 12292164.07)	693.31 (176.17 to 1446.25)	2009034.34 (531130.72 to 4213618.51)	477.50 (121.28 to 1009.07)	3983125.08 (1072018.17 to 8086445.30)	903.34 (225.87 to 1865.55)
1994	6018465.78 (1628450.93 to 12359407.94)	693.36 (176.01 to 1444.98)	2017210.86 (533864.83 to 4223902.93)	477.31 (121.11 to 1007.52)	4001254.92 (1081514.80 to 8125768.51)	903.67 (226.20 to 1863.19)
1995	6042211.00 (1634587.19 to 12379288.47)	693.23 (175.43 to 1443.91)	2025027.14 (535079.54 to 4238616.52)	477.19 (121.08 to 1007.67)	4017183.86 (1081922.00 to 8140447.61)	903.52 (225.09 to 1860.46)
1996	6076003.68 (1654140.85 to 12453823.77)	694.22 (176.54 to 1443.93)	2034619.25 (541838.20 to 4265302.71)	477.46 (121.50 to 1010.63)	4041384.43 (1094586.64 to 8209522.85)	905.25 (225.92 to 1859.38)
1997	6123673.62 (1671163.92 to 12505875.87)	696.73 (177.71 to 1445.84)	2047253.83 (545602.16 to 4290712.62)	478.37 (121.54 to 1012.15)	4076419.79 (1108791.92 to 8277102.70)	909.38 (227.61 to 1862.83)
1998	6177850.48 (1697809.65 to 12624787.49)	699.74 (179.37 to 1452.16)	2061756.65 (554866.70 to 4313850.76)	479.50 (121.65 to 1017.76)	4116093.84 (1130981.28 to 8349476.18)	914.31 (230.84 to 1873.09)
1999	6226390.23 (1719153.88 to 12713813.79)	702.11 (180.51 to 1454.91)	2074823.32 (560758.82 to 4332274.49)	480.32 (122.38 to 1018.96)	4151566.90 (1143629.42 to 8413696.49)	918.31 (232.24 to 1880.96)
2000	6261203.67 (1729572.93 to 12774937.76)	703.02 (181.09 to 1456.20)	2085350.02 (566455.29 to 4351987.03)	480.66 (122.81 to 1019.23)	4175853.65 (1150465.75 to 8455648.77)	919.90 (233.40 to 1884.99)

2001	6284579.75 (1740241.17 to 12814829.31)	702.83 (181.45 to 1456.42)	2093651.49 (567170.00 to 4371587.17)	480.63 (122.31 to 1021.02)	4190928.25 (1155992.16 to 8480696.89)	919.69 (233.20 to 1889.47)
2002	6305091.51 (1746443.82 to 12848253.02)	702.64 (181.09 to 1456.74)	2100945.06 (571096.09 to 4373462.03)	480.64 (122.68 to 1018.76)	4204146.45 (1164410.37 to 8499310.03)	919.44 (233.10 to 1885.46)
2003	6324179.75 (1752398.25 to 12899082.03)	702.61 (181.20 to 1458.37)	2107696.46 (572963.91 to 4395301.15)	480.73 (122.58 to 1021.36)	4216483.30 (1169182.06 to 8528125.39)	919.40 (233.28 to 1888.12)
2004	6341910.45 (1767360.44 to 12950736.19)	702.54 (181.13 to 1460.27)	2113643.23 (573967.03 to 4422446.35)	480.70 (122.45 to 1026.00)	4228267.21 (1176568.94 to 8539995.03)	919.43 (232.54 to 1888.35)
2005	6360572.23 (1774510.22 to 12984624.75)	702.72 (180.90 to 1457.21)	2120420.01 (577421.24 to 4416301.75)	480.98 (121.67 to 1022.51)	4240152.23 (1185904.62 to 8579530.31)	919.65 (233.03 to 1885.63)
2006	6376459.38 (1784429.89 to 13002666.30)	703.07 (180.98 to 1458.83)	2125573.60 (579299.58 to 4424593.36)	481.23 (121.67 to 1023.81)	4250885.78 (1189352.88 to 8588943.87)	920.26 (232.73 to 1890.53)
2007	6391586.74 (1792395.22 to 13023643.84)	703.64 (180.92 to 1458.67)	2130993.28 (582078.46 to 4434857.28)	481.74 (121.90 to 1025.79)	4260593.46 (1198509.87 to 8613920.86)	921.04 (232.68 to 1889.57)
2008	6406698.20 (1804559.89 to 13030282.17)	704.43 (181.58 to 1462.12)	2136918.47 (586428.11 to 4447449.29)	482.53 (122.23 to 1024.91)	4269779.73 (1205946.71 to 8621535.24)	921.95 (233.18 to 1895.04)
2009	6418114.31 (1811896.70 to 13044628.86)	705.08 (181.63 to 1461.21)	2140661.09 (590192.62 to 4436582.98)	483.02 (123.04 to 1026.76)	4277453.23 (1210604.58 to 8632547.36)	922.87 (232.47 to 1892.49)
2010	6426613.72 (1820337.58 to 13051561.60)	705.63 (181.15 to 1464.11)	2143718.02 (592006.83 to 4443777.30)	483.47 (122.03 to 1026.94)	4282895.70 (1215158.72 to 8617514.25)	923.62 (232.84 to 1895.30)
2011	6433429.16 (1827530.21 to 13068070.24)	706.26 (181.43 to 1465.97)	2146528.02 (595628.50 to 4453196.05)	484.09 (122.54 to 1028.73)	4286901.14 (1221208.72 to 8640291.19)	924.34 (233.23 to 1897.35)
2012	6441752.15 (1840796.53 to 13101722.42)	707.19 (181.10 to 1468.83)	2150192.95 (599976.06 to 4443073.30)	484.90 (122.33 to 1031.80)	4291559.20 (1225733.49 to 8642013.24)	925.53 (232.69 to 1898.52)
2013	6453658.27 (1847603.93 to 13101318.02)	708.39 (180.45 to 1470.73)	2156790.81 (601302.38 to 4450741.54)	486.20 (122.16 to 1031.76)	4296867.47 (1226660.41 to 8650480.43)	926.83 (232.49 to 1902.69)

2014	6465059.94 (1855703.17 to 13135131.18)	709.29 (180.43 to 1476.97)	2163469.34 (605446.53 to 4470627.20)	487.25 (121.73 to 1033.04)	4301590.60 (1229647.74 to 8668704.82)	927.86 (233.22 to 1907.41)
2015	6474452.48 (1864039.47 to 13165444.57)	709.77 (180.63 to 1479.09)	2169550.74 (607368.07 to 4482051.16)	487.94 (122.54 to 1034.28)	4304901.74 (1232821.22 to 8663899.76)	928.48 (233.17 to 1906.12)
2016	6467040.41 (1858502.71 to 13136643.50)	708.43 (179.21 to 1475.14)	2172105.16 (612167.86 to 4480148.49)	487.80 (122.30 to 1035.01)	4294935.25 (1223355.02 to 8645401.65)	926.38 (231.63 to 1899.48)
2017	6445379.44 (1840759.74 to 13108407.19)	705.76 (177.01 to 1470.75)	2172119.97 (610537.53 to 4493855.97)	487.16 (121.79 to 1033.09)	4273259.47 (1208039.95 to 8626149.89)	922.12 (227.46 to 1892.67)
2018	6420069.49 (1814144.08 to 13051160.65)	702.78 (175.23 to 1462.87)	2170880.15 (607221.81 to 4487025.72)	486.32 (120.87 to 1032.78)	4249189.34 (1195748.44 to 8575879.90)	917.42 (225.52 to 1881.90)
2019	6403434.72 (1800490.17 to 13022538.04)	701.07 (173.80 to 1461.56)	2169402.84 (605330.19 to 4479584.44)	485.67 (120.78 to 1029.55)	4234031.88 (1192380.07 to 8547342.37)	915.00 (224.49 to 1881.06)
2020	6365442.66 (1801710.91 to 12953725.47)	697.32 (173.27 to 1455.06)	2160360.81 (608609.46 to 4453954.89)	483.68 (120.34 to 1027.31)	4205081.85 (1195083.96 to 8480623.28)	909.78 (223.35 to 1874.43)
2021	6345063.09 (1796988.70 to 12906373.08)	696.22 (173.05 to 1449.93)	2156683.04 (610227.14 to 4441134.25)	483.36 (120.11 to 1021.87)	4188380.05 (1191901.20 to 8451079.17)	908.18 (223.50 to 1866.52)
Percentage Change, 1990-2021	0.08% (0.04% to 0.14%)	0.00% (-0.02% to 0.02%)	0.09% (0.06% to 0.17%)	0.01% (-0.01% to 0.03%)	0.07% (0.04% to 0.13%)	0.01% (-0.02% to 0.03%)
Statistical Analysis	Spearman's ρ = 0.870 p-value < 0.001	Spearman's ρ = 0.658 p-value < 0.001	Spearman's ρ = 0.974 p-value < 0.001	Spearman's ρ = 0.924 p-value < 0.001	Spearman's ρ = 0.784 p-value < 0.001	Spearman's ρ = 0.625 p-value < 0.001
	Wilcoxon rank sum test between sex (count): p-value < 0.001 Wilcoxon rank sum test between sex (rate): p-value < 0.001					

Table S2c: Counts and age-standardized incidence rates of headache disorders from 1990 to 2021, by sex

	Both		Male		Female	
	Absolute number	Age-standardized rate, per 100 000 people	Absolute number	Age-standardized rate, per 100 000 people	Absolute number	Age-standardized rate, per 100 000 people
1990	100053721.33 (88528726.15 to 111403577.39)	12143.81 (10689.35 to 13495.53)	46307595.33 (40761679.08 to 51812109.90)	11542.36 (10150.17 to 12846.05)	53746126.00 (47761724.74 to 59619536.98)	12726.54 (11243.61 to 14156.08)
1991	100502724.54 (89028054.48 to 111856875.73)	12136.55 (10687.30 to 13492.24)	46530481.98 (41007570.16 to 52040071.71)	11534.30 (10147.94 to 12838.57)	53972242.56 (47971522.27 to 59821390.31)	12720.62 (11239.59 to 14142.34)
1992	100925979.81 (89445299.36 to 112303693.77)	12128.58 (10686.26 to 13487.62)	46740345.68 (41236213.25 to 52241292.02)	11526.29 (10146.07 to 12826.69)	54185634.13 (48179249.46 to 60011483.11)	12713.33 (11234.01 to 14127.61)
1993	101305305.77 (89810745.86 to 112705133.84)	12120.91 (10686.45 to 13482.64)	46924989.22 (41431832.28 to 52403324.68)	11519.22 (10145.66 to 12819.68)	54380316.55 (48337936.04 to 60185690.04)	12705.63 (11227.48 to 14111.96)
1994	101579419.95 (90099713.15 to 112987752.47)	12113.84 (10687.22 to 13479.44)	47052901.41 (41570100.69 to 52494573.38)	11513.16 (10146.30 to 12813.12)	54526518.54 (48423308.07 to 60318187.89)	12697.95 (11221.09 to 14095.63)
1995	101801806.06 (90356191.64 to 113239637.72)	12107.78 (10688.86 to 13477.93)	47153474.30 (41687192.98 to 52556642.95)	11508.42 (10148.74 to 12807.58)	54648331.76 (48495246.99 to 60446301.11)	12690.92 (11213.32 to 14081.48)
1996	102002068.33 (90568942.26 to 113418868.46)	12101.07 (10674.35 to 13461.93)	47249568.08 (41744285.28 to 52664229.51)	11503.70 (10138.13 to 12779.63)	54752500.25 (48633799.97 to 60549860.16)	12682.79 (11201.74 to 14074.59)
1997	102168989.33 (90774111.46 to 113518948.10)	12092.20 (10660.90 to 13438.42)	47338094.14 (41808453.55 to 52818939.57)	11497.61 (10132.09 to 12772.10)	54830895.19 (48807473.44 to 60615317.01)	12671.99 (11185.31 to 14056.17)
1998	102329972.63 (90986776.49 to 113667807.45)	12081.71 (10655.26 to 13418.50)	47429008.07 (41893173.01 to 52979857.09)	11490.07 (10134.44 to 12775.73)	54900964.56 (48955968.64 to 60664819.38)	12659.51 (11167.42 to 14035.57)
1999	102473286.07 (91064738.12 to 113808281.42)	12071.37 (10652.46 to 13401.12)	47510505.65 (41977568.61 to 53045302.59)	11481.97 (10123.75 to 12779.30)	54962780.42 (49073795.49 to 60696034.35)	12647.90 (11155.75 to 14011.38)
2000	102619499.11 (91110609.87 to 113963304.70)	12063.98 (10652.15 to 13387.96)	47585431.32 (42059667.71 to 53156691.10)	11475.42 (10107.37 to 12783.32)	55034067.79 (49186229.68 to 60703955.55)	12640.48 (11149.75 to 13987.72)

2001	102790630.06 (91237661.85 to 114189876.34)	12061.18 (10647.04 to 13389.21)	47669016.23 (42224538.94 to 53275393.80)	11472.83 (10110.36 to 12780.44)	55121613.83 (49291305.88 to 60789833.62)	12638.18 (11148.24 to 13993.75)
2002	102953826.77 (91408980.34 to 114317879.43)	12062.11 (10645.27 to 13393.66)	47751132.79 (42357009.94 to 53364821.58)	11474.38 (10118.75 to 12781.82)	55202693.98 (49368969.15 to 60899904.45)	12639.08 (11154.34 to 14002.49)
2003	103091293.16 (91592139.17 to 114301761.03)	12064.15 (10643.97 to 13399.61)	47820626.40 (42476003.09 to 53450319.01)	11477.06 (10128.73 to 12775.47)	55270666.76 (49427842.92 to 60996304.05)	12640.96 (11166.42 to 14013.12)
2004	103214104.96 (91753870.59 to 114485496.92)	12065.38 (10641.32 to 13405.55)	47884429.70 (42574802.77 to 53540792.75)	11478.72 (10125.42 to 12768.57)	55329675.26 (49479747.48 to 61080037.04)	12642.29 (11177.60 to 14020.62)
2005	103301386.64 (91884703.05 to 114683258.61)	12064.37 (10639.93 to 13408.60)	47929227.73 (42550313.85 to 53571382.33)	11477.70 (10118.00 to 12758.77)	55372158.91 (49525612.71 to 61141814.69)	12641.84 (11186.46 to 14025.97)
2006	103328903.33 (91934280.91 to 114717658.78)	12062.01 (10639.43 to 13405.09)	47944711.68 (42489677.39 to 53593187.95)	11475.27 (10116.03 to 12754.65)	55384191.65 (49553171.69 to 61177639.00)	12640.06 (11186.60 to 14025.05)
2007	103327000.05 (91957684.03 to 114643269.22)	12060.23 (10638.86 to 13401.41)	47948091.81 (42446637.79 to 53628183.92)	11473.69 (10114.07 to 12751.54)	55378908.24 (49571689.32 to 61172805.28)	12638.51 (11185.89 to 14023.56)
2008	103310902.21 (91895365.93 to 114534815.78)	12058.23 (10637.58 to 13397.85)	47945837.98 (42421678.27 to 53636570.65)	11471.86 (10111.09 to 12747.98)	55365064.22 (49547332.25 to 61131448.51)	12636.74 (11183.94 to 14021.20)
2009	103280124.91 (91865139.82 to 114388775.28)	12056.21 (10635.76 to 13394.22)	47935857.37 (42388445.25 to 53629057.69)	11469.92 (10107.98 to 12744.15)	55344267.54 (49504625.71 to 61067534.55)	12635.09 (11181.26 to 14019.20)
2010	103233467.54 (91814492.63 to 114219551.11)	12054.36 (10633.89 to 13390.56)	47916454.90 (42358729.67 to 53567546.28)	11467.99 (10105.29 to 12740.28)	55317012.65 (49456864.22 to 61061043.51)	12633.77 (11178.59 to 14018.44)
2011	103204794.80 (91793201.09 to 114132857.86)	12054.63 (10633.33 to 13390.70)	47903646.82 (42368109.12 to 53449634.07)	11468.18 (10103.22 to 12734.92)	55301147.97 (49395896.68 to 61057614.21)	12634.62 (11184.44 to 14020.18)
2012	103244200.07 (91836536.87 to 114172282.34)	12057.45 (10635.34 to 13394.73)	47926316.79 (42374843.26 to 53373172.79)	11471.07 (10103.35 to 12740.45)	55317883.27 (49384169.62 to 61054824.82)	12637.88 (11189.42 to 14025.08)
2013	103338658.31 (91882096.87 to 114280353.39)	12060.55 (10638.34 to 13399.71)	47982698.94 (42407135.84 to 53351325.36)	11474.43 (10104.54 to 12747.59)	55355959.37 (49401087.17 to 61071093.25)	12641.35 (11194.20 to 14029.41)

2014	103490388.37 (91939598.79 to 114437789.01)	12062.39 (10641.96 to 13403.30)	48073325.12 (42462727.34 to 53415214.63)	11476.67 (10105.79 to 12753.29)	55417063.25 (49441512.73 to 61137880.10)	12643.65 (11197.75 to 14031.17)
2015	103668668.48 (92019409.76 to 114611718.35)	12061.69 (10644.57 to 13402.90)	48183183.24 (42533517.74 to 53489658.25)	11476.63 (10106.70 to 12754.70)	55485485.24 (49485892.02 to 61208373.00)	12643.33 (11199.37 to 14028.65)
2016	103907504.58 (92114966.33 to 114899434.58)	12067.52 (10646.24 to 13413.47)	48321290.48 (42627126.69 to 53645978.79)	11482.71 (10100.50 to 12768.94)	55586214.10 (49487839.64 to 61325870.16)	12649.87 (11209.47 to 14047.81)
2017	104229326.80 (92331371.96 to 115282365.49)	12083.08 (10654.49 to 13435.91)	48495276.01 (42755540.86 to 53882073.77)	11497.80 (10115.37 to 12804.58)	55734050.79 (49575831.11 to 61495712.54)	12666.75 (11227.77 to 14066.38)
2018	104530807.72 (92560412.43 to 115663515.73)	12098.76 (10662.99 to 13459.25)	48655119.84 (42892242.54 to 54142124.33)	11512.73 (10128.05 to 12829.40)	55875687.88 (49664460.57 to 61677845.37)	12683.89 (11239.06 to 14080.06)
2019	104703329.13 (92699747.90 to 115909256.17)	12105.68 (10668.93 to 13471.62)	48750757.52 (42984994.93 to 54330369.71)	11519.26 (10131.93 to 12840.56)	55952571.62 (49706986.64 to 61780612.60)	12691.91 (11239.25 to 14066.57)
2020	104418693.89 (92480133.84 to 115484807.75)	12073.40 (10637.42 to 13420.18)	48604772.72 (42890791.67 to 54025164.39)	11481.64 (10094.70 to 12779.65)	55813921.17 (49585783.22 to 61508957.79)	12665.75 (11217.23 to 14036.82)
2021	104292837.24 (92399738.42 to 115349658.98)	12070.27 (10635.74 to 13416.36)	48555908.52 (42852324.20 to 53951770.13)	11479.08 (10093.46 to 12782.11)	55736928.71 (49546328.77 to 61419006.97)	12662.55 (11215.82 to 14029.50)
Percentage Change, 1990-2021	0.04% (0.02% to 0.07%)	-0.01% (-0.01% to 0.00%)	0.05% (0.02% to 0.08%)	-0.01% (-0.01% to 0.00%)	0.04% (0.01% to 0.06%)	-0.01% (-0.01% to 0.00%)
Statistical Analysis	Spearman's ρ = 0.967 p-value < 0.001	Spearman's ρ = -0.467 p-value = 0.007	Spearman's ρ = 0.972 p-value < 0.001	Spearman's ρ = -0.390 p-value = 0.027	Spearman's ρ = 0.951 p-value < 0.001	Spearman's ρ = -0.353 p-value = 0.047
	Wilcoxon rank sum test between sex (count): p-value < 0.001 Wilcoxon rank sum test between sex (rate): p-value < 0.001					

Table S2d: Counts and age-standardized YLD rates of headache disorders from 1990 to 2021, by sex

	Both		Male		Female	
	Absolute number	**Age-standardized rate, per 100 000 people**	**Absolute number**	**Age-standardized rate, per 100 000 people**	**Absolute number**	**Age-standardized rate, per 100 000 people**
1990	5891748.16 (1583812.42 to 12128651.80)	693.03 (177.31 to 1449.58)	1974899.70 (515608.89 to 4145375.64)	477.96 (121.47 to 1008.77)	3916848.46 (1057242.13 to 7963031.06)	901.61 (227.71 to 1866.95)
1991	5925687.24 (1596400.37 to 12178527.82)	693.07 (176.66 to 1447.90)	1986907.86 (518629.78 to 4162960.00)	477.79 (121.01 to 1007.18)	3938779.38 (1063829.54 to 8007156.55)	902.19 (227.07 to 1867.78)
1992	5960165.39 (1607845.20 to 12253171.75)	693.22 (176.19 to 1449.69)	1998848.71 (522590.82 to 4195238.66)	477.72 (120.89 to 1010.83)	3961316.68 (1068232.90 to 8041800.81)	902.79 (226.06 to 1867.08)
1993	5992159.43 (1621479.44 to 12292164.07)	693.31 (176.17 to 1446.25)	2009034.34 (531130.72 to 4213618.51)	477.50 (121.28 to 1009.07)	3983125.08 (1072018.17 to 8086445.30)	903.34 (225.87 to 1865.55)
1994	6018465.78 (1628450.93 to 12359407.94)	693.36 (176.01 to 1444.98)	2017210.86 (533864.83 to 4223902.93)	477.31 (121.11 to 1007.52)	4001254.92 (1081514.80 to 8125768.51)	903.67 (226.20 to 1863.19)
1995	6042211.00 (1634587.19 to 12379288.47)	693.23 (175.43 to 1443.91)	2025027.14 (535079.54 to 4238616.52)	477.19 (121.08 to 1007.67)	4017183.86 (1081922.00 to 8140447.61)	903.52 (225.09 to 1860.46)
1996	6076003.68 (1654140.85 to 12453823.77)	694.22 (176.54 to 1443.93)	2034619.25 (541838.20 to 4265302.71)	477.46 (121.50 to 1010.63)	4041384.43 (1094586.64 to 8209522.85)	905.25 (225.92 to 1859.38)
1997	6123673.62 (1671163.92 to 12505875.87)	696.73 (177.71 to 1445.84)	2047253.83 (545602.16 to 4290712.62)	478.37 (121.54 to 1012.15)	4076419.79 (1108791.92 to 8277102.70)	909.38 (227.61 to 1862.83)
1998	6177850.48 (1697809.65 to 12624787.49)	699.74 (179.37 to 1452.16)	2061756.65 (554866.70 to 4313850.76)	479.50 (121.65 to 1017.76)	4116093.84 (1130981.28 to 8349476.18)	914.31 (230.84 to 1873.09)
1999	6226390.23 (1719153.88 to 12713813.79)	702.11 (180.51 to 1454.91)	2074823.32 (560758.82 to 4332274.49)	480.32 (122.38 to 1018.96)	4151566.90 (1143629.42 to 8413696.49)	918.31 (232.24 to 1880.96)
2000	6261203.67 (1729572.93 to 12774937.76)	703.02 (181.09 to 1456.20)	2085350.02 (566455.29 to 4351987.03)	480.66 (122.81 to 1019.23)	4175853.65 (1150465.75 to 8455648.77)	919.90 (233.40 to 1884.99)

2001	6284579.75 (1740241.17 to 12814829.31)	702.83 (181.45 to 1456.42)	2093651.49 (567170.00 to 4371587.17)	480.63 (122.31 to 1021.02)	4190928.25 (1155992.16 to 8480696.89)	919.69 (233.20 to 1889.47)
2002	6305091.51 (1746443.82 to 12848253.02)	702.64 (181.09 to 1456.74)	2100945.06 (571096.09 to 4373462.03)	480.64 (122.68 to 1018.76)	4204146.45 (1164410.37 to 8499310.03)	919.44 (233.10 to 1885.46)
2003	6324179.75 (1752398.25 to 12899082.03)	702.61 (181.20 to 1458.37)	2107696.46 (572963.91 to 4395301.15)	480.73 (122.58 to 1021.36)	4216483.30 (1169182.06 to 8528125.39)	919.40 (233.28 to 1888.12)
2004	6341910.45 (1767360.44 to 12950736.19)	702.54 (181.13 to 1460.27)	2113643.23 (573967.03 to 4422446.35)	480.70 (122.45 to 1026.00)	4228267.21 (1176568.94 to 8539995.03)	919.43 (232.54 to 1888.35)
2005	6360572.23 (1774510.22 to 12984624.75)	702.72 (180.90 to 1457.21)	2120420.01 (577421.24 to 4416301.75)	480.98 (121.67 to 1022.51)	4240152.23 (1185904.62 to 8579530.31)	919.65 (233.03 to 1885.63)
2006	6376459.38 (1784429.89 to 13002666.30)	703.07 (180.98 to 1458.83)	2125573.60 (579299.58 to 4424593.36)	481.23 (121.67 to 1023.81)	4250885.78 (1189352.88 to 8588943.87)	920.26 (232.73 to 1890.53)
2007	6391586.74 (1792395.22 to 13023643.84)	703.64 (180.92 to 1458.67)	2130993.28 (582078.46 to 4434857.28)	481.74 (121.90 to 1025.79)	4260593.46 (1198509.87 to 8613920.86)	921.04 (232.68 to 1889.57)
2008	6406698.20 (1804559.89 to 13030282.17)	704.43 (181.58 to 1462.12)	2136918.47 (586428.11 to 4447449.29)	482.53 (122.23 to 1024.91)	4269779.73 (1205946.71 to 8621535.24)	921.95 (233.18 to 1895.04)
2009	6418114.31 (1811896.70 to 13044628.86)	705.08 (181.63 to 1461.21)	2140661.09 (590192.62 to 4436582.98)	483.02 (123.04 to 1026.76)	4277453.23 (1210604.58 to 8632547.36)	922.87 (232.47 to 1892.49)
2010	6426613.72 (1820337.58 to 13051561.60)	705.63 (181.15 to 1464.11)	2143718.02 (592006.83 to 4443777.30)	483.47 (122.03 to 1026.94)	4282895.70 (1215158.72 to 8617514.25)	923.62 (232.84 to 1895.30)
2011	6433429.16 (1827530.21 to 13068070.24)	706.26 (181.43 to 1465.97)	2146528.02 (595628.50 to 4453196.05)	484.09 (122.54 to 1028.73)	4286901.14 (1221208.72 to 8640291.19)	924.34 (233.23 to 1897.35)
2012	6441752.15 (1840796.53 to 13101722.42)	707.19 (181.10 to 1468.83)	2150192.95 (599976.06 to 4443073.30)	484.90 (122.33 to 1031.80)	4291559.20 (1225733.49 to 8642013.24)	925.53 (232.69 to 1898.52)
2013	6453658.27 (1847603.93 to 13101318.02)	708.39 (180.45 to 1470.73)	2156790.81 (601302.38 to 4450741.54)	486.20 (122.16 to 1031.76)	4296867.47 (1226660.41 to 8650480.43)	926.83 (232.49 to 1902.69)

2014	6465059.94 (1855703.17 to 13135131.18)	709.29 (180.43 to 1476.97)	2163469.34 (605446.53 to 4470627.20)	487.25 (121.73 to 1033.04)	4301590.60 (1229647.74 to 8668704.82)	927.86 (233.22 to 1907.41)
2015	6474452.48 (1864039.47 to 13165444.57)	709.77 (180.63 to 1479.09)	2169550.74 (607368.07 to 4482051.16)	487.94 (122.54 to 1034.28)	4304901.74 (1232821.22 to 8663899.76)	928.48 (233.17 to 1906.12)
2016	6467040.41 (1858502.71 to 13136643.50)	708.43 (179.21 to 1475.14)	2172105.16 (612167.86 to 4480148.49)	487.80 (122.30 to 1035.01)	4294935.25 (1223355.02 to 8645401.65)	926.38 (231.63 to 1899.48)
2017	6445379.44 (1840759.74 to 13108407.19)	705.76 (177.01 to 1470.75)	2172119.97 (610537.53 to 4493855.97)	487.16 (121.79 to 1033.09)	4273259.47 (1208039.95 to 8626149.89)	922.12 (227.46 to 1892.67)
2018	6420069.49 (1814144.08 to 13051160.65)	702.78 (175.23 to 1462.87)	2170880.15 (607221.81 to 4487025.72)	486.32 (120.87 to 1032.78)	4249189.34 (1195748.44 to 8575879.90)	917.42 (225.52 to 1881.90)
2019	6403434.72 (1800490.17 to 13022538.04)	701.07 (173.80 to 1461.56)	2169402.84 (605330.19 to 4479584.44)	485.67 (120.78 to 1029.55)	4234031.88 (1192380.07 to 8547342.37)	915.00 (224.49 to 1881.06)
2020	6365442.66 (1801710.91 to 12953725.47)	697.32 (173.27 to 1455.06)	2160360.81 (608609.46 to 4453954.89)	483.68 (120.34 to 1027.31)	4205081.85 (1195083.96 to 8480623.28)	909.78 (223.35 to 1874.43)
2021	6345063.09 (1796988.70 to 12906373.08)	696.22 (173.05 to 1449.93)	2156683.04 (610227.14 to 4441134.25)	483.36 (120.11 to 1021.87)	4188380.05 (1191901.20 to 8451079.17)	908.18 (223.50 to 1866.52)
Percentage Change, 1990-2021	0.08% (0.04% to 0.14%)	0.00% (-0.02% to 0.02%)	0.09% (0.06% to 0.17%)	0.01% (-0.01% to 0.03%)	0.07% (0.04% to 0.13%)	0.01% (-0.02% to 0.03%)
Statistical Analysis	Spearman's ρ = 0.870 p-value < 0.001	Spearman's ρ = 0.658 p-value < 0.001	Spearman's ρ = 0.974 p-value < 0.001	Spearman's ρ = 0.924 p-value < 0.001	Spearman's ρ = 0.784 p-value < 0.001	Spearman's ρ = 0.625 p-value < 0.001
	Wilcoxon rank sum test between sex (count): p-value < 0.001 Wilcoxon rank sum test between sex (rate): p-value < 0.001					

Table S2e: Counts and age-standardized prevalence rates of migraine from 1990 to 2021, by sex

	Both		Male		Female	
	Absolute number	**Age-standardized rate, per 100 000 people**	**Absolute number**	**Age-standardized rate, per 100 000 people**	**Absolute number**	**Age-standardized rate, per 100 000 people**
1990	134693058.36 (116329423.36 to 155047785.69)	15984.72 (13736.58 to 18412.19)	44475919.65 (37797958.81 to 51602008.57)	10821.46 (9209.97 to 12554.12)	90217138.71 (78296922.34 to 103850256.71)	21021.72 (18154.62 to 24131.73)
1991	135454821.98 (117158297.04 to 155874976.41)	15990.38 (13742.59 to 18405.92)	44723463.71 (38026589.20 to 51819647.04)	10817.61 (9209.16 to 12542.04)	90731358.27 (78831111.06 to 104259524.42)	21043.97 (18169.20 to 24152.10)
1992	136229804.86 (118019318.31 to 156723412.16)	15998.12 (13758.18 to 18404.25)	44969275.19 (38263984.93 to 52040365.35)	10815.47 (9207.09 to 12535.96)	91260529.67 (79366253.76 to 104729087.83)	21066.97 (18192.89 to 24168.92)
1993	136953444.93 (118824914.56 to 157514925.11)	16003.67 (13774.34 to 18402.27)	45190747.88 (38479801.75 to 52227526.18)	10812.44 (9204.05 to 12524.31)	91762697.05 (79895488.06 to 105188526.18)	21083.74 (18223.40 to 24174.35)
1994	137541341.15 (119370472.32 to 158161124.30)	16007.56 (13780.95 to 18398.41)	45364294.51 (38692294.52 to 52358815.71)	10809.96 (9203.70 to 12523.35)	92177046.64 (80385205.16 to 105581916.48)	21094.36 (18242.47 to 24162.57)
1995	138074253.23 (119844745.85 to 158749773.36)	16009.18 (13783.80 to 18393.28)	45525453.73 (38888768.11 to 52474116.83)	10808.87 (9207.97 to 12526.70)	92548799.50 (80840511.51 to 105900039.55)	21097.89 (18268.98 to 24141.52)
1996	138753485.29 (120682698.42 to 159362391.32)	16026.96 (13814.92 to 18402.17)	45732033.32 (39085395.64 to 52570601.12)	10817.60 (9229.08 to 12523.07)	93021451.97 (81370117.32 to 106344189.99)	21124.58 (18333.27 to 24144.44)
1997	139663335.86 (121693720.68 to 160109384.73)	16070.82 (13881.46 to 18436.72)	45999957.35 (39396944.44 to 52814454.40)	10839.70 (9265.44 to 12511.15)	93663378.51 (81989887.63 to 107012606.81)	21190.64 (18448.88 to 24199.03)
1998	140676468.07 (122811872.01 to 161052961.21)	16120.70 (13964.51 to 18477.23)	46300411.24 (39765701.01 to 53102959.45)	10864.63 (9306.01 to 12507.98)	94376056.83 (82781744.57 to 107684129.46)	21266.57 (18573.79 to 24263.36)
1999	141590922.17 (123862969.57 to 161891767.69)	16160.50 (14031.11 to 18508.52)	46576908.34 (40108490.11 to 53457531.83)	10884.73 (9341.39 to 12510.24)	95014013.83 (83647300.06 to 108305782.56)	21327.92 (18637.32 to 24314.79)
2000	142268703.92 (124767707.65 to 162517476.41)	16175.66 (14067.62 to 18502.40)	46792801.21 (40384959.73 to 53724001.35)	10893.22 (9366.61 to 12512.07)	95475902.72 (84325029.45 to 108770568.72)	21351.86 (18657.16 to 24338.70)

2001	142724591.54 (125156238.08 to 162972619.12)	16169.63 (14067.06 to 18502.12)	46950939.60 (40539665.72 to 53873181.64)	10891.31 (9368.83 to 12508.22)	95773651.94 (84566639.62 to 109144313.54)	21344.69 (18648.60 to 24320.87)
2002	143093687.91 (125461415.16 to 163432992.27)	16161.70 (14065.19 to 18498.27)	47077795.28 (40663472.38 to 53953375.13)	10888.00 (9364.72 to 12512.91)	96015892.63 (84823107.26 to 109455673.89)	21335.16 (18639.49 to 24308.83)
2003	143409787.87 (125725712.02 to 163845194.90)	16153.83 (14063.01 to 18491.05)	47182600.59 (40764604.75 to 54038985.90)	10884.17 (9364.90 to 12512.93)	96227187.28 (85052589.64 to 109739567.61)	21325.83 (18636.71 to 24297.88)
2004	143711254.73 (125972249.02 to 164188168.15)	16148.26 (14062.23 to 18484.49)	47284214.58 (40861267.63 to 54162629.48)	10881.87 (9367.46 to 12511.89)	96427040.15 (85242797.77 to 110021500.85)	21320.32 (18636.70 to 24291.54)
2005	144032298.34 (126315147.65 to 164497273.35)	16149.50 (14067.00 to 18485.62)	47389359.21 (40949372.97 to 54205903.71)	10883.81 (9373.45 to 12516.76)	96642939.13 (85346247.25 to 110331358.73)	21324.38 (18653.44 to 24295.57)
2006	144329266.75 (126617770.40 to 164815857.81)	16159.22 (14071.63 to 18498.85)	47489212.72 (41032049.40 to 54295778.47)	10892.36 (9380.61 to 12527.06)	96840054.03 (85528384.97 to 110561362.70)	21338.70 (18663.33 to 24314.76)
2007	144603974.27 (126881238.26 to 165106286.06)	16174.90 (14081.36 to 18518.33)	47587807.59 (41115886.64 to 54381327.39)	10906.19 (9391.90 to 12543.73)	97016166.67 (85692224.54 to 110748443.98)	21359.43 (18678.72 to 24340.56)
2008	144859611.27 (127119177.57 to 165363524.73)	16192.57 (14092.80 to 18539.73)	47677018.84 (41193867.35 to 54455610.87)	10921.02 (9403.70 to 12561.95)	97182592.43 (85851947.51 to 110926790.08)	21382.40 (18696.35 to 24368.46)
2009	145027292.36 (127313796.97 to 165508643.07)	16208.40 (14102.72 to 18558.60)	47733277.83 (41260858.39 to 54491252.37)	10933.51 (9413.09 to 12577.55)	97294014.53 (85954458.15 to 111034548.11)	21403.91 (18714.88 to 24394.26)
2010	145099664.90 (127402287.47 to 165523026.24)	16219.65 (14109.15 to 18571.75)	47746227.67 (41293183.25 to 54501078.88)	10940.40 (9417.43 to 12586.66)	97353437.23 (85988724.51 to 111076069.08)	21421.54 (18731.09 to 24415.19)
2011	145166843.31 (127481625.63 to 165743694.52)	16236.34 (14114.99 to 18605.63)	47767118.15 (41319224.82 to 54573049.38)	10953.25 (9426.19 to 12615.80)	97399725.16 (85998707.97 to 111253380.81)	21444.00 (18740.08 to 24466.81)
2012	145320744.63 (127537203.09 to 166049997.91)	16265.20 (14133.65 to 18656.32)	47848489.90 (41392286.51 to 54729593.50)	10980.10 (9444.76 to 12661.63)	97472254.73 (86024597.99 to 111369167.42)	21477.68 (18778.18 to 24535.95)
2013	145532308.77 (127561746.88 to 166232019.90)	16296.67 (14155.39 to 18712.14)	47969617.03 (41494901.94 to 54933187.32)	11011.65 (9475.27 to 12706.52)	97562691.74 (86026344.35 to 111483549.79)	21513.32 (18820.25 to 24611.08)

2014	145727494.72 (127686748.10 to 166488787.46)	16321.50 (14171.48 to 18747.16)	48097745.77 (41598950.78 to 55143719.49)	11038.89 (9499.24 to 12754.97)	97629748.95 (86015818.12 to 111579247.61)	21542.31 (18832.46 to 24676.71)
2015	145836081.53 (127787951.60 to 166646606.38)	16331.12 (14172.69 to 18762.00)	48193831.09 (41705280.59 to 55244136.24)	11052.71 (9507.80 to 12780.13)	97642250.44 (85938166.55 to 111613667.38)	21556.49 (18828.22 to 24702.70)
2016	145692127.25 (127398278.47 to 166589513.22)	16311.20 (14129.47 to 18748.05)	48209751.13 (41689638.26 to 55325439.26)	11045.88 (9495.77 to 12774.44)	97482376.11 (85728485.58 to 111504788.06)	21533.24 (18786.43 to 24705.48)
2017	145333825.14 (126762140.41 to 166597760.75)	16267.57 (14064.11 to 18713.89)	48170200.61 (41602811.76 to 55407143.56)	11025.41 (9469.78 to 12762.20)	97163624.54 (85158372.96 to 111331986.08)	21476.50 (18688.87 to 24650.85)
2018	144912123.85 (126188267.64 to 166574579.59)	16219.55 (13987.28 to 18676.25)	48105342.20 (41480790.99 to 55536986.39)	11001.05 (9437.68 to 12741.96)	96806781.65 (84613783.41 to 111113224.75)	21414.21 (18579.38 to 24616.96)
2019	144559444.37 (125753778.74 to 166535409.43)	16187.88 (13942.34 to 18665.64)	48042019.27 (41372568.19 to 55530835.70)	10983.37 (9413.41 to 12731.24)	96517425.10 (84158698.17 to 111109440.71)	21377.00 (18499.20 to 24585.20)
2020	143837136.25 (125122906.66 to 165669589.69)	16128.64 (13894.64 to 18590.34)	47871621.82 (41224119.13 to 55198048.76)	10951.84 (9378.11 to 12683.32)	95965514.43 (83809184.61 to 110397195.97)	21297.28 (18477.94 to 24499.88)
2021	143542170.14 (124859309.64 to 165307694.92)	16128.60 (13894.33 to 18592.33)	47804150.91 (41171341.16 to 55104465.37)	10952.93 (9377.99 to 12681.88)	95738019.23 (83608895.84 to 110149171.39)	21302.28 (18481.83 to 24506.50)
Percentage Change, 1990-2021	0.07% (0.04% to 0.09%)	0.01% (0.00% to 0.02%)	0.07% (0.04% to 0.11%)	0.01% (0.00% to 0.03%)	0.06% (0.03% to 0.09%)	0.01% (0.00% to 0.03%)
Statistical Analysis	Spearman's ρ = 0.850 p-value < 0.001	Spearman's ρ = 0.752 p-value < 0.001	Spearman's ρ = 0.964 p-value < 0.001	Spearman's ρ = 0.911 p-value < 0.001	Spearman's ρ = 0.775 p-value < 0.001	Spearman's ρ = 0.757 p-value < 0.001
	Wilcoxon rank sum test between sex (count): p-value < 0.001 Wilcoxon rank sum test between sex (rate): p-value < 0.001					

Table S2f: Counts and age-standardized DALY rates of migraine from 1990 to 2021, by sex

	Both		Male		Female	
	Absolute number	Age-standardized rate, per 100 000 people	Absolute number	Age-standardized rate, per 100 000 people	Absolute number	Age-standardized rate, per 100 000 people
1990	5203117.75 (1068484.67 to 11017419.82)	614.32 (118.25 to 1310.40)	1711779.75 (344885.26 to 3748341.36)	415.00 (81.03 to 914.80)	3491338.00 (724875.78 to 7380118.47)	808.18 (153.69 to 1729.52)
1991	5233374.45 (1077944.74 to 11082768.84)	614.50 (118.40 to 1308.54)	1722040.31 (347274.24 to 3764152.54)	414.90 (80.92 to 913.44)	3511334.14 (731314.07 to 7431239.74)	808.92 (153.49 to 1730.73)
1992	5263981.26 (1088785.02 to 11132458.29)	614.73 (118.60 to 1309.38)	1732196.82 (352037.45 to 3787264.37)	414.87 (81.27 to 914.14)	3531784.44 (736867.02 to 7449312.49)	809.64 (153.55 to 1727.36)
1993	5292235.82 (1094033.72 to 11189432.07)	614.89 (118.40 to 1309.05)	1740832.37 (353073.55 to 3811611.12)	414.69 (80.93 to 915.56)	3551403.45 (742893.32 to 7512211.32)	810.24 (153.86 to 1729.77)
1994	5315374.87 (1100951.05 to 11239399.52)	614.99 (118.33 to 1309.08)	1747760.44 (354617.16 to 3825588.69)	414.54 (80.73 to 915.64)	3567614.44 (748008.38 to 7531176.77)	810.62 (154.08 to 1726.90)
1995	5336306.52 (1107023.82 to 11258291.05)	614.95 (118.31 to 1309.37)	1754371.46 (357089.45 to 3834257.69)	414.47 (80.69 to 913.78)	3581935.06 (753229.17 to 7547686.37)	810.60 (154.25 to 1723.69)
1996	5365535.00 (1116517.33 to 11322799.04)	615.84 (118.62 to 1307.67)	1762634.57 (360719.20 to 3851453.97)	414.75 (80.98 to 917.56)	3602900.43 (758193.80 to 7603457.11)	812.11 (154.50 to 1732.33)
1997	5406705.39 (1133667.03 to 11411809.43)	618.05 (119.82 to 1311.56)	1773558.66 (363764.64 to 3852893.41)	415.60 (81.15 to 914.59)	3633146.72 (771242.72 to 7634124.76)	815.69 (156.51 to 1742.52)
1998	5453114.53 (1148182.48 to 11501960.43)	620.64 (120.59 to 1316.87)	1786030.05 (367675.65 to 3884157.50)	416.63 (81.39 to 917.05)	3667084.48 (780842.86 to 7691781.85)	819.89 (157.62 to 1752.11)
1999	5494987.66 (1164931.43 to 11610753.26)	622.72 (121.72 to 1321.54)	1797319.64 (373454.38 to 3906078.72)	417.40 (82.22 to 918.90)	3697668.02 (791459.38 to 7727744.66)	823.34 (159.14 to 1757.73)
2000	5524955.74 (1174414.40 to 11675328.08)	623.54 (122.17 to 1322.59)	1806344.76 (377725.34 to 3918319.01)	417.75 (82.31 to 919.04)	3718610.97 (796647.14 to 7779702.70)	824.73 (159.99 to 1764.47)

2001	5544573.28 (1180698.77 to 11728066.50)	623.37 (122.05 to 1324.41)	1813190.01 (378493.90 to 3935854.69)	417.72 (81.93 to 918.56)	3731383.27 (802204.88 to 7791352.24)	824.54 (160.15 to 1761.62)
2002	5561383.95 (1192464.25 to 11749879.26)	623.17 (122.14 to 1322.27)	1819068.21 (382806.64 to 3936553.58)	417.72 (82.29 to 919.28)	3742315.74 (809501.86 to 7813179.49)	824.25 (159.77 to 1763.01)
2003	5577012.31 (1198508.08 to 11795215.96)	623.12 (122.29 to 1322.89)	1824509.47 (383418.02 to 3946781.49)	417.79 (81.95 to 917.03)	3752502.84 (816059.89 to 7845245.08)	824.18 (160.66 to 1765.90)
2004	5591156.33 (1208181.31 to 11833329.19)	623.01 (122.20 to 1323.42)	1829166.26 (386324.79 to 3970323.61)	417.74 (81.97 to 922.29)	3761990.07 (822841.56 to 7866300.04)	824.16 (160.47 to 1768.01)
2005	5606695.59 (1210095.46 to 11825853.15)	623.22 (122.23 to 1322.20)	1834818.82 (387915.94 to 3971207.74)	418.05 (81.80 to 920.37)	3771876.77 (824454.09 to 7879340.67)	824.40 (160.75 to 1764.01)
2006	5619842.43 (1221604.02 to 11880829.49)	623.61 (122.55 to 1326.86)	1839024.40 (393503.79 to 3984221.73)	418.33 (82.47 to 923.05)	3780818.03 (830879.20 to 7874694.27)	825.03 (160.78 to 1767.68)
2007	5632229.74 (1225103.69 to 11898608.54)	624.17 (121.77 to 1328.40)	1843342.25 (393320.33 to 3987559.83)	418.81 (82.01 to 921.58)	3788887.49 (832561.42 to 7889809.16)	825.82 (159.71 to 1767.80)
2008	5644670.43 (1233868.02 to 11923014.03)	624.96 (122.19 to 1329.61)	1848296.75 (395672.45 to 3991371.99)	419.60 (82.12 to 925.73)	3796373.67 (838521.79 to 7904526.27)	826.70 (160.52 to 1771.70)
2009	5653913.65 (1236833.49 to 11928776.04)	625.63 (122.19 to 1329.89)	1851203.56 (398041.12 to 4001917.29)	420.09 (82.28 to 926.08)	3802710.09 (840763.22 to 7920029.49)	827.66 (160.32 to 1772.49)
2010	5660086.52 (1243359.80 to 11952827.00)	626.19 (122.11 to 1329.68)	1853370.66 (400963.60 to 3995753.88)	420.52 (82.37 to 924.78)	3806715.86 (842396.20 to 7923004.05)	828.42 (160.13 to 1774.44)
2011	5664877.56 (1244740.13 to 11934887.15)	626.82 (122.09 to 1332.68)	1855403.71 (400418.82 to 4006099.22)	421.12 (82.01 to 925.17)	3809473.85 (844321.32 to 7920138.93)	829.15 (160.48 to 1776.46)
2012	5671134.02 (1250178.61 to 11932296.73)	627.73 (121.80 to 1336.02)	1858151.50 (400367.22 to 4025156.06)	421.89 (81.72 to 927.84)	3812982.52 (849811.39 to 7918470.77)	830.33 (160.23 to 1777.74)
2013	5680870.38 (1248504.92 to 11936599.68)	628.93 (121.01 to 1336.61)	1863674.77 (399686.02 to 4025412.98)	423.13 (81.24 to 931.87)	3817195.62 (849054.65 to 7920472.40)	831.65 (159.15 to 1783.60)

2014	5689836.79 (1260264.71 to 11951089.62)	629.80 (121.41 to 1339.86)	1868992.35 (406345.19 to 4029482.04)	424.08 (81.77 to 935.61)	3820844.44 (853919.52 to 7921383.80)	832.71 (159.19 to 1786.48)
2015	5697078.78 (1263604.05 to 11942422.27)	630.31 (121.13 to 1342.51)	1873947.53 (405630.33 to 4044393.70)	424.77 (81.48 to 935.51)	3823131.26 (857973.72 to 7924684.57)	833.38 (159.38 to 1786.84)
2016	5689607.96 (1260881.92 to 11907561.56)	629.19 (120.51 to 1335.86)	1875512.94 (407233.93 to 4045363.17)	424.61 (81.35 to 937.56)	3814095.02 (853647.99 to 7894115.62)	831.68 (158.25 to 1778.37)
2017	5670376.40 (1250075.91 to 11886840.44)	626.92 (118.91 to 1332.80)	1874691.48 (406543.74 to 4048124.77)	423.96 (81.25 to 937.67)	3795684.92 (843745.82 to 7865797.35)	828.19 (155.39 to 1774.68)
2018	5647865.76 (1236241.30 to 11877457.79)	624.38 (117.09 to 1328.72)	1872792.92 (404996.54 to 4038396.08)	423.13 (80.49 to 935.49)	3775072.84 (830705.04 to 7849776.55)	824.31 (152.76 to 1767.47)
2019	5632053.76 (1231907.06 to 11846822.79)	622.86 (116.12 to 1326.36)	1870739.64 (404956.89 to 4011935.59)	422.49 (80.06 to 936.11)	3761314.12 (826238.06 to 7851427.46)	822.25 (151.29 to 1754.01)
2020	5595986.89 (1233370.21 to 11767494.34)	619.40 (116.04 to 1318.92)	1862495.26 (405053.57 to 3981008.41)	420.77 (79.54 to 930.32)	3733491.63 (827993.47 to 7787135.18)	817.33 (151.33 to 1746.36)
2021	5577086.08 (1234081.57 to 11719998.01)	618.43 (116.07 to 1315.08)	1859028.36 (409180.70 to 3972660.88)	420.49 (81.01 to 930.36)	3718057.71 (824559.40 to 7770294.82)	815.91 (151.00 to 1739.13)
Percentage Change, 1990-2021	0.07% (0.04% to 0.15%)	0.01% (-0.02% to 0.02%)	0.09% (0.05% to 0.18%)	0.01% (-0.01% to 0.03%)	0.06% (0.03% to 0.13%)	0.01% (-0.02% to 0.03%)
Statistical Analysis	Spearman's ρ = 0.848 p-value < 0.001	Spearman's ρ = 0.699 p-value < 0.001	Spearman's ρ = 0.970 p-value < 0.001	Spearman's ρ = 0.924 p-value < 0.001	Spearman's ρ = 0.761 p-value < 0.001	Spearman's ρ = 0.661 p-value < 0.001
	Wilcoxon rank sum test between sex (count): p-value < 0.001 Wilcoxon rank sum test between sex (rate): p-value < 0.001					

Table S2g: Counts and age-standardized incidence rates of migraine from 1990 to 2021, by sex

	Both		Male		Female	
	Absolute number	Age-standardized rate, per 100 000 people	Absolute number	Age-standardized rate, per 100 000 people	Absolute number	Age-standardized rate, per 100 000 people
1990	9470368.50 (8249961.74 to 10780895.79)	1232.64 (1072.47 to 1401.37)	3319452.75 (2856376.09 to 3825508.22)	864.03 (744.61 to 990.51)	6150915.75 (5407171.65 to 6949414.63)	1607.95 (1401.76 to 1823.58)
1991	9491405.84 (8270298.28 to 10814722.55)	1231.08 (1071.23 to 1399.35)	3329194.52 (2865043.37 to 3835585.91)	863.29 (743.87 to 989.21)	6162211.32 (5414231.96 to 6965829.65)	1605.66 (1399.97 to 1820.41)
1992	9510308.11 (8287553.28 to 10847963.16)	1229.78 (1070.04 to 1397.56)	3338127.64 (2874645.52 to 3847408.18)	862.71 (743.17 to 989.02)	6172180.47 (5419908.75 to 6985149.00)	1603.70 (1398.94 to 1818.09)
1993	9526826.69 (8299318.79 to 10880572.87)	1228.66 (1069.08 to 1396.10)	3345441.73 (2882513.22 to 3853618.00)	862.18 (742.72 to 989.04)	6181384.95 (5424209.93 to 7005136.74)	1601.99 (1398.15 to 1816.27)
1994	9533769.71 (8303529.22 to 10896221.26)	1227.87 (1068.47 to 1395.08)	3348472.22 (2886083.08 to 3855056.72)	861.83 (742.43 to 989.25)	6185297.49 (5423550.07 to 7021339.14)	1600.63 (1397.75 to 1814.99)
1995	9535441.95 (8303909.68 to 10899870.56)	1227.39 (1068.23 to 1394.73)	3349059.03 (2889066.86 to 3854454.84)	861.66 (742.28 to 989.20)	6186382.91 (5427358.73 to 7033811.22)	1599.70 (1397.80 to 1814.20)
1996	9538229.88 (8305844.34 to 10889781.46)	1227.81 (1068.18 to 1395.40)	3350287.75 (2884577.94 to 3852763.92)	862.14 (743.34 to 988.88)	6187942.13 (5427911.51 to 7030738.35)	1600.00 (1397.73 to 1815.46)
1997	9543208.70 (8317306.73 to 10884597.12)	1229.52 (1069.44 to 1397.24)	3352648.04 (2883033.58 to 3851773.26)	863.55 (745.23 to 989.03)	6190560.67 (5429413.92 to 7028533.24)	1602.05 (1399.28 to 1817.02)
1998	9549013.50 (8330050.74 to 10879656.17)	1231.88 (1071.33 to 1400.95)	3355318.14 (2885070.11 to 3851518.13)	865.38 (747.42 to 989.66)	6193695.36 (5431565.88 to 7023277.60)	1605.06 (1401.87 to 1820.02)
1999	9548774.89 (8335370.56 to 10859080.89)	1234.24 (1073.14 to 1403.85)	3355640.20 (2886040.22 to 3848746.72)	867.15 (749.49 to 991.26)	6193134.69 (5432363.71 to 7019561.94)	1608.16 (1406.55 to 1822.99)
2000	9538344.46 (8331088.35 to 10846277.92)	1236.04 (1075.27 to 1405.01)	3351851.11 (2883298.29 to 3843362.23)	868.45 (751.14 to 992.78)	6186493.35 (5432783.00 to 7015860.72)	1610.62 (1410.35 to 1824.55)

2001	9518771.50 (8317451.89 to 10819552.76)	1237.36 (1076.61 to 1406.18)	3344391.05 (2878412.67 to 3833474.97)	869.29 (751.66 to 993.51)	6174380.45 (5421345.69 to 7002931.64)	1612.59 (1412.04 to 1826.25)
2002	9492927.92 (8295832.93 to 10782964.94)	1238.73 (1077.93 to 1407.13)	3334226.12 (2872067.55 to 3822277.37)	870.02 (752.13 to 994.21)	6158701.80 (5407442.01 to 6980135.73)	1614.79 (1414.00 to 1828.24)
2003	9463368.22 (8270173.27 to 10741593.97)	1240.17 (1079.21 to 1408.00)	3322348.82 (2863354.13 to 3809880.36)	870.71 (752.62 to 995.11)	6141019.40 (5392035.69 to 6952731.56)	1617.18 (1416.03 to 1830.24)
2004	9432549.81 (8237437.39 to 10699481.41)	1241.65 (1080.55 to 1408.76)	3310473.15 (2853899.09 to 3794665.11)	871.42 (753.15 to 996.49)	6122076.66 (5375659.67 to 6926426.83)	1619.65 (1417.95 to 1832.26)
2005	9402086.41 (8204840.82 to 10667699.59)	1243.32 (1081.98 to 1409.73)	3299049.69 (2844048.38 to 3778671.23)	872.31 (753.51 to 997.78)	6103036.72 (5359436.82 to 6907214.55)	1622.32 (1419.85 to 1834.07)
2006	9370677.74 (8167667.00 to 10635994.73)	1245.18 (1083.57 to 1411.62)	3287909.92 (2834547.70 to 3764165.29)	873.44 (754.43 to 999.09)	6082767.82 (5345309.58 to 6886875.27)	1625.10 (1422.10 to 1836.59)
2007	9338479.47 (8133758.31 to 10603638.94)	1247.06 (1085.03 to 1413.66)	3276973.02 (2826438.44 to 3752651.49)	874.63 (755.44 to 1000.48)	6061506.45 (5327605.27 to 6867714.94)	1627.81 (1424.11 to 1839.19)
2008	9307879.56 (8107383.43 to 10572453.54)	1248.76 (1086.28 to 1415.38)	3266739.73 (2814969.80 to 3741866.36)	875.68 (756.38 to 1001.69)	6041139.83 (5307014.74 to 6850268.91)	1630.27 (1425.85 to 1841.60)
2009	9276848.35 (8079263.77 to 10548315.42)	1250.22 (1087.29 to 1416.78)	3256382.17 (2804782.36 to 3728379.29)	876.49 (757.12 to 1002.60)	6020466.19 (5288360.02 to 6831752.32)	1632.47 (1427.32 to 1843.80)
2010	9243982.12 (8054646.10 to 10522024.10)	1251.29 (1087.96 to 1417.83)	3245010.71 (2795792.57 to 3710746.40)	876.89 (757.54 to 1002.99)	5998971.41 (5272396.00 to 6810661.70)	1634.29 (1428.45 to 1845.79)
2011	9214182.19 (8029487.78 to 10490221.03)	1252.52 (1089.16 to 1419.47)	3235578.16 (2789126.71 to 3692335.40)	877.62 (758.27 to 1004.29)	5978604.03 (5251985.36 to 6779515.42)	1636.09 (1426.84 to 1847.66)
2012	9191990.39 (8010276.16 to 10454242.54)	1254.23 (1090.01 to 1422.84)	3230950.42 (2787062.96 to 3690829.14)	879.14 (759.61 to 1005.72)	5961039.97 (5234049.10 to 6749991.95)	1638.10 (1428.42 to 1850.37)
2013	9177562.99 (7996314.65 to 10426753.07)	1255.81 (1090.67 to 1425.88)	3230505.26 (2787390.11 to 3692445.71)	880.82 (760.19 to 1007.80)	5947057.73 (5218637.27 to 6729112.18)	1639.82 (1430.46 to 1853.16)

2014	9169803.63 (7986705.72 to 10417820.23)	1256.91 (1091.04 to 1427.83)	3232884.35 (2791784.35 to 3699135.04)	882.15 (759.71 to 1008.75)	5936919.28 (5204602.98 to 6713409.84)	1641.06 (1429.76 to 1855.97)
2015	9163344.13 (7989947.07 to 10416503.34)	1257.07 (1090.62 to 1428.81)	3235296.40 (2799047.36 to 3708172.65)	882.59 (759.50 to 1010.00)	5928047.72 (5192997.14 to 6701974.56)	1641.47 (1427.66 to 1857.84)
2016	9154177.57 (7984888.96 to 10418588.90)	1256.06 (1090.00 to 1430.57)	3236087.41 (2792519.10 to 3706602.19)	882.04 (759.52 to 1011.62)	5918090.16 (5185753.21 to 6697946.75)	1640.54 (1427.78 to 1858.86)
2017	9143578.16 (7973139.77 to 10404473.18)	1254.28 (1088.60 to 1429.22)	3236573.42 (2787881.25 to 3710852.67)	881.04 (758.07 to 1010.86)	5907004.74 (5176150.24 to 6682790.71)	1638.51 (1427.57 to 1858.74)
2018	9130557.19 (7956403.73 to 10371478.17)	1252.33 (1087.01 to 1426.10)	3235911.31 (2784218.76 to 3710043.38)	879.92 (756.24 to 1008.52)	5894645.87 (5165586.01 to 6661900.46)	1636.19 (1426.84 to 1855.51)
2019	9114415.15 (7926887.89 to 10345946.67)	1250.92 (1085.91 to 1423.63)	3233400.42 (2783019.83 to 3707505.50)	879.10 (753.89 to 1007.84)	5881014.74 (5142109.98 to 6643642.75)	1634.58 (1426.64 to 1854.08)
2020	9081416.37 (7902332.48 to 10316991.08)	1248.20 (1084.02 to 1419.52)	3223550.59 (2774758.31 to 3694479.18)	877.22 (752.33 to 1006.32)	5857865.78 (5116795.08 to 6621261.19)	1631.29 (1422.91 to 1851.19)
2021	9057610.76 (7881493.51 to 10303044.20)	1248.05 (1084.00 to 1419.21)	3217801.56 (2771062.45 to 3686607.65)	877.41 (752.49 to 1006.54)	5839809.20 (5101893.46 to 6597893.91)	1631.07 (1422.68 to 1851.11)
Percentage Change, 1990-2021	-0.04% (-0.07% to -0.02%)	0.01% (0.01% to 0.02%)	-0.03% (-0.06% to -0.01%)	0.02% (0.01% to 0.03%)	-0.05% (-0.08% to -0.03%)	0.01% (0.01% to 0.02%)
Statistical Analysis	Spearman's ρ = -0.903 p-value < 0.001	Spearman's ρ = 0.877 p-value < 0.001	Spearman's ρ = -0.865 p-value < 0.001	Spearman's ρ = 0.923 p-value < 0.001	Spearman's ρ = -0.908 p-value < 0.001	Spearman's ρ = 0.889 p-value < 0.001
	Wilcoxon rank sum test between sex (count): p-value < 0.001 Wilcoxon rank sum test between sex (rate): p-value < 0.001					

Table S2h: Counts and age-standardized YLD rates of migraine from 1990 to 2021, by sex

	Both		Male		Female	
	Absolute number	**Age-standardized rate, per 100 000 people**	**Absolute number**	**Age-standardized rate, per 100 000 people**	**Absolute number**	**Age-standardized rate, per 100 000 people**
1990	5203117.75 (1068484.67 to 11017419.82)	614.32 (118.25 to 1310.40)	1711779.75 (344885.26 to 3748341.36)	415.00 (81.03 to 914.80)	3491338.00 (724875.78 to 7380118.47)	808.18 (153.69 to 1729.52)
1991	5233374.45 (1077944.74 to 11082768.84)	614.50 (118.40 to 1308.54)	1722040.31 (347274.24 to 3764152.54)	414.90 (80.92 to 913.44)	3511334.14 (731314.07 to 7431239.74)	808.92 (153.49 to 1730.73)
1992	5263981.26 (1088785.02 to 11132458.29)	614.73 (118.60 to 1309.38)	1732196.82 (352037.45 to 3787264.37)	414.87 (81.27 to 914.14)	3531784.44 (736867.02 to 7449312.49)	809.64 (153.55 to 1727.36)
1993	5292235.82 (1094033.72 to 11189432.07)	614.89 (118.40 to 1309.05)	1740832.37 (353073.55 to 3811611.12)	414.69 (80.93 to 915.56)	3551403.45 (742893.32 to 7512211.32)	810.24 (153.86 to 1729.77)
1994	5315374.87 (1100951.05 to 11239399.52)	614.99 (118.33 to 1309.08)	1747760.44 (354617.16 to 3825588.69)	414.54 (80.73 to 915.64)	3567614.44 (748008.38 to 7531176.77)	810.62 (154.08 to 1726.90)
1995	5336306.52 (1107023.82 to 11258291.05)	614.95 (118.31 to 1309.37)	1754371.46 (357089.45 to 3834257.69)	414.47 (80.69 to 913.78)	3581935.06 (753229.17 to 7547686.37)	810.60 (154.25 to 1723.69)
1996	5365535.00 (1116517.33 to 11322799.04)	615.84 (118.62 to 1307.67)	1762634.57 (360719.20 to 3851453.97)	414.75 (80.98 to 917.56)	3602900.43 (758193.80 to 7603457.11)	812.11 (154.50 to 1732.33)
1997	5406705.39 (1133667.03 to 11411809.43)	618.05 (119.82 to 1311.56)	1773558.66 (363764.64 to 3852893.41)	415.60 (81.15 to 914.59)	3633146.72 (771242.72 to 7634124.76)	815.69 (156.51 to 1742.52)
1998	5453114.53 (1148182.48 to 11501960.43)	620.64 (120.59 to 1316.87)	1786030.05 (367675.65 to 3884157.50)	416.63 (81.39 to 917.05)	3667084.48 (780842.86 to 7691781.85)	819.89 (157.62 to 1752.11)
1999	5494987.66 (1164931.43 to 11610753.26)	622.72 (121.72 to 1321.54)	1797319.64 (373454.38 to 3906078.72)	417.40 (82.22 to 918.90)	3697668.02 (791459.38 to 7727744.66)	823.34 (159.14 to 1757.73)
2000	5524955.74 (1174414.40 to 11675328.08)	623.54 (122.17 to 1322.59)	1806344.76 (377725.34 to 3918319.01)	417.75 (82.31 to 919.04)	3718610.97 (796647.14 to 7779702.70)	824.73 (159.99 to 1764.47)

2001	5544573.28 (1180698.77 to 11728066.50)	623.37 (122.05 to 1324.41)	1813190.01 (378493.90 to 3935854.69)	417.72 (81.93 to 918.56)	3731383.27 (802204.88 to 7791352.24)	824.54 (160.15 to 1761.62)
2002	5561383.95 (1192464.25 to 11749879.26)	623.17 (122.14 to 1322.27)	1819068.21 (382806.64 to 3936553.58)	417.72 (82.29 to 919.28)	3742315.74 (809501.86 to 7813179.49)	824.25 (159.77 to 1763.01)
2003	5577012.31 (1198508.08 to 11795215.96)	623.12 (122.29 to 1322.89)	1824509.47 (383418.02 to 3946781.49)	417.79 (81.95 to 917.03)	3752502.84 (816059.89 to 7845245.08)	824.18 (160.66 to 1765.90)
2004	5591156.33 (1208181.31 to 11833329.19)	623.01 (122.20 to 1323.42)	1829166.26 (386324.79 to 3970323.61)	417.74 (81.97 to 922.29)	3761990.07 (822841.56 to 7866300.04)	824.16 (160.47 to 1768.01)
2005	5606695.59 (1210095.46 to 11825853.15)	623.22 (122.23 to 1322.20)	1834818.82 (387915.94 to 3971207.74)	418.05 (81.80 to 920.37)	3771876.77 (824454.09 to 7879340.67)	824.40 (160.75 to 1764.01)
2006	5619842.43 (1221604.02 to 11880829.49)	623.61 (122.55 to 1326.86)	1839024.40 (393503.79 to 3984221.73)	418.33 (82.47 to 923.05)	3780818.03 (830879.20 to 7874694.27)	825.03 (160.78 to 1767.68)
2007	5632229.74 (1225103.69 to 11898608.54)	624.17 (121.77 to 1328.40)	1843342.25 (393320.33 to 3987559.83)	418.81 (82.01 to 921.58)	3788887.49 (832561.42 to 7889809.16)	825.82 (159.71 to 1767.80)
2008	5644670.43 (1233868.02 to 11923014.03)	624.96 (122.19 to 1329.61)	1848296.75 (395672.45 to 3991371.99)	419.60 (82.12 to 925.73)	3796373.67 (838521.79 to 7904526.27)	826.70 (160.52 to 1771.70)
2009	5653913.65 (1236833.49 to 11928776.04)	625.63 (122.19 to 1329.89)	1851203.56 (398041.12 to 4001917.29)	420.09 (82.28 to 926.08)	3802710.09 (840763.22 to 7920029.49)	827.66 (160.32 to 1772.49)
2010	5660086.52 (1243359.80 to 11952827.00)	626.19 (122.11 to 1329.68)	1853370.66 (400963.60 to 3995753.88)	420.52 (82.37 to 924.78)	3806715.86 (842396.20 to 7923004.05)	828.42 (160.13 to 1774.44)
2011	5664877.56 (1244740.13 to 11934887.15)	626.82 (122.09 to 1332.68)	1855403.71 (400418.82 to 4006099.22)	421.12 (82.01 to 925.17)	3809473.85 (844321.32 to 7920138.93)	829.15 (160.48 to 1776.46)
2012	5671134.02 (1250178.61 to 11932296.73)	627.73 (121.80 to 1336.02)	1858151.50 (400367.22 to 4025156.06)	421.89 (81.72 to 927.84)	3812982.52 (849811.39 to 7918470.77)	830.33 (160.23 to 1777.74)
2013	5680870.38 (1248504.92 to 11936599.68)	628.93 (121.01 to 1336.61)	1863674.77 (399686.02 to 4025412.98)	423.13 (81.24 to 931.87)	3817195.62 (849054.65 to 7920472.40)	831.65 (159.15 to 1783.60)

2014	5689836.79 (1260264.71 to 11951089.62)	629.80 (121.41 to 1339.86)	1868992.35 (406345.19 to 4029482.04)	424.08 (81.77 to 935.61)	3820844.44 (853919.52 to 7921383.80)	832.71 (159.19 to 1786.48)
2015	5697078.78 (1263604.05 to 11942422.27)	630.31 (121.13 to 1342.51)	1873947.53 (405630.33 to 4044393.70)	424.77 (81.48 to 935.51)	3823131.26 (857973.72 to 7924684.57)	833.38 (159.38 to 1786.84)
2016	5689607.96 (1260881.92 to 11907561.56)	629.19 (120.51 to 1335.86)	1875512.94 (407233.93 to 4045363.17)	424.61 (81.35 to 937.56)	3814095.02 (853647.99 to 7894115.62)	831.68 (158.25 to 1778.37)
2017	5670376.40 (1250075.91 to 11886840.44)	626.92 (118.91 to 1332.80)	1874691.48 (406543.74 to 4048124.77)	423.96 (81.25 to 937.67)	3795684.92 (843745.82 to 7865797.35)	828.19 (155.39 to 1774.68)
2018	5647865.76 (1236241.30 to 11877457.79)	624.38 (117.09 to 1328.72)	1872792.92 (404996.54 to 4038396.08)	423.13 (80.49 to 935.49)	3775072.84 (830705.04 to 7849776.55)	824.31 (152.76 to 1767.47)
2019	5632053.76 (1231907.06 to 11846822.79)	622.86 (116.12 to 1326.36)	1870739.64 (404956.89 to 4011935.59)	422.49 (80.06 to 936.11)	3761314.12 (826238.06 to 7851427.46)	822.25 (151.29 to 1754.01)
2020	5595986.89 (1233370.21 to 11767494.34)	619.40 (116.04 to 1318.92)	1862495.26 (405053.57 to 3981008.41)	420.77 (79.54 to 930.32)	3733491.63 (827993.47 to 7787135.18)	817.33 (151.33 to 1746.36)
2021	5577086.08 (1234081.57 to 11719998.01)	618.43 (116.07 to 1315.08)	1859028.36 (409180.70 to 3972660.88)	420.49 (81.01 to 930.36)	3718057.71 (824559.40 to 7770294.82)	815.91 (151.00 to 1739.13)
Percentage Change, 1990-2021	0.07% (0.04% to 0.15%)	0.01% (-0.02% to 0.02%)	0.09% (0.05% to 0.18%)	0.01% (-0.01% to 0.03%)	0.06% (0.03% to 0.13%)	0.01% (-0.02% to 0.03%)
Statistical Analysis	Spearman's ρ = 0.848 p-value < 0.001	Spearman's ρ = 0.699 p-value < 0.001	Spearman's ρ = 0.970 p-value < 0.001	Spearman's ρ = 0.924 p-value < 0.001	Spearman's ρ = 0.761 p-value < 0.001	Spearman's ρ = 0.661 p-value < 0.001
	Wilcoxon rank sum test between sex (count): p-value < 0.001 Wilcoxon rank sum test between sex (rate): p-value < 0.001					

Table S2i: Counts and age-standardized prevalence rates of tension-type headache from 1990 to 2021, by sex

	Both		Male		Female	
	Absolute number	Age-standardized rate, per 100 000 people	Absolute number	Age-standardized rate, per 100 000 people	Absolute number	Age-standardized rate, per 100 000 people
1990	263085772.75 (234474303.61 to 296486651.56)	31057.91 (27533.49 to 35153.24)	123598803.54 (109388608.31 to 140161902.53)	30215.98 (26655.86 to 34300.99)	139486969.21 (124412718.79 to 156684931.45)	31814.06 (28237.04 to 35902.34)
1991	264166774.59 (235234308.73 to 297433102.56)	31008.54 (27490.83 to 35105.20)	124156939.47 (109885411.20 to 140753677.15)	30163.36 (26587.55 to 34267.13)	140009835.12 (124905828.38 to 157048739.85)	31769.41 (28204.82 to 35860.26)
1992	265263023.76 (236105279.29 to 298546305.23)	30961.51 (27435.48 to 35057.36)	124710078.82 (110391244.24 to 141399372.78)	30114.67 (26519.74 to 34224.64)	140552944.94 (125464941.70 to 157529983.66)	31725.62 (28169.02 to 35835.54)
1993	266315573.43 (237003222.82 to 299639558.13)	30919.30 (27385.31 to 35012.88)	125222954.32 (110873199.14 to 141960292.45)	30072.14 (26459.35 to 34177.71)	141092619.11 (126041715.55 to 158036728.50)	31685.10 (28133.84 to 35811.65)
1994	267175502.85 (237759034.00 to 300514023.99)	30883.36 (27342.44 to 34973.72)	125617856.01 (111359619.08 to 142380605.48)	30036.80 (26408.53 to 34138.75)	141557646.84 (126568237.52 to 158468224.88)	31649.69 (28105.61 to 35791.95)
1995	267972086.57 (238325131.04 to 301205431.12)	30853.69 (27305.70 to 34941.96)	125971949.42 (111735989.38 to 142748306.06)	30008.68 (26389.06 to 34107.82)	142000137.15 (126933404.17 to 158816464.28)	31619.63 (28082.24 to 35749.88)
1996	268721600.18 (239319557.07 to 301688583.70)	30819.37 (27289.00 to 34863.72)	126326743.82 (112141675.74 to 142937194.64)	29980.34 (26369.50 to 34017.60)	142394856.36 (127265143.81 to 158956388.65)	31581.13 (28111.39 to 35661.79)
1997	269348893.14 (240261991.51 to 301807651.46)	30772.04 (27261.76 to 34769.16)	126659583.36 (112398015.94 to 143005821.44)	29945.46 (26382.40 to 33914.12)	142689309.79 (127580226.47 to 159035457.58)	31524.03 (28066.77 to 35545.86)
1998	269982409.46 (241217843.18 to 301908227.90)	30718.95 (27239.01 to 34664.86)	127019718.92 (112704912.88 to 143104676.68)	29907.38 (26378.49 to 33806.17)	142962690.55 (127998388.38 to 159150658.32)	31458.91 (27975.00 to 35418.46)
1999	270604255.69 (241568962.85 to 301990662.99)	30669.30 (27192.90 to 34567.05)	127371550.13 (113111902.97 to 143206202.51)	29870.69 (26373.32 to 33741.74)	143232705.57 (128429717.49 to 159410666.37)	31399.18 (27958.07 to 35310.92)
2000	271294415.00 (242089871.31 to 302240865.32)	30634.94 (27204.82 to 34508.37)	127728752.24 (113508512.05 to 143362280.64)	29843.37 (26365.75 to 33683.79)	143565662.76 (128791356.76 to 159623002.55)	31360.10 (27949.68 to 35221.61)

2001	272139352.65 (242912072.98 to 303130827.33)	30620.93 (27188.91 to 34477.25)	128146099.40 (113992889.73 to 143750987.94)	29833.21 (26349.34 to 33673.52)	143993253.25 (129045493.45 to 160180481.14)	31344.09 (27930.57 to 35214.10)
2002	273038926.89 (243998976.88 to 304060732.73)	30620.26 (27184.85 to 34455.34)	128596640.33 (114303400.34 to 144196481.63)	29838.40 (26369.95 to 33651.66)	144442286.55 (129583851.68 to 160527105.10)	31339.10 (27915.36 to 35206.71)
2003	273887334.11 (244908628.10 to 304948051.20)	30623.70 (27194.58 to 34437.21)	129022531.84 (114571989.34 to 144612304.38)	29848.69 (26419.72 to 33635.03)	144864802.27 (130124956.41 to 161038475.82)	31336.83 (27927.11 to 35205.03)
2004	274684600.67 (245790881.14 to 305775035.34)	30624.17 (27209.79 to 34425.70)	129424012.10 (114959894.82 to 144978135.53)	29855.40 (26462.08 to 33616.24)	145260588.58 (130635476.69 to 161504654.47)	31332.19 (27936.62 to 35201.02)
2005	275352936.10 (246471917.48 to 306454738.63)	30615.95 (27221.51 to 34419.20)	129751161.63 (115395446.57 to 145264490.66)	29851.85 (26485.31 to 33604.40)	145601774.48 (130922240.04 to 161848714.21)	31320.46 (27941.59 to 35206.17)
2006	275812434.60 (246850907.70 to 306932869.40)	30600.99 (27201.86 to 34402.46)	129966196.56 (115712304.26 to 145479451.33)	29840.48 (26468.31 to 33586.08)	145846238.04 (131116860.76 to 162072321.70)	31302.98 (27920.62 to 35197.90)
2007	276157358.50 (247207134.07 to 307221717.75)	30586.44 (27181.49 to 34384.97)	130126353.73 (115922881.79 to 145635601.89)	29829.61 (26452.17 to 33568.51)	146031004.77 (131283681.26 to 162204125.45)	31285.64 (27900.50 to 35186.73)
2008	276424432.89 (247530898.41 to 307582712.67)	30570.87 (27161.97 to 34366.14)	130247456.90 (116065541.38 to 145715000.20)	29817.34 (26435.13 to 33549.62)	146176975.99 (131427905.76 to 162405972.89)	31267.54 (27879.95 to 35165.88)
2009	276599547.70 (247799971.68 to 307905777.97)	30555.88 (27142.84 to 34348.57)	130324738.93 (116056309.92 to 145659345.23)	29805.63 (26418.64 to 33531.81)	146274808.77 (131564920.56 to 162542308.47)	31250.16 (27860.09 to 35146.10)
2010	276707856.12 (247875065.89 to 308196729.87)	30543.51 (27126.23 to 34334.96)	130370147.01 (116019776.68 to 145603841.96)	29796.76 (26404.56 to 33520.82)	146337709.10 (131687315.93 to 162671194.59)	31235.29 (27843.32 to 35131.82)
2011	276886171.77 (248061548.27 to 308355442.70)	30544.62 (27132.54 to 34330.86)	130472617.72 (116120139.90 to 145632489.12)	29806.74 (26414.58 to 33526.72)	146413554.05 (131793316.18 to 162728836.64)	31229.04 (27824.67 to 35102.39)
2012	277277839.73 (248402432.17 to 308599528.74)	30563.50 (27149.84 to 34361.14)	130724041.25 (116307348.15 to 145791936.63)	29841.41 (26442.14 to 33567.87)	146553798.49 (131903237.86 to 162833561.38)	31234.22 (27828.99 to 35088.39)
2013	277824172.99 (248888817.65 to 309010005.45)	30589.67 (27171.05 to 34400.28)	131086203.69 (116607455.38 to 146078451.52)	29885.56 (26477.85 to 33629.33)	146737969.30 (131993999.26 to 163017642.07)	31244.83 (27834.07 to 35081.83)

2014	278483845.85 (249506734.03 to 309509710.04)	30614.00 (27197.86 to 34425.17)	131516758.51 (116971794.76 to 146435254.21)	29925.57 (26530.26 to 33691.66)	146967087.34 (132106594.67 to 163217961.86)	31256.01 (27826.41 to 35081.23)
2015	279141422.04 (250295937.15 to 310212665.28)	30628.56 (27218.00 to 34435.57)	131938062.70 (117341555.67 to 146829171.87)	29949.51 (26563.32 to 33735.85)	147203359.34 (132219193.32 to 163298960.91)	31263.36 (27824.24 to 35071.76)
2016	280168459.31 (251095856.30 to 311342732.97)	30684.76 (27231.72 to 34499.43)	132492991.89 (118052030.45 to 147593221.10)	30003.96 (26569.27 to 33786.06)	147675467.42 (132352257.05 to 163899373.61)	31322.62 (27872.53 to 35182.77)
2017	281748470.10 (251960626.59 to 313257298.48)	30800.27 (27292.86 to 34676.32)	133272699.42 (118798302.59 to 148748758.44)	30108.80 (26579.55 to 33949.24)	148475770.67 (132848259.92 to 164669724.37)	31449.41 (27969.30 to 35340.37)
2018	283272973.98 (253081974.95 to 315077900.13)	30914.83 (27368.49 to 34849.32)	134010742.16 (119282860.07 to 149776897.34)	30210.77 (26648.70 to 34112.82)	149262231.82 (133275048.36 to 165791722.69)	31577.06 (28066.34 to 35546.40)
2019	284170816.99 (253848810.92 to 315965010.45)	30971.98 (27399.33 to 34969.13)	134458864.21 (119571391.72 to 150354624.61)	30260.91 (26698.41 to 34215.69)	149711952.78 (133595860.07 to 166566007.70)	31642.23 (28077.75 to 35677.65)
2020	282775658.15 (252532797.33 to 314082977.13)	30821.82 (27249.62 to 34815.93)	133558479.70 (118620789.26 to 149223825.76)	30053.88 (26482.69 to 34028.48)	149217178.45 (133213037.54 to 165879863.73)	31548.73 (28002.78 to 35562.82)
2021	282494328.80 (252165015.17 to 313416190.31)	30810.85 (27241.14 to 34786.17)	133449338.95 (118544091.44 to 149064034.63)	30043.09 (26465.42 to 33994.50)	149044989.85 (133037481.88 to 165493921.45)	31538.63 (27993.01 to 35543.12)
Percentage Change, 1990-2021	0.07% (0.05% to 0.10%)	-0.01% (-0.02% to 0.00%)	0.08% (0.05% to 0.11%)	-0.01% (-0.02% to 0.01%)	0.07% (0.04% to 0.10%)	-0.01% (-0.02% to 0.00%)
Statistical Analysis	Spearman's ρ = 0.997 p-value < 0.001	Spearman's ρ = -0.337 p-value = 0.060	Spearman's ρ = 0.997 p-value < 0.001	Spearman's ρ = -0.071 p-value = 0.697	Spearman's ρ = 0.997 p-value < 0.001	Spearman's ρ = -0.495 p-value = 0.004
					Wilcoxon rank sum test between sex (count): p-value < 0.001 Wilcoxon rank sum test between sex (rate): p-value < 0.001	

Table S2j: Counts and age-standardized DALY rates of tension-type headache from 1990 to 2021, by sex

	Both		Male		Female	
	Absolute number	Age-standardized rate, per 100 000 people	Absolute number	Age-standardized rate, per 100 000 people	Absolute number	Age-standardized rate, per 100 000 people
1990	688630.41 (213826.80 to 2188953.53)	78.70 (23.92 to 257.25)	263119.95 (69992.48 to 963459.65)	62.96 (16.52 to 233.69)	425510.46 (144716.84 to 1237108.07)	93.42 (31.02 to 278.55)
1991	692312.78 (214113.13 to 2196810.61)	78.57 (23.63 to 256.60)	264867.55 (70402.80 to 965180.06)	62.89 (16.32 to 233.09)	427445.23 (144955.68 to 1245581.75)	93.26 (30.81 to 278.46)
1992	696184.13 (216808.10 to 2209452.57)	78.48 (23.79 to 256.14)	266651.89 (70615.61 to 971971.06)	62.86 (16.25 to 233.36)	429532.25 (145995.85 to 1252088.39)	93.15 (30.89 to 279.10)
1993	699923.61 (218192.46 to 2220228.82)	78.43 (23.75 to 256.21)	268201.98 (70878.49 to 974504.39)	62.81 (16.14 to 232.75)	431721.63 (147522.67 to 1257869.57)	93.09 (30.89 to 278.72)
1994	703090.90 (219956.16 to 2226145.31)	78.37 (23.79 to 255.85)	269450.42 (71194.18 to 977883.36)	62.76 (16.15 to 232.73)	433640.48 (148785.68 to 1261718.35)	93.05 (30.96 to 277.74)
1995	705904.49 (220474.83 to 2233986.82)	78.28 (23.66 to 255.09)	270655.68 (72809.38 to 980308.10)	62.72 (16.22 to 232.26)	435248.81 (148517.83 to 1264333.44)	92.92 (30.66 to 277.34)
1996	710468.68 (224021.11 to 2241077.55)	78.38 (23.90 to 255.32)	271984.68 (72673.25 to 982300.89)	62.70 (16.26 to 232.16)	438484.00 (150388.66 to 1273846.50)	93.14 (30.90 to 276.94)
1997	716968.23 (226867.12 to 2254886.35)	78.68 (23.98 to 255.45)	273695.17 (74190.95 to 984669.71)	62.76 (16.39 to 231.73)	443273.06 (152099.26 to 1281081.55)	93.69 (31.20 to 277.82)
1998	724735.95 (231588.85 to 2260638.08)	79.10 (24.42 to 255.43)	275726.59 (75447.98 to 990923.10)	62.87 (16.53 to 231.74)	449009.36 (156862.75 to 1288540.21)	94.43 (31.91 to 277.42)
1999	731402.56 (234771.86 to 2271356.13)	79.39 (24.67 to 255.32)	277503.69 (75219.94 to 995550.52)	62.92 (16.53 to 231.41)	453898.88 (159456.49 to 1296281.36)	94.98 (32.26 to 277.87)
2000	736247.94 (237237.31 to 2280348.92)	79.48 (24.78 to 255.77)	279005.26 (75866.37 to 1000230.95)	62.91 (16.49 to 231.91)	457242.68 (161230.09 to 1300424.55)	95.17 (32.37 to 277.60)

2001	740006.47 (240564.39 to 2293125.12)	79.46 (24.90 to 255.73)	280461.49 (76850.19 to 1003944.49)	62.91 (16.78 to 232.50)	459544.98 (162338.67 to 1306938.98)	95.15 (32.41 to 277.77)
2002	743707.56 (239505.08 to 2304527.57)	79.48 (24.74 to 255.97)	281876.85 (76731.47 to 1010129.60)	62.92 (16.59 to 233.04)	461830.71 (162832.36 to 1311305.58)	95.19 (32.47 to 277.74)
2003	747167.44 (241242.06 to 2316737.14)	79.50 (24.68 to 256.16)	283186.98 (76824.33 to 1017527.57)	62.94 (16.53 to 233.82)	463980.45 (164416.85 to 1318171.81)	95.21 (32.42 to 278.22)
2004	750754.11 (241988.78 to 2334158.56)	79.53 (24.73 to 256.20)	284476.97 (77350.30 to 1022870.10)	62.96 (16.68 to 234.38)	466277.14 (164409.70 to 1324734.50)	95.28 (32.46 to 279.26)
2005	753876.64 (242977.04 to 2341848.88)	79.49 (24.64 to 256.35)	285601.18 (77855.94 to 1022197.55)	62.93 (16.43 to 233.50)	468275.46 (165479.78 to 1330167.40)	95.25 (32.51 to 279.32)
2006	756616.96 (243419.31 to 2347414.05)	79.46 (24.62 to 255.88)	286549.20 (78427.95 to 1024276.71)	62.90 (16.38 to 233.34)	470067.75 (164991.36 to 1330085.07)	95.23 (32.48 to 278.73)
2007	759357.00 (246106.32 to 2356825.33)	79.46 (24.83 to 256.37)	287651.03 (78662.51 to 1025879.62)	62.93 (16.55 to 233.40)	471705.97 (166811.81 to 1337493.08)	95.22 (32.68 to 279.34)
2008	762027.78 (245611.17 to 2359821.97)	79.47 (24.63 to 256.22)	288621.72 (78796.65 to 1028252.97)	62.94 (16.46 to 233.53)	473406.06 (166104.99 to 1338058.78)	95.25 (32.34 to 278.61)
2009	764200.66 (248835.34 to 2365459.16)	79.45 (24.82 to 256.29)	289457.53 (80197.34 to 1030837.00)	62.93 (16.57 to 233.75)	474743.13 (169551.30 to 1341480.47)	95.22 (32.91 to 278.97)
2010	766527.20 (248631.10 to 2367135.96)	79.44 (24.70 to 256.34)	290347.36 (79872.21 to 1033805.76)	62.95 (16.47 to 234.26)	476179.84 (168628.10 to 1341501.76)	95.20 (32.49 to 278.81)
2011	768551.59 (250567.44 to 2372933.50)	79.44 (24.83 to 256.04)	291124.31 (80222.70 to 1032690.12)	62.97 (16.59 to 234.09)	477427.29 (170184.85 to 1343680.84)	95.19 (32.74 to 279.13)
2012	770618.13 (250003.15 to 2380904.96)	79.46 (24.78 to 256.30)	292041.45 (81358.75 to 1035114.42)	63.02 (16.71 to 234.09)	478576.68 (168821.16 to 1348428.92)	95.20 (32.55 to 279.39)
2013	772787.89 (252205.40 to 2384945.72)	79.47 (24.75 to 256.38)	293116.04 (81908.97 to 1036601.95)	63.07 (16.54 to 234.25)	479671.85 (170300.86 to 1348680.74)	95.18 (32.50 to 279.23)

2014	775223.16 (252493.99 to 2393723.80)	79.49 (24.61 to 256.90)	294477.00 (81505.16 to 1040832.20)	63.17 (16.54 to 234.92)	480746.16 (170956.42 to 1355119.99)	95.15 (32.41 to 279.97)
2015	777373.70 (253789.00 to 2402372.70)	79.46 (24.53 to 257.29)	295603.21 (82634.64 to 1043990.03)	63.18 (16.60 to 235.28)	481770.48 (171069.82 to 1357653.89)	95.10 (32.17 to 279.83)
2016	777432.45 (251774.55 to 2404882.64)	79.24 (24.58 to 257.22)	296592.22 (82488.04 to 1046210.26)	63.18 (16.64 to 235.42)	480840.23 (169286.52 to 1358887.57)	94.71 (32.17 to 280.01)
2017	775003.03 (250908.88 to 2417260.25)	78.84 (24.04 to 257.89)	297428.48 (83000.36 to 1049186.88)	63.20 (16.52 to 235.71)	477574.55 (167289.83 to 1361671.83)	93.92 (31.47 to 280.98)
2018	772203.73 (246962.98 to 2422266.01)	78.41 (23.67 to 258.09)	298087.23 (81987.28 to 1054783.94)	63.19 (16.25 to 235.77)	474116.51 (163987.13 to 1364937.08)	93.11 (30.82 to 281.25)
2019	771380.97 (245182.05 to 2423182.63)	78.21 (23.60 to 258.18)	298663.20 (82172.57 to 1053229.36)	63.18 (16.29 to 235.33)	472717.76 (162342.31 to 1367563.57)	92.75 (30.59 to 281.84)
2020	769455.77 (245537.03 to 2409898.81)	77.92 (23.41 to 257.29)	297865.55 (82109.12 to 1047075.05)	62.91 (16.38 to 233.70)	471590.22 (161911.56 to 1363423.68)	92.45 (30.20 to 281.20)
2021	767977.02 (245879.07 to 2405182.64)	77.79 (23.49 to 256.54)	297654.68 (83195.64 to 1044194.41)	62.87 (16.40 to 232.91)	470322.34 (162163.34 to 1359954.49)	92.26 (30.36 to 280.15)
Percentage Change, 1990-2021	0.12% (0.03% to 0.18%)	-0.01% (-0.06% to 0.02%)	0.13% (0.02% to 0.23%)	0.00% (-0.06% to 0.03%)	0.11% (0.03% to 0.16%)	-0.01% (-0.05% to 0.01%)
Statistical Analysis	Spearman's ρ = 0.951 p-value < 0.001	Spearman's ρ = 0.039 p-value = 0.831	Spearman's ρ = 0.997 p-value < 0.001	Spearman's ρ = 0.682 p-value < 0.001	Spearman's ρ = 0.882 p-value < 0.001	Spearman's ρ = 0.065 p-value = 0.726
	Wilcoxon rank sum test between sex (count): p-value < 0.001 Wilcoxon rank sum test between sex (rate): p-value < 0.001					

Table S2k: Counts and age-standardized incidence rates of tension-type headache from 1990 to 2021, by sex

	Both		Male		Female	
	Absolute number	Age-standardized rate, per 100 000 people	Absolute number	Age-standardized rate, per 100 000 people	Absolute number	Age-standardized rate, per 100 000 people
1990	90583352.83 (78895825.05 to 101724244.72)	10911.18 (9459.09 to 12276.46)	42988142.58 (37387029.21 to 48468834.20)	10678.34 (9297.48 to 12031.95)	47595210.25 (41570138.12 to 53175114.35)	11118.59 (9626.10 to 12516.34)
1991	91011318.70 (79319631.71 to 102179801.33)	10905.47 (9461.17 to 12268.64)	43201287.46 (37601942.39 to 48684753.60)	10671.01 (9294.55 to 12029.03)	47810031.25 (41772957.88 to 53432422.11)	11114.96 (9619.90 to 12507.86)
1992	91415671.70 (79704680.07 to 102601884.82)	10898.80 (9462.23 to 12260.06)	43402218.04 (37815463.73 to 48875779.35)	10663.58 (9291.95 to 12024.54)	48013453.66 (41943425.50 to 53660884.13)	11109.62 (9612.26 to 12497.14)
1993	91778479.08 (80063469.35 to 102988818.20)	10892.25 (9464.10 to 12251.33)	43579547.48 (38073123.47 to 49057681.98)	10657.04 (9291.14 to 12013.10)	48198931.60 (42094286.38 to 53873041.48)	11103.65 (9603.71 to 12489.19)
1994	92045650.25 (80418840.09 to 103288824.71)	10885.97 (9465.64 to 12243.14)	43704429.20 (38283146.28 to 49184904.52)	10651.34 (9295.09 to 12003.11)	48341221.05 (42240737.59 to 54039889.29)	11097.31 (9599.45 to 12475.17)
1995	92266364.11 (80742556.77 to 103576434.17)	10880.39 (9467.70 to 12236.47)	43804415.26 (38465075.37 to 49274058.74)	10646.75 (9301.97 to 11995.13)	48461948.85 (42387462.70 to 54206895.14)	11091.23 (9597.46 to 12462.15)
1996	92463838.45 (80979597.98 to 103681129.57)	10873.25 (9472.40 to 12221.53)	43899280.33 (38551453.70 to 49268522.39)	10641.56 (9293.77 to 11971.64)	48564558.12 (42501716.90 to 54291158.81)	11082.78 (9600.08 to 12452.61)
1997	92625780.63 (81140014.93 to 103775836.45)	10862.69 (9476.27 to 12210.71)	43985446.10 (38620629.97 to 49372904.84)	10634.07 (9295.61 to 11953.53)	48640334.52 (42568128.44 to 54324996.54)	11069.94 (9599.59 to 12448.66)
1998	92780959.13 (81271967.61 to 103871095.37)	10849.83 (9471.61 to 12198.94)	44073689.92 (38677478.00 to 49529615.55)	10624.69 (9296.32 to 11932.74)	48707269.20 (42678886.14 to 54343484.19)	11054.44 (9597.40 to 12434.91)
1999	92924511.18 (81455528.27 to 103969905.32)	10837.13 (9467.15 to 12182.04)	44154865.45 (38715529.98 to 49673869.46)	10614.83 (9295.10 to 11925.85)	48769645.73 (42829353.38 to 54368285.36)	11039.74 (9599.75 to 12410.52)
2000	93081154.65 (81638597.74 to 104097085.33)	10827.94 (9465.64 to 12163.23)	44233580.21 (38740666.56 to 49743418.08)	10606.97 (9283.65 to 11919.97)	48847574.44 (42986215.12 to 54451381.20)	11029.87 (9607.35 to 12391.84)

2001	93271858.56 (81840667.12 to 104258518.73)	10823.83 (9459.72 to 12162.00)	44324625.18 (38822700.93 to 49846066.93)	10603.54 (9283.09 to 11921.84)	48947233.38 (43084522.63 to 54533997.70)	11025.59 (9598.94 to 12381.67)
2002	93460898.85 (81996611.81 to 104437273.33)	10823.39 (9456.97 to 12159.67)	44416906.67 (38950147.48 to 49930264.35)	10604.36 (9285.81 to 11921.70)	49043992.18 (43158831.95 to 54624075.05)	11024.29 (9593.34 to 12374.46)
2003	93627924.94 (82196966.55 to 104609774.82)	10823.98 (9454.66 to 12166.49)	44498277.57 (39068503.32 to 49997885.10)	10606.36 (9288.03 to 11923.21)	49129647.37 (43213911.62 to 54677122.28)	11023.78 (9587.73 to 12382.07)
2004	93781555.14 (82377340.13 to 104888397.93)	10823.73 (9451.31 to 12174.06)	44573956.55 (39173085.34 to 50066148.25)	10607.30 (9286.17 to 11933.67)	49207598.60 (43254645.87 to 54798428.61)	11022.65 (9584.96 to 12392.77)
2005	93899300.24 (82489907.37 to 105077732.86)	10821.04 (9445.71 to 12173.44)	44630178.05 (39253090.92 to 50126472.79)	10605.39 (9281.32 to 11940.73)	49269122.19 (43324089.27 to 54857508.72)	11019.52 (9586.61 to 12400.87)
2006	93958225.59 (82487136.68 to 105143450.19)	10816.83 (9442.98 to 12169.54)	44656801.76 (39258268.88 to 50188980.66)	10601.83 (9278.48 to 11934.09)	49301423.83 (43358124.48 to 54878039.31)	11014.96 (9585.12 to 12394.30)
2007	93988520.57 (82531871.16 to 105140766.22)	10813.17 (9441.14 to 12166.35)	44671118.79 (39239898.18 to 50228012.47)	10599.07 (9276.90 to 11929.59)	49317401.79 (43365224.37 to 54876751.29)	11010.70 (9582.90 to 12388.12)
2008	94003022.65 (82554707.91 to 105066350.12)	10809.46 (9439.31 to 12163.09)	44679098.25 (39205399.44 to 50220830.55)	10596.18 (9274.57 to 11925.68)	49323924.40 (43351902.01 to 54871972.18)	11006.47 (9579.91 to 12382.15)
2009	94003276.56 (82555480.36 to 104954668.24)	10805.99 (9437.66 to 12160.02)	44679475.20 (39142125.62 to 50237842.21)	10593.43 (9271.87 to 11922.31)	49323801.35 (43342607.05 to 54843947.19)	11002.63 (9576.76 to 12377.07)
2010	93989485.43 (82536678.69 to 104818749.19)	10803.06 (9435.18 to 12157.00)	44671444.19 (39108805.04 to 50252185.26)	10591.10 (9269.92 to 11919.17)	49318041.24 (43339735.90 to 54798524.48)	10999.48 (9573.89 to 12373.30)
2011	93990612.61 (82476605.75 to 104674549.62)	10802.11 (9436.03 to 12155.69)	44668068.67 (39083369.29 to 50231082.91)	10590.56 (9267.39 to 11920.29)	49322543.95 (43355937.34 to 54817689.66)	10998.52 (9579.69 to 12378.62)
2012	94052209.68 (82492256.93 to 104683080.61)	10803.23 (9438.23 to 12157.58)	44695366.37 (39092532.13 to 50206957.61)	10591.93 (9265.62 to 11919.29)	49356843.30 (43388560.88 to 54844196.89)	10999.78 (9587.17 to 12386.16)
2013	94161095.32 (82527029.23 to 104785391.02)	10804.74 (9439.40 to 12159.79)	44752193.68 (39158720.15 to 50179524.50)	10593.61 (9263.96 to 11917.18)	49408901.64 (43400864.10 to 54881583.92)	11001.54 (9595.43 to 12391.79)

2014	94320584.74 (82629193.64 to 105017235.81)	10805.48 (9439.28 to 12159.94)	44840440.77 (39203286.94 to 50231506.33)	10594.52 (9262.13 to 11913.80)	49480143.97 (43467347.67 to 54967877.63)	11002.59 (9604.04 to 12396.38)
2015	94505324.35 (82770802.43 to 105308450.97)	10804.62 (9439.01 to 12156.10)	44947886.84 (39291891.31 to 50292621.49)	10594.04 (9260.54 to 11907.84)	49557437.52 (43542345.80 to 54997018.51)	11001.86 (9611.55 to 12398.92)
2016	94753327.01 (82945596.40 to 105579087.08)	10811.46 (9444.10 to 12169.61)	45085203.07 (39408848.97 to 50465011.44)	10600.68 (9267.06 to 11919.62)	49668123.94 (43595684.46 to 55168952.74)	11009.33 (9605.07 to 12418.74)
2017	95085748.64 (83187493.57 to 105973050.17)	10828.80 (9449.64 to 12186.74)	45258702.59 (39550600.72 to 50671920.63)	10616.76 (9277.10 to 11950.78)	49827046.05 (43700852.26 to 55407492.75)	11028.24 (9607.78 to 12450.44)
2018	95400250.54 (83417053.61 to 106341988.79)	10846.42 (9453.82 to 12206.80)	45419208.53 (39684718.23 to 50844865.25)	10632.81 (9275.13 to 11984.01)	49981042.01 (43854238.49 to 55644313.85)	11047.69 (9611.47 to 12442.00)
2019	95588913.98 (83563743.78 to 106566529.72)	10854.76 (9449.40 to 12214.81)	45517357.10 (39773077.52 to 50958152.76)	10640.16 (9265.41 to 11991.86)	50071556.88 (43960321.99 to 55804228.69)	11057.33 (9607.55 to 12413.21)
2020	95337277.52 (83321477.16 to 106141070.92)	10825.20 (9433.99 to 12184.91)	45381222.13 (39637734.22 to 50762220.89)	10604.42 (9247.73 to 11950.39)	49956055.39 (43841624.55 to 55614186.39)	11034.46 (9597.77 to 12396.39)
2021	95235226.48 (83299117.39 to 105938467.33)	10822.21 (9430.78 to 12181.47)	45338106.97 (39635650.34 to 50694953.06)	10601.67 (9245.89 to 11946.76)	49897119.51 (43827321.21 to 55512992.28)	11031.48 (9595.45 to 12389.90)
Percentage Change, 1990-2021	0.05% (0.02% to 0.08%)	-0.01% (-0.02% to 0.00%)	0.05% (0.02% to 0.09%)	-0.01% (-0.02% to 0.00%)	0.05% (0.02% to 0.08%)	-0.01% (-0.02% to 0.00%)
Statistical Analysis	Spearman's ρ = 0.994 p-value < 0.001	Spearman's ρ = -0.650 p-value < 0.001	Spearman's ρ = 0.992 p-value < 0.001	Spearman's ρ = -0.641 p-value < 0.001	Spearman's ρ = 0.993 p-value < 0.001	Spearman's ρ = -0.612 p-value < 0.001
	Wilcoxon rank sum test between sex (count): p-value < 0.001 Wilcoxon rank sum test between sex (rate): p-value < 0.001					

Table S2l: Counts and age-standardized YLD rates of tension-type headache from 1990 to 2021, by sex

	Both		Male		Female	
	Absolute number	Age-standardized rate, per 100 000 people	Absolute number	Age-standardized rate, per 100 000 people	Absolute number	Age-standardized rate, per 100 000 people
1990	688630.41 (213826.80 to 2188953.53)	78.70 (23.92 to 257.25)	263119.95 (69992.48 to 963459.65)	62.96 (16.52 to 233.69)	425510.46 (144716.84 to 1237108.07)	93.42 (31.02 to 278.55)
1991	692312.78 (214113.13 to 2196810.61)	78.57 (23.63 to 256.60)	264867.55 (70402.80 to 965180.06)	62.89 (16.32 to 233.09)	427445.23 (144955.68 to 1245581.75)	93.26 (30.81 to 278.46)
1992	696184.13 (216808.10 to 2209452.57)	78.48 (23.79 to 256.14)	266651.89 (70615.61 to 971971.06)	62.86 (16.25 to 233.36)	429532.25 (145995.85 to 1252088.39)	93.15 (30.89 to 279.10)
1993	699923.61 (218192.46 to 2220228.82)	78.43 (23.75 to 256.21)	268201.98 (70878.49 to 974504.39)	62.81 (16.14 to 232.75)	431721.63 (147522.67 to 1257869.57)	93.09 (30.89 to 278.72)
1994	703090.90 (219956.16 to 2226145.31)	78.37 (23.79 to 255.85)	269450.42 (71194.18 to 977883.36)	62.76 (16.15 to 232.73)	433640.48 (148785.68 to 1261718.35)	93.05 (30.96 to 277.74)
1995	705904.49 (220474.83 to 2233986.82)	78.28 (23.66 to 255.09)	270655.68 (72809.38 to 980308.10)	62.72 (16.22 to 232.26)	435248.81 (148517.83 to 1264333.44)	92.92 (30.66 to 277.34)
1996	710468.68 (224021.11 to 2241077.55)	78.38 (23.90 to 255.32)	271984.68 (72673.25 to 982300.89)	62.70 (16.26 to 232.16)	438484.00 (150388.66 to 1273846.50)	93.14 (30.90 to 276.94)
1997	716968.23 (226867.12 to 2254886.35)	78.68 (23.98 to 255.45)	273695.17 (74190.95 to 984669.71)	62.76 (16.39 to 231.73)	443273.06 (152099.26 to 1281081.55)	93.69 (31.20 to 277.82)
1998	724735.95 (231588.85 to 2260638.08)	79.10 (24.42 to 255.43)	275726.59 (75447.98 to 990923.10)	62.87 (16.53 to 231.74)	449009.36 (156862.75 to 1288540.21)	94.43 (31.91 to 277.42)
1999	731402.56 (234771.86 to 2271356.13)	79.39 (24.67 to 255.32)	277503.69 (75219.94 to 995550.52)	62.92 (16.53 to 231.41)	453898.88 (159456.49 to 1296281.36)	94.98 (32.26 to 277.87)
2000	736247.94 (237237.31 to 2280348.92)	79.48 (24.78 to 255.77)	279005.26 (75866.37 to 1000230.95)	62.91 (16.49 to 231.91)	457242.68 (161230.09 to 1300424.55)	95.17 (32.37 to 277.60)

2001	740006.47 (240564.39 to 2293125.12)	79.46 (24.90 to 255.73)	280461.49 (76850.19 to 1003944.49)	62.91 (16.78 to 232.50)	459544.98 (162338.67 to 1306938.98)	95.15 (32.41 to 277.77)
2002	743707.56 (239505.08 to 2304527.57)	79.48 (24.74 to 255.97)	281876.85 (76731.47 to 1010129.60)	62.92 (16.59 to 233.04)	461830.71 (162832.36 to 1311305.58)	95.19 (32.47 to 277.74)
2003	747167.44 (241242.06 to 2316737.14)	79.50 (24.68 to 256.16)	283186.98 (76824.33 to 1017527.57)	62.94 (16.53 to 233.82)	463980.45 (164416.85 to 1318171.81)	95.21 (32.42 to 278.22)
2004	750754.11 (241988.78 to 2334158.56)	79.53 (24.73 to 256.20)	284476.97 (77350.30 to 1022870.10)	62.96 (16.68 to 234.38)	466277.14 (164409.70 to 1324734.50)	95.28 (32.46 to 279.26)
2005	753876.64 (242977.04 to 2341848.88)	79.49 (24.64 to 256.35)	285601.18 (77855.94 to 1022197.55)	62.93 (16.43 to 233.50)	468275.46 (165479.78 to 1330167.40)	95.25 (32.51 to 279.32)
2006	756616.96 (243419.31 to 2347414.05)	79.46 (24.62 to 255.88)	286549.20 (78427.95 to 1024276.71)	62.90 (16.38 to 233.34)	470067.75 (164991.36 to 1330085.07)	95.23 (32.48 to 278.73)
2007	759357.00 (246106.32 to 2356825.33)	79.46 (24.83 to 256.37)	287651.03 (78662.51 to 1025879.62)	62.93 (16.55 to 233.40)	471705.97 (166811.81 to 1337493.08)	95.22 (32.68 to 279.34)
2008	762027.78 (245611.17 to 2359821.97)	79.47 (24.63 to 256.22)	288621.72 (78796.65 to 1028252.97)	62.94 (16.46 to 233.53)	473406.06 (166104.99 to 1338058.78)	95.25 (32.34 to 278.61)
2009	764200.66 (248835.34 to 2365459.16)	79.45 (24.82 to 256.29)	289457.53 (80197.34 to 1030837.00)	62.93 (16.57 to 233.75)	474743.13 (169551.30 to 1341480.47)	95.22 (32.91 to 278.97)
2010	766527.20 (248631.10 to 2367135.96)	79.44 (24.70 to 256.34)	290347.36 (79872.21 to 1033805.76)	62.95 (16.47 to 234.26)	476179.84 (168628.10 to 1341501.76)	95.20 (32.49 to 278.81)
2011	768551.59 (250567.44 to 2372933.50)	79.44 (24.83 to 256.04)	291124.31 (80222.70 to 1032690.12)	62.97 (16.59 to 234.09)	477427.29 (170184.85 to 1343680.84)	95.19 (32.74 to 279.13)
2012	770618.13 (250003.15 to 2380904.96)	79.46 (24.78 to 256.30)	292041.45 (81358.75 to 1035114.42)	63.02 (16.71 to 234.09)	478576.68 (168821.16 to 1348428.92)	95.20 (32.55 to 279.39)
2013	772787.89 (252205.40 to 2384945.72)	79.47 (24.75 to 256.38)	293116.04 (81908.97 to 1036601.95)	63.07 (16.54 to 234.25)	479671.85 (170300.86 to 1348680.74)	95.18 (32.50 to 279.23)

2014	775223.16 (252493.99 to 2393723.80)	79.49 (24.61 to 256.90)	294477.00 (81505.16 to 1040832.20)	63.17 (16.54 to 234.92)	480746.16 (170956.42 to 1355119.99)	95.15 (32.41 to 279.97)
2015	777373.70 (253789.00 to 2402372.70)	79.46 (24.53 to 257.29)	295603.21 (82634.64 to 1043990.03)	63.18 (16.60 to 235.28)	481770.48 (171069.82 to 1357653.89)	95.10 (32.17 to 279.83)
2016	777432.45 (251774.55 to 2404882.64)	79.24 (24.58 to 257.22)	296592.22 (82488.04 to 1046210.26)	63.18 (16.64 to 235.42)	480840.23 (169286.52 to 1358887.57)	94.71 (32.17 to 280.01)
2017	775003.03 (250908.88 to 2417260.25)	78.84 (24.04 to 257.89)	297428.48 (83000.36 to 1049186.88)	63.20 (16.52 to 235.71)	477574.55 (167289.83 to 1361671.83)	93.92 (31.47 to 280.98)
2018	772203.73 (246962.98 to 2422266.01)	78.41 (23.67 to 258.09)	298087.23 (81987.28 to 1054783.94)	63.19 (16.25 to 235.77)	474116.51 (163987.13 to 1364937.08)	93.11 (30.82 to 281.25)
2019	771380.97 (245182.05 to 2423182.63)	78.21 (23.60 to 258.18)	298663.20 (82172.57 to 1053229.36)	63.18 (16.29 to 235.33)	472717.76 (162342.31 to 1367563.57)	92.75 (30.59 to 281.84)
2020	769455.77 (245537.03 to 2409898.81)	77.92 (23.41 to 257.29)	297865.55 (82109.12 to 1047075.05)	62.91 (16.38 to 233.70)	471590.22 (161911.56 to 1363423.68)	92.45 (30.20 to 281.20)
2021	767977.02 (245879.07 to 2405182.64)	77.79 (23.49 to 256.54)	297654.68 (83195.64 to 1044194.41)	62.87 (16.40 to 232.91)	470322.34 (162163.34 to 1359954.49)	92.26 (30.36 to 280.15)
Percentage Change, 1990-2021	0.12% (0.03% to 0.18%)	-0.01% (-0.06% to 0.02%)	0.13% (0.02% to 0.23%)	0.00% (-0.06% to 0.03%)	0.11% (0.03% to 0.16%)	-0.01% (-0.05% to 0.01%)
Statistical Analysis	688630.41 (213826.80 to 2188953.53)	78.70 (23.92 to 257.25)	263119.95 (69992.48 to 963459.65)	62.96 (16.52 to 233.69)	425510.46 (144716.84 to 1237108.07)	93.42 (31.02 to 278.55)
					Wilcoxon rank sum test between sex (count): p-value < 0.001 Wilcoxon rank sum test between sex (rate): p-value < 0.001	

Table S3a: Counts and age-standardized prevalence rates of headache disorders in 2021, and percentage changes from 1990 to 2021, by country and sex

	Male			Female		
	Absolute number, 2021	**Age-standardized rate, per 100 000 people, 2021**	**Percentage Change, 1990-2021**	**Absolute number, 2021**	**Age-standardized rate, per 100 000 people, 2021**	**Percentage Change, 1990-2021**
Europe	**163430491.08 (149177588.93 to 177041537.85)**	**36910.27 (33762.87 to 40317.43)**	**0.00% (-0.01% to 0.01%)**	**207161139.44 (192553758.31 to 220826723.58)**	**44416.59 (41290.00 to 47491.58)**	**0.00% (-0.01% to 0.01%)**
Albania	501402.49 (449487.87 to 554845.26)	34617.34 (30993.45 to 38410.01)	0.00% (0.00% to 0.00%)	610374.02 (559877.60 to 663521.28)	42424.21 (39052.91 to 46174.27)	0.00% (0.00% to 0.00%)
Andorra	19081.98 (17127.41 to 21053.94)	38569.63 (34565.68 to 42539.73)	0.00% (0.00% to 0.00%)	21829.81 (20091.46 to 23679.83)	46977.08 (43262.21 to 50654.93)	0.00% (0.00% to 0.00%)
Austria	1826515.70 (1651181.65 to 2005643.87)	38175.65 (34228.37 to 42089.80)	0.00% (0.00% to 0.00%)	2190405.88 (2012076.13 to 2358433.81)	45216.16 (41744.17 to 48708.46)	0.00% (0.00% to 0.00%)
Belarus	1663360.14 (1498273.21 to 1850103.06)	35513.66 (31976.20 to 39618.83)	0.00% (0.00% to 0.00%)	2210717.76 (2031047.54 to 2405727.90)	41305.95 (37857.98 to 44685.48)	0.00% (0.00% to 0.00%)
Belgium	2393761.39 (2159698.92 to 2618196.98)	40082.72 (36069.24 to 43878.49)	0.01% (-0.01% to 0.03%)	3086398.22 (2857571.39 to 3324073.86)	50426.47 (46775.23 to 54094.88)	0.03% (0.00% to 0.06%)
Bosnia and Herzegovina	608793.75 (549772.01 to 672481.76)	34617.32 (30995.34 to 38406.18)	0.00% (0.00% to 0.00%)	779167.13 (714886.35 to 846420.68)	42424.19 (39012.53 to 46216.36)	0.00% (0.00% to 0.00%)
Bulgaria	1238561.63 (1112938.52 to 1364156.50)	34617.11 (30964.76 to 38442.47)	0.00% (0.00% to 0.01%)	1601510.42 (1470542.38 to 1735742.20)	42424.27 (38928.57 to 46191.77)	0.00% (0.00% to 0.00%)
Croatia	770254.98 (697199.06 to 850331.16)	34620.19 (31268.04 to 38373.33)	0.00% (-0.04% to 0.04%)	992525.37 (909529.82 to 1075203.35)	42378.06 (39016.10 to 46186.35)	0.00% (-0.03% to 0.03%)
Cyprus	281236.73 (253452.91 to 310199.56)	38568.75 (34566.94 to 42631.73)	0.00% (0.00% to 0.00%)	355365.37 (327813.14 to 385443.56)	46977.50 (43272.16 to 50698.02)	0.00% (0.00% to 0.00%)

Czechia	1949186.60 (1759377.53 to 2148768.60)	34616.84 (31002.41 to 38438.99)	0.00% (0.00% to 0.00%)	2447030.64 (2249219.62 to 2646261.23)	42423.77 (38984.18 to 46228.80)	0.00% (0.00% to 0.00%)
Denmark	1168625.49 (1050119.71 to 1286272.98)	37873.38 (34206.73 to 41849.79)	0.00% (-0.04% to 0.04%)	1465030.21 (1352393.56 to 1581524.72)	47301.01 (43539.41 to 50975.75)	-0.01% (-0.05% to 0.02%)
Estonia	236313.70 (213314.54 to 262019.29)	35513.97 (31991.04 to 39628.43)	0.00% (0.00% to 0.00%)	301984.04 (277836.54 to 328701.00)	41305.92 (37839.78 to 44726.54)	0.00% (0.00% to 0.00%)
Finland	1117495.36 (1008469.04 to 1230121.11)	38569.63 (34618.57 to 42528.01)	0.00% (0.00% to 0.00%)	1370746.87 (1265693.13 to 1483122.42)	46977.26 (43276.06 to 50663.50)	0.00% (0.00% to 0.00%)
France	13013153.05 (11753021.54 to 14279496.65)	38717.59 (34759.39 to 42546.14)	0.00% (-0.02% to 0.01%)	15997001.26 (14791875.17 to 17290828.73)	45215.58 (41773.16 to 48714.61)	0.00% (-0.02% to 0.01%)
Germany	17943044.68 (16313519.19 to 19646163.18)	39409.55 (35774.91 to 43287.37)	0.02% (-0.02% to 0.06%)	22218595.36 (20598356.38 to 23807745.14)	49337.96 (45780.76 to 52868.34)	0.02% (-0.01% to 0.05%)
Greece	2057233.67 (1851218.13 to 2251802.84)	39022.46 (35093.57 to 42805.66)	0.00% (-0.01% to 0.01%)	2621917.39 (2410355.15 to 2833092.52)	47297.06 (43539.46 to 50921.60)	0.00% (-0.02% to 0.02%)
Hungary	1723834.18 (1557320.76 to 1902388.78)	34617.60 (31016.73 to 38370.60)	0.00% (0.00% to 0.00%)	2301671.26 (2116755.20 to 2492119.74)	42424.71 (38968.67 to 46206.69)	0.00% (0.00% to 0.00%)
Iceland	72366.09 (65352.75 to 79778.55)	38570.50 (34552.05 to 42563.72)	0.00% (0.00% to 0.00%)	85122.69 (78667.00 to 91973.58)	46976.96 (43241.12 to 50653.06)	0.00% (0.00% to 0.00%)
Ireland	987102.77 (890397.84 to 1086248.23)	38569.63 (34535.62 to 42621.90)	0.00% (0.00% to 0.00%)	1235626.91 (1140714.63 to 1335358.35)	46976.73 (43290.22 to 50631.56)	0.00% (0.00% to 0.00%)
Israel	1825994.21 (1640563.71 to 2008923.98)	38568.98 (34576.83 to 42552.00)	0.00% (0.00% to 0.00%)	2245258.31 (2071370.57 to 2421003.50)	46977.06 (43255.19 to 50720.37)	0.00% (0.00% to 0.00%)
Italy	12684746.77 (11671185.85 to 13616225.81)	40460.56 (37380.69 to 43660.02)	0.00% (-0.02% to 0.03%)	15917995.62 (14829557.44 to 16960614.46)	48918.21 (45734.52 to 51941.37)	0.00% (-0.02% to 0.02%)
Latvia	327378.13 (295286.50 to 363562.79)	35513.47 (31963.02 to 39565.03)	0.00% (-0.01% to 0.00%)	440387.65 (404357.39 to 479178.21)	41304.96 (37834.01 to 44697.49)	0.00% (0.00% to 0.00%)

Lithuania	491626.98 (440792.17 to 546772.16)	36325.85 (32430.25 to 40557.22)	0.00% (0.00% to 0.00%)	655646.35 (601401.16 to 708936.36)	41960.61 (38390.31 to 45546.74)	0.00% (0.00% to 0.00%)
Luxembourg	137878.41 (124403.70 to 152568.19)	38861.61 (35102.11 to 43119.56)	0.00% (0.00% to 0.00%)	159488.09 (146922.47 to 171598.45)	45901.04 (42400.97 to 49447.45)	0.00% (0.00% to 0.00%)
Malta	90785.88 (81752.95 to 99894.88)	38568.56 (34554.84 to 42618.63)	0.00% (0.00% to 0.00%)	109154.82 (100637.50 to 118151.57)	46977.38 (43263.35 to 50655.22)	0.00% (0.00% to 0.00%)
Monaco	7431.92 (6699.62 to 8199.75)	38569.96 (34597.02 to 42514.03)	0.00% (0.00% to 0.00%)	9502.07 (8710.66 to 10301.00)	46976.99 (43302.52 to 50683.76)	0.00% (0.00% to 0.00%)
Montenegro	113204.20 (102183.49 to 125178.60)	34617.37 (30987.91 to 38411.05)	0.00% (0.00% to 0.00%)	142743.80 (130960.95 to 155230.47)	42424.28 (39065.27 to 46183.03)	0.00% (0.00% to 0.00%)
Netherlands	3691279.64 (3312748.27 to 4056654.86)	40632.84 (36287.43 to 44823.77)	0.01% (0.00% to 0.03%)	4440376.91 (4110411.66 to 4782205.84)	48431.43 (44588.59 to 52223.67)	0.01% (0.00% to 0.03%)
North Macedonia	423325.27 (382113.42 to 468779.35)	34616.94 (31023.47 to 38438.68)	0.00% (0.00% to 0.00%)	503225.93 (462206.84 to 546848.08)	42424.26 (39001.37 to 46198.39)	0.00% (0.00% to 0.00%)
Norway	1184311.05 (1085337.35 to 1278456.38)	40625.92 (37252.31 to 43990.14)	0.03% (0.00% to 0.06%)	1418998.39 (1328160.05 to 1510108.05)	50016.78 (46828.78 to 53151.60)	0.02% (0.00% to 0.04%)
Poland	7347164.07 (6722733.82 to 7991897.54)	36323.24 (33269.48 to 39677.43)	0.00% (0.00% to 0.00%)	9438683.43 (8762127.72 to 10097610.38)	44025.19 (40814.13 to 47195.39)	0.00% (0.00% to 0.00%)
Portugal	2086906.50 (1881885.95 to 2294505.94)	38569.69 (34602.32 to 42563.48)	0.00% (0.00% to 0.00%)	2787884.79 (2565048.86 to 3012725.29)	46976.92 (43276.82 to 50689.56)	0.00% (0.00% to 0.00%)
Republic of Moldova	674794.39 (608949.04 to 751911.66)	35513.05 (31956.95 to 39583.72)	0.00% (0.00% to 0.00%)	858439.75 (786238.79 to 935049.43)	41305.87 (37840.55 to 44803.49)	0.00% (0.00% to 0.00%)
Romania	3441383.85 (3103831.35 to 3793397.54)	34617.21 (31069.85 to 38428.56)	0.00% (0.00% to 0.00%)	4429193.35 (4073265.54 to 4804624.89)	42423.90 (39052.36 to 46181.14)	0.00% (0.00% to 0.00%)
Russian Federation	26763522.83 (24613256.10 to 29078254.35)	36909.65 (33940.01 to 40242.33)	0.00% (-0.02% to 0.04%)	35568872.88 (33102316.55 to 38057029.48)	42803.25 (39809.18 to 45764.61)	0.00% (-0.02% to 0.03%)

San Marino	6493.72 (5864.12 to 7148.39)	38568.97 (34540.35 to 42582.14)	0.00% (0.00% to 0.00%)	8543.86 (7862.48 to 9238.46)	46977.10 (43258.11 to 50679.82)	0.00% (0.00% to 0.00%)
Serbia	1696706.43 (1535944.70 to 1873038.06)	34623.66 (31022.12 to 38386.19)	0.00% (0.00% to 0.00%)	2077120.73 (1903548.17 to 2249837.50)	42427.86 (38917.38 to 46182.23)	0.00% (0.00% to 0.00%)
Slovakia	1000589.49 (901403.81 to 1108203.31)	34617.70 (31033.22 to 38425.45)	0.00% (0.00% to 0.00%)	1278330.02 (1170987.69 to 1385532.19)	42423.93 (38895.18 to 46177.91)	0.00% (0.00% to 0.00%)
Slovenia	384589.07 (346184.94 to 423997.73)	34617.99 (30987.74 to 38476.87)	0.00% (0.00% to 0.00%)	472450.95 (433707.24 to 512041.49)	42424.44 (38959.04 to 46183.44)	0.00% (0.00% to 0.00%)
Spain	9310338.43 (8459072.68 to 10188427.55)	38755.29 (34993.92 to 42572.20)	0.00% (0.00% to 0.01%)	11495489.30 (10594596.29 to 12460455.38)	46379.76 (42731.95 to 50127.76)	0.00% (0.00% to 0.00%)
Sweden	2123476.19 (1953775.57 to 2289717.68)	38799.97 (35745.58 to 42219.24)	0.00% (-0.03% to 0.03%)	2685793.81 (2508733.59 to 2849645.10)	49970.30 (46676.95 to 53170.23)	0.00% (-0.02% to 0.02%)
Switzerland	1703833.80 (1530952.95 to 1878971.92)	35659.63 (32155.86 to 39378.54)	0.03% (-0.01% to 0.09%)	2076028.28 (1907649.39 to 2251827.63)	43777.65 (40286.68 to 47237.42)	0.02% (-0.01% to 0.06%)
Ukraine	8197816.98 (7513185.08 to 8916935.81)	37124.21 (34087.74 to 40483.94)	0.00% (0.00% to 0.00%)	10894423.81 (10096470.92 to 11667213.79)	42894.62 (39735.60 to 45955.41)	0.00% (0.00% to 0.00%)
United Kingdom	13833963.20 (12654905.37 to 14973758.92)	39323.60 (36151.90 to 42638.08)	0.00% (-0.01% to 0.01%)	17417171.16 (16274104.77 to 18549984.14)	47648.03 (44554.03 to 50637.60)	0.00% (-0.01% to 0.01%)

Table S3b: Counts and age-standardized DALY rates of headache disorders in 2021, and percentage changes from 1990 to 2021, by country and sex

	Male			Female		
	Absolute number, 2021	**Age-standardized rate, per 100 000 people, 2021**	**Percentage Change, 1990-2021**	**Absolute number, 2021**	**Age-standardized rate, per 100 000 people, 2021**	**Percentage Change, 1990-2021**
Europe	**2156683.04 (610227.14 to 4441134.25)**	**483.36 (120.11 to 1021.87)**	**0.01% (-0.01% to 0.03%)**	**4188380.05 (1191901.20 to 8451079.17)**	**908.18 (223.50 to 1866.52)**	**0.01% (-0.02% to 0.03%)**
Albania	6370.36 (2016.95 to 12857.39)	431.91 (124.11 to 886.67)	0.00% (-0.04% to 0.05%)	10953.67 (3062.68 to 23179.72)	750.32 (194.01 to 1613.90)	0.00% (-0.04% to 0.03%)
Andorra	241.91 (50.95 to 519.53)	489.24 (86.07 to 1076.87)	0.00% (-0.05% to 0.05%)	442.21 (102.11 to 915.54)	958.55 (185.68 to 2053.42)	0.00% (-0.04% to 0.03%)
Austria	22315.45 (5453.43 to 47835.01)	469.87 (98.02 to 1033.84)	0.00% (-0.07% to 0.06%)	42848.78 (10379.57 to 87853.27)	910.67 (186.47 to 1925.91)	0.00% (-0.04% to 0.04%)
Belarus	20850.31 (8145.28 to 40680.20)	421.65 (149.25 to 850.44)	0.00% (-0.05% to 0.05%)	44186.63 (16238.71 to 85779.46)	798.55 (262.61 to 1606.64)	0.00% (-0.04% to 0.03%)
Belgium	33742.99 (5848.17 to 72433.05)	575.67 (85.23 to 1269.70)	0.03% (-0.07% to 0.12%)	69266.67 (12490.45 to 146826.94)	1166.28 (185.12 to 2528.78)	0.08% (-0.03% to 0.18%)
Bosnia and Herzegovina	7817.58 (2573.11 to 15554.73)	430.04 (123.89 to 890.30)	0.00% (-0.05% to 0.06%)	13864.93 (4050.40 to 29021.25)	746.95 (193.03 to 1610.11)	0.00% (-0.04% to 0.04%)
Bulgaria	15924.73 (5165.18 to 31875.74)	430.56 (122.90 to 892.84)	0.00% (-0.04% to 0.05%)	28199.19 (8349.48 to 58779.52)	747.64 (192.01 to 1603.14)	0.00% (-0.04% to 0.03%)
Croatia	9866.88 (3231.66 to 19757.21)	430.47 (125.14 to 887.58)	0.00% (-0.06% to 0.07%)	17534.41 (5132.77 to 36425.16)	750.60 (193.44 to 1626.08)	0.00% (-0.05% to 0.06%)
Cyprus	3578.44 (728.20 to 7719.10)	490.73 (88.25 to 1082.27)	0.00% (-0.06% to 0.06%)	7264.48 (1573.34 to 15031.96)	960.26 (183.55 to 2052.65)	0.00% (-0.04% to 0.03%)
Czechia	25017.40 (8263.60 to 49788.50)	430.94 (125.69 to 889.86)	0.00% (-0.04% to 0.05%)	43133.67 (12354.18 to 90639.44)	748.37 (190.88 to 1628.33)	0.00% (-0.04% to 0.04%)

Denmark	13524.04 (3306.92 to 28831.59)	445.32 (93.96 to 969.36)	0.02% (-0.05% to 0.10%)	25675.53 (5828.86 to 53318.55)	863.67 (170.89 to 1820.81)	0.02% (-0.05% to 0.10%)
Estonia	2940.07 (1157.74 to 5755.00)	422.10 (150.58 to 852.54)	0.01% (-0.04% to 0.06%)	5886.78 (2202.68 to 11427.82)	800.29 (265.57 to 1598.27)	0.00% (-0.03% to 0.03%)
Finland	13769.28 (2825.38 to 29427.60)	487.86 (86.78 to 1073.33)	0.00% (-0.05% to 0.06%)	26579.26 (5975.21 to 54488.41)	959.39 (184.19 to 2035.43)	0.00% (-0.04% to 0.04%)
France	171067.16 (38864.67 to 362011.25)	516.78 (101.13 to 1110.26)	-0.01% (-0.08% to 0.07%)	326156.60 (84679.31 to 657207.83)	951.73 (216.88 to 1950.88)	-0.01% (-0.07% to 0.06%)
Germany	231513.59 (49952.83 to 488124.83)	519.55 (96.00 to 1110.27)	0.03% (-0.05% to 0.11%)	455840.62 (105101.56 to 925890.88)	1056.88 (196.66 to 2225.78)	0.02% (-0.05% to 0.10%)
Greece	26385.85 (5314.50 to 57855.17)	511.88 (85.80 to 1147.56)	-0.01% (-0.08% to 0.06%)	51872.16 (11669.93 to 106816.74)	974.19 (182.76 to 2078.22)	0.00% (-0.07% to 0.06%)
Hungary	22259.54 (7356.73 to 44486.06)	432.01 (127.54 to 905.19)	0.01% (-0.04% to 0.06%)	40668.51 (12096.93 to 85032.66)	749.06 (195.03 to 1618.28)	0.00% (-0.04% to 0.05%)
Iceland	912.46 (176.61 to 1956.59)	490.85 (86.42 to 1084.95)	0.00% (-0.05% to 0.05%)	1709.34 (367.22 to 3579.01)	962.07 (186.91 to 2055.02)	0.00% (-0.04% to 0.04%)
Ireland	12408.68 (2454.33 to 27048.04)	487.86 (83.73 to 1074.14)	0.00% (-0.06% to 0.05%)	24789.04 (5401.03 to 51149.51)	955.72 (183.76 to 2041.89)	0.00% (-0.04% to 0.03%)
Israel	23134.32 (4213.83 to 51247.55)	491.42 (86.90 to 1094.13)	0.00% (-0.05% to 0.05%)	45309.50 (8942.59 to 96078.05)	963.01 (183.39 to 2071.68)	0.00% (-0.04% to 0.03%)
Italy	163472.55 (33294.01 to 350580.00)	532.62 (89.26 to 1172.86)	0.01% (-0.04% to 0.06%)	325272.52 (69737.49 to 678546.36)	1049.23 (181.47 to 2232.96)	0.02% (-0.04% to 0.06%)
Latvia	4088.12 (1615.91 to 7883.34)	421.56 (149.85 to 844.53)	0.01% (-0.04% to 0.06%)	8624.94 (3244.73 to 16692.39)	800.04 (266.40 to 1590.50)	0.00% (-0.03% to 0.04%)
Lithuania	5367.77 (2047.75 to 10550.65)	377.19 (132.14 to 761.61)	0.01% (-0.05% to 0.05%)	11835.40 (4134.77 to 23161.69)	752.52 (229.49 to 1528.20)	0.00% (-0.04% to 0.03%)

Luxembourg	1773.69 (415.55 to 3736.14)	497.39 (103.85 to 1064.70)	0.01% (-0.04% to 0.06%)	3269.10 (831.51 to 6579.89)	944.96 (215.19 to 1929.69)	0.00% (-0.03% to 0.03%)
Malta	1131.17 (247.14 to 2435.76)	490.02 (88.35 to 1087.21)	0.00% (-0.05% to 0.06%)	2142.87 (482.01 to 4411.82)	960.48 (181.64 to 2045.71)	0.00% (-0.03% to 0.03%)
Monaco	90.96 (20.53 to 191.79)	489.59 (87.80 to 1092.18)	0.00% (-0.05% to 0.05%)	183.19 (43.29 to 374.59)	957.44 (183.64 to 2036.52)	-0.01% (-0.04% to 0.03%)
Montenegro	1452.64 (464.57 to 2961.25)	432.13 (124.96 to 894.11)	0.00% (-0.04% to 0.06%)	2551.12 (722.61 to 5432.53)	747.55 (189.86 to 1619.27)	-0.01% (-0.04% to 0.03%)
Netherlands	41406.73 (8074.70 to 92831.79)	468.09 (78.36 to 1070.25)	0.07% (-0.05% to 0.19%)	81505.26 (16294.50 to 171216.98)	928.70 (157.97 to 1981.10)	0.04% (-0.04% to 0.11%)
North Macedonia	5484.49 (1752.60 to 11053.89)	431.69 (124.56 to 887.98)	0.00% (-0.05% to 0.05%)	9090.58 (2547.79 to 19218.16)	746.84 (191.54 to 1611.94)	0.00% (-0.04% to 0.03%)
Norway	14390.67 (2856.02 to 31524.09)	499.29 (87.89 to 1109.11)	0.09% (0.02% to 0.16%)	26422.71 (5385.36 to 55234.48)	961.46 (170.20 to 2049.84)	0.07% (0.00% to 0.12%)
Poland	95963.54 (33133.53 to 192959.82)	457.39 (137.89 to 955.96)	0.01% (-0.02% to 0.03%)	170082.73 (50749.31 to 348111.69)	785.46 (206.61 to 1680.95)	0.00% (-0.01% to 0.02%)
Portugal	25883.46 (5420.87 to 55524.75)	487.62 (83.55 to 1070.99)	0.01% (-0.05% to 0.06%)	54391.84 (12758.08 to 111585.95)	954.76 (184.12 to 2034.90)	0.00% (-0.03% to 0.03%)
Republic of Moldova	8454.21 (3330.41 to 16556.63)	422.67 (150.16 to 851.31)	0.00% (-0.04% to 0.05%)	17261.92 (6313.62 to 33503.43)	800.19 (266.08 to 1581.48)	0.00% (-0.03% to 0.04%)
Romania	44378.56 (14592.60 to 88512.92)	432.04 (127.38 to 877.21)	0.01% (-0.04% to 0.06%)	78636.56 (23554.33 to 164607.17)	751.34 (194.86 to 1617.96)	0.00% (-0.04% to 0.05%)
Russian Federation	373515.26 (147654.74 to 738518.28)	490.59 (182.01 to 1001.08)	0.01% (-0.01% to 0.02%)	753629.55 (298331.56 to 1446183.65)	875.09 (321.87 to 1741.34)	0.00% (-0.01% to 0.01%)
San Marino	80.08 (16.86 to 171.95)	489.26 (85.66 to 1078.25)	0.00% (-0.05% to 0.05%)	168.48 (38.73 to 346.51)	957.81 (183.29 to 2050.16)	-0.01% (-0.05% to 0.03%)
Serbia	21712.93 (6921.98 to 43923.53)	433.01 (126.43 to 900.79)	0.00% (-0.05% to 0.05%)	36900.12 (10740.76 to 77968.46)	750.37 (192.08 to 1600.07)	0.00% (-0.04% to 0.03%)

Slovakia	12950.31 (4148.10 to 25860.49)	431.78 (125.73 to 882.03)	0.01% (-0.05% to 0.06%)	22895.21 (6671.21 to 48873.55)	750.44 (193.99 to 1622.29)	0.00% (-0.04% to 0.04%)
Slovenia	4962.65 (1656.48 to 9790.50)	431.94 (126.39 to 880.93)	0.01% (-0.04% to 0.05%)	8340.18 (2454.28 to 17535.55)	750.26 (190.22 to 1625.18)	0.00% (-0.04% to 0.04%)
Spain	120492.37 (25368.92 to 260200.62)	507.44 (90.49 to 1122.00)	0.01% (-0.04% to 0.10%)	246689.17 (63992.83 to 497984.29)	1017.76 (216.78 to 2118.58)	0.00% (-0.06% to 0.05%)
Sweden	25969.88 (5265.00 to 54912.98)	483.47 (84.62 to 1037.44)	0.01% (-0.06% to 0.08%)	50475.24 (10255.52 to 106515.41)	981.10 (177.44 to 2084.33)	0.00% (-0.05% to 0.06%)
Switzerland	21074.77 (4923.31 to 44633.94)	445.27 (87.44 to 975.21)	0.02% (-0.05% to 0.10%)	40439.94 (9896.36 to 82678.81)	876.05 (186.46 to 1831.12)	0.01% (-0.05% to 0.07%)
Ukraine	103319.75 (40823.70 to 200958.67)	443.08 (164.50 to 890.88)	0.00% (-0.04% to 0.04%)	216629.76 (81765.09 to 416710.72)	825.76 (272.08 to 1658.70)	0.00% (-0.03% to 0.03%)
United Kingdom	167910.69 (36446.04 to 357634.14)	483.12 (93.82 to 1047.05)	0.01% (-0.04% to 0.05%)	339324.26 (77760.69 to 711127.93)	953.23 (191.24 to 2021.20)	0.00% (-0.04% to 0.04%)

Table S3c: Counts and age-standardized incidence rates of headache disorders in 2021, and percentage changes from 1990 to 2021, by country and sex

	Male			Female		
	Absolute number, 2021	**Age-standardized rate, per 100 000 people, 2021**	**Percentage Change, 1990-2021**	**Absolute number, 2021**	**Age-standardized rate, per 100 000 people, 2021**	**Percentage Change, 1990-2021**
Europe	**48555908.52 (42852324.20 to 53951770.13)**	**11479.08 (10093.46 to 12782.11)**	**-0.01% (-0.01% to 0.00%)**	**55736928.71 (49546328.77 to 61419006.97)**	**12662.55 (11215.82 to 14029.50)**	**-0.01% (-0.01% to 0.00%)**
Albania	152513.73 (134073.31 to 170641.68)	10965.85 (9581.84 to 12335.29)	0.00% (-0.01% to 0.01%)	167964.28 (147359.76 to 186928.59)	12372.46 (10856.90 to 13777.05)	0.00% (0.00% to 0.01%)
Andorra	5383.07 (4683.85 to 6078.60)	11673.71 (10192.20 to 13164.88)	0.00% (0.00% to 0.01%)	5632.78 (4974.16 to 6301.47)	13072.40 (11432.96 to 14635.12)	0.00% (0.00% to 0.00%)
Austria	526934.48 (463367.24 to 592004.32)	11620.90 (10086.06 to 13115.56)	0.00% (0.00% to 0.01%)	588472.45 (523471.10 to 652878.82)	12898.94 (11439.36 to 14394.55)	0.00% (0.00% to 0.01%)
Belarus	505414.59 (444106.98 to 566877.66)	11257.71 (9873.99 to 12679.75)	0.00% (-0.01% to 0.01%)	600239.59 (531079.04 to 669303.17)	11983.54 (10515.36 to 13353.38)	0.00% (0.00% to 0.01%)
Belgium	670812.68 (592315.17 to 747766.22)	11787.73 (10317.57 to 13288.52)	0.00% (-0.01% to 0.01%)	762458.96 (681816.60 to 847940.35)	13232.60 (11579.62 to 14824.87)	0.00% (-0.01% to 0.01%)
Bosnia and Herzegovina	182794.68 (160974.84 to 204904.97)	10965.74 (9599.48 to 12340.88)	0.00% (-0.01% to 0.00%)	211889.85 (186487.46 to 233821.41)	12372.32 (10849.70 to 13782.34)	0.00% (0.00% to 0.00%)
Bulgaria	370042.05 (326368.58 to 414540.37)	10965.91 (9604.32 to 12317.95)	0.00% (0.00% to 0.01%)	433662.36 (382168.98 to 481210.63)	12372.95 (10841.85 to 13788.24)	0.00% (-0.01% to 0.01%)
Croatia	230348.41 (203599.11 to 256326.48)	10956.68 (9627.82 to 12282.60)	0.00% (-0.04% to 0.03%)	270914.30 (241926.73 to 300342.70)	12417.31 (10943.39 to 13838.61)	0.00% (-0.04% to 0.04%)
Cyprus	81140.73 (70237.75 to 91742.42)	11673.95 (10184.74 to 13159.17)	0.00% (0.00% to 0.01%)	92750.41 (81613.64 to 103708.75)	13072.45 (11413.63 to 14685.83)	0.00% (0.00% to 0.00%)

Czechia	584603.22 (515653.87 to 654052.20)	10965.92 (9592.39 to 12315.47)	0.00% (-0.01% to 0.01%)	667748.29 (591628.37 to 739917.54)	12372.56 (10860.96 to 13780.47)	0.00% (0.00% to 0.00%)
Denmark	342098.86 (300377.34 to 381161.57)	11600.54 (10075.99 to 13019.76)	0.00% (-0.04% to 0.04%)	382423.34 (334085.02 to 426778.90)	13056.85 (11375.84 to 14648.32)	0.01% (-0.04% to 0.06%)
Estonia	71522.20 (62955.07 to 79955.35)	11258.07 (9865.99 to 12627.03)	0.00% (-0.01% to 0.01%)	82338.80 (73179.45 to 91251.72)	11983.44 (10485.40 to 13359.58)	0.00% (0.00% to 0.00%)
Finland	322391.34 (282430.09 to 359154.91)	11673.79 (10153.30 to 13193.54)	0.00% (-0.01% to 0.00%)	362286.01 (324176.76 to 402672.26)	13072.72 (11431.50 to 14653.47)	0.00% (0.00% to 0.00%)
France	3759212.99 (3331766.41 to 4186405.82)	11649.75 (10213.33 to 13089.52)	0.00% (-0.01% to 0.01%)	4350694.88 (3871100.83 to 4786643.86)	12850.77 (11337.48 to 14420.30)	0.00% (-0.01% to 0.01%)
Germany	5030643.80 (4414066.98 to 5613294.32)	11730.08 (10238.58 to 13253.66)	0.01% (-0.04% to 0.05%)	5522812.86 (4897418.38 to 6243975.41)	13183.15 (11599.98 to 14868.32)	0.00% (-0.04% to 0.05%)
Greece	582220.98 (510845.31 to 651178.04)	11713.04 (10217.85 to 13211.61)	0.00% (-0.01% to 0.01%)	678342.93 (603780.46 to 754441.38)	13089.29 (11441.01 to 14668.72)	0.00% (-0.01% to 0.01%)
Hungary	516779.99 (456529.46 to 579768.66)	10965.76 (9595.83 to 12331.91)	0.00% (-0.01% to 0.01%)	624647.15 (552445.48 to 688736.23)	12372.69 (10861.64 to 13791.97)	0.00% (0.00% to 0.01%)
Iceland	21111.94 (18635.24 to 23716.77)	11673.90 (10187.77 to 13166.98)	0.00% (-0.01% to 0.01%)	22748.26 (20163.37 to 25361.71)	13072.13 (11408.44 to 14673.05)	0.00% (0.00% to 0.01%)
Ireland	288953.71 (255462.33 to 323236.68)	11673.58 (10195.65 to 13151.86)	0.00% (0.00% to 0.00%)	330238.74 (293091.41 to 369148.15)	13072.44 (11430.78 to 14674.90)	0.00% (0.00% to 0.00%)
Israel	551170.96 (482384.96 to 619750.75)	11673.49 (10197.50 to 13163.59)	0.00% (-0.01% to 0.01%)	619757.45 (546269.55 to 690501.83)	13072.37 (11415.22 to 14647.06)	0.00% (0.00% to 0.01%)
Italy	3733829.62 (3300733.25 to 4152523.20)	12692.38 (11132.10 to 14151.36)	0.00% (-0.03% to 0.03%)	4269817.07 (3785044.38 to 4684980.82)	14128.78 (12578.02 to 15576.18)	0.00% (-0.03% to 0.03%)
Latvia	98958.84 (87213.39 to 110774.65)	11258.01 (9868.88 to 12655.13)	0.00% (0.00% to 0.01%)	119299.14 (105920.04 to 132039.28)	11983.45 (10483.20 to 13340.36)	0.00% (0.00% to 0.00%)

Lithuania	146473.66 (127854.94 to 165041.84)	11372.11 (9826.63 to 12858.10)	0.00% (-0.01% to 0.01%)	176279.79 (157063.14 to 195201.22)	12108.20 (10565.99 to 13560.98)	0.00% (-0.01% to 0.00%)
Luxembourg	39257.74 (34277.57 to 44592.52)	11678.91 (10193.95 to 13124.62)	0.00% (-0.01% to 0.01%)	42446.61 (37214.65 to 47289.89)	12951.16 (11373.68 to 14499.40)	0.00% (0.00% to 0.00%)
Malta	25961.95 (22717.75 to 29113.83)	11673.53 (10211.02 to 13168.60)	0.00% (-0.01% to 0.01%)	28508.59 (25513.09 to 31788.76)	13072.21 (11426.80 to 14659.61)	0.00% (0.00% to 0.00%)
Monaco	2113.26 (1864.56 to 2366.36)	11673.80 (10184.91 to 13156.65)	0.00% (-0.01% to 0.01%)	2469.93 (2202.21 to 2750.02)	13072.12 (11411.45 to 14667.32)	0.00% (-0.01% to 0.01%)
Montenegro	34465.00 (30351.24 to 38748.14)	10965.83 (9593.60 to 12316.84)	0.00% (0.00% to 0.01%)	39340.21 (34696.29 to 43602.24)	12372.37 (10855.02 to 13801.69)	0.00% (-0.01% to 0.00%)
Netherlands	1013957.22 (894733.43 to 1140552.94)	11784.90 (10190.55 to 13379.47)	0.00% (0.00% to 0.01%)	1135177.58 (998979.71 to 1272876.80)	13158.74 (11337.87 to 14902.33)	0.00% (0.00% to 0.01%)
North Macedonia	127221.61 (111986.23 to 143555.66)	10965.82 (9593.80 to 12338.92)	0.00% (0.00% to 0.01%)	137476.95 (120957.37 to 153286.47)	12372.45 (10857.78 to 13791.10)	0.00% (0.00% to 0.00%)
Norway	357294.83 (318629.91 to 398868.00)	12797.15 (11400.47 to 14283.16)	0.02% (-0.01% to 0.06%)	391906.34 (347140.35 to 434680.92)	14544.81 (12855.64 to 16188.84)	0.01% (-0.03% to 0.05%)
Poland	2250573.56 (1983619.97 to 2497809.85)	11737.26 (10396.00 to 13118.85)	0.00% (0.00% to 0.00%)	2658108.11 (2347869.56 to 2928576.05)	13259.29 (11648.10 to 14702.16)	0.00% (0.00% to 0.00%)
Portugal	594452.56 (520810.83 to 664156.80)	11673.62 (10216.84 to 13153.19)	0.00% (0.00% to 0.01%)	722571.21 (644900.06 to 804569.14)	13072.59 (11431.34 to 14667.64)	0.00% (0.00% to 0.00%)
Republic of Moldova	203423.65 (178213.48 to 228659.16)	11257.85 (9856.54 to 12693.15)	0.00% (-0.01% to 0.01%)	232080.45 (205529.25 to 260542.10)	11983.25 (10483.06 to 13340.81)	0.00% (-0.01% to 0.01%)
Romania	1036670.46 (916271.61 to 1161052.05)	10965.97 (9586.76 to 12322.54)	0.00% (0.00% to 0.01%)	1210222.68 (1066332.77 to 1335474.67)	12372.52 (10842.49 to 13800.53)	0.00% (-0.01% to 0.00%)
Russian Federation	8245557.17 (7243008.89 to 9178026.93)	11855.44 (10423.24 to 13186.33)	0.00% (-0.04% to 0.04%)	9898485.31 (8763046.93 to 10936173.18)	12710.13 (11290.49 to 14156.67)	0.01% (-0.03% to 0.05%)

San Marino	1863.32 (1642.80 to 2080.83)	11673.79 (10195.94 to 13164.93)	0.00% (-0.01% to 0.01%)	2219.90 (1979.97 to 2469.48)	13072.15 (11405.85 to 14655.12)	0.00% (0.00% to 0.00%)
Serbia	512565.68 (451931.20 to 575188.10)	10965.89 (9587.44 to 12320.69)	0.00% (-0.01% to 0.01%)	568288.11 (502658.70 to 628454.97)	12372.47 (10863.74 to 13793.97)	0.00% (0.00% to 0.01%)
Slovakia	300677.23 (265157.48 to 338509.09)	10965.95 (9583.46 to 12322.18)	0.00% (0.00% to 0.01%)	348486.71 (307319.82 to 386145.38)	12372.47 (10845.02 to 13759.49)	0.00% (0.00% to 0.01%)
Slovenia	115021.51 (101128.38 to 128552.39)	10965.67 (9593.15 to 12327.42)	0.00% (-0.01% to 0.01%)	128639.48 (114006.71 to 141787.58)	12372.83 (10848.17 to 13790.17)	0.00% (-0.01% to 0.01%)
Spain	2648605.88 (2314838.64 to 2969417.46)	11688.64 (10131.10 to 13111.03)	0.00% (-0.01% to 0.01%)	3000700.55 (2675883.87 to 3327979.37)	12898.11 (11434.63 to 14372.02)	0.00% (0.00% to 0.00%)
Sweden	653777.52 (578316.80 to 717960.22)	12444.97 (11004.09 to 13844.36)	0.01% (-0.03% to 0.04%)	730913.49 (653549.70 to 806839.25)	14334.09 (12768.93 to 16000.48)	0.00% (-0.03% to 0.04%)
Switzerland	514306.65 (449773.44 to 574595.17)	11310.97 (9988.18 to 12614.16)	0.01% (-0.03% to 0.06%)	570561.16 (504512.84 to 630655.44)	12711.90 (11158.47 to 14072.35)	0.01% (-0.03% to 0.05%)
Ukraine	2538686.48 (2235101.19 to 2845038.43)	12085.71 (10652.93 to 13488.62)	0.00% (0.00% to 0.01%)	3022001.09 (2674049.88 to 3358320.07)	12813.24 (11305.27 to 14287.16)	0.00% (0.00% to 0.00%)
United Kingdom	4195329.42 (3724031.58 to 4656670.02)	12444.29 (10985.71 to 13892.51)	0.00% (0.00% to 0.00%)	4849796.79 (4318090.05 to 5357625.65)	13947.46 (12381.56 to 15446.27)	0.00% (0.00% to 0.01%)

Table S3d: Counts and age-standardized YLD rates of headache disorders in 2021, and percentage changes from 1990 to 2021, by country and sex

	Male			Female		
	Absolute number, 2021	**Age-standardized rate, per 100 000 people, 2021**	**Percentage Change, 1990-2021**	**Absolute number, 2021**	**Age-standardized rate, per 100 000 people, 2021**	**Percentage Change, 1990-2021**
Europe	**2156683.04 (610227.14 to 4441134.25)**	**483.36 (120.11 to 1021.87)**	**0.01% (-0.01% to 0.03%)**	**4188380.05 (1191901.20 to 8451079.17)**	**908.18 (223.50 to 1866.52)**	**0.01% (-0.02% to 0.03%)**
Albania	6370.36 (2016.95 to 12857.39)	431.91 (124.11 to 886.67)	0.00% (-0.04% to 0.05%)	10953.67 (3062.68 to 23179.72)	750.32 (194.01 to 1613.90)	0.00% (-0.04% to 0.03%)
Andorra	241.91 (50.95 to 519.53)	489.24 (86.07 to 1076.87)	0.00% (-0.05% to 0.05%)	442.21 (102.11 to 915.54)	958.55 (185.68 to 2053.42)	0.00% (-0.04% to 0.03%)
Austria	22315.45 (5453.43 to 47835.01)	469.87 (98.02 to 1033.84)	0.00% (-0.07% to 0.06%)	42848.78 (10379.57 to 87853.27)	910.67 (186.47 to 1925.91)	0.00% (-0.04% to 0.04%)
Belarus	20850.31 (8145.28 to 40680.20)	421.65 (149.25 to 850.44)	0.00% (-0.05% to 0.05%)	44186.63 (16238.71 to 85779.46)	798.55 (262.61 to 1606.64)	0.00% (-0.04% to 0.03%)
Belgium	33742.99 (5848.17 to 72433.05)	575.67 (85.23 to 1269.70)	0.03% (-0.07% to 0.12%)	69266.67 (12490.45 to 146826.94)	1166.28 (185.12 to 2528.78)	0.08% (-0.03% to 0.18%)
Bosnia and Herzegovina	7817.58 (2573.11 to 15554.73)	430.04 (123.89 to 890.30)	0.00% (-0.05% to 0.06%)	13864.93 (4050.40 to 29021.25)	746.95 (193.03 to 1610.11)	0.00% (-0.04% to 0.04%)
Bulgaria	15924.73 (5165.18 to 31875.74)	430.56 (122.90 to 892.84)	0.00% (-0.04% to 0.05%)	28199.19 (8349.48 to 58779.52)	747.64 (192.01 to 1603.14)	0.00% (-0.04% to 0.03%)
Croatia	9866.88 (3231.66 to 19757.21)	430.47 (125.14 to 887.58)	0.00% (-0.06% to 0.07%)	17534.41 (5132.77 to 36425.16)	750.60 (193.44 to 1626.08)	0.00% (-0.05% to 0.06%)
Cyprus	3578.44 (728.20 to 7719.10)	490.73 (88.25 to 1082.27)	0.00% (-0.06% to 0.06%)	7264.48 (1573.34 to 15031.96)	960.26 (183.55 to 2052.65)	0.00% (-0.04% to 0.03%)
Czechia	25017.40 (8263.60 to 49788.50)	430.94 (125.69 to 889.86)	0.00% (-0.04% to 0.05%)	43133.67 (12354.18 to 90639.44)	748.37 (190.88 to 1628.33)	0.00% (-0.04% to 0.04%)

Denmark	13524.04 (3306.92 to 28831.59)	445.32 (93.96 to 969.36)	0.02% (-0.05% to 0.10%)	25675.53 (5828.86 to 53318.55)	863.67 (170.89 to 1820.81)	0.02% (-0.05% to 0.10%)
Estonia	2940.07 (1157.74 to 5755.00)	422.10 (150.58 to 852.54)	0.01% (-0.04% to 0.06%)	5886.78 (2202.68 to 11427.82)	800.29 (265.57 to 1598.27)	0.00% (-0.03% to 0.03%)
Finland	13769.28 (2825.38 to 29427.60)	487.86 (86.78 to 1073.33)	0.00% (-0.05% to 0.06%)	26579.26 (5975.21 to 54488.41)	959.39 (184.19 to 2035.43)	0.00% (-0.04% to 0.04%)
France	171067.16 (38864.67 to 362011.25)	516.78 (101.13 to 1110.26)	-0.01% (-0.08% to 0.07%)	326156.60 (84679.31 to 657207.83)	951.73 (216.88 to 1950.88)	-0.01% (-0.07% to 0.06%)
Germany	231513.59 (49952.83 to 488124.83)	519.55 (96.00 to 1110.27)	0.03% (-0.05% to 0.11%)	455840.62 (105101.56 to 925890.88)	1056.88 (196.66 to 2225.78)	0.02% (-0.05% to 0.10%)
Greece	26385.85 (5314.50 to 57855.17)	511.88 (85.80 to 1147.56)	-0.01% (-0.08% to 0.06%)	51872.16 (11669.93 to 106816.74)	974.19 (182.76 to 2078.22)	0.00% (-0.07% to 0.06%)
Hungary	22259.54 (7356.73 to 44486.06)	432.01 (127.54 to 905.19)	0.01% (-0.04% to 0.06%)	40668.51 (12096.93 to 85032.66)	749.06 (195.03 to 1618.28)	0.00% (-0.04% to 0.05%)
Iceland	912.46 (176.61 to 1956.59)	490.85 (86.42 to 1084.95)	0.00% (-0.05% to 0.05%)	1709.34 (367.22 to 3579.01)	962.07 (186.91 to 2055.02)	0.00% (-0.04% to 0.04%)
Ireland	12408.68 (2454.33 to 27048.04)	487.86 (83.73 to 1074.14)	0.00% (-0.06% to 0.05%)	24789.04 (5401.03 to 51149.51)	955.72 (183.76 to 2041.89)	0.00% (-0.04% to 0.03%)
Israel	23134.32 (4213.83 to 51247.55)	491.42 (86.90 to 1094.13)	0.00% (-0.05% to 0.05%)	45309.50 (8942.59 to 96078.05)	963.01 (183.39 to 2071.68)	0.00% (-0.04% to 0.03%)
Italy	163472.55 (33294.01 to 350580.00)	532.62 (89.26 to 1172.86)	0.01% (-0.04% to 0.06%)	325272.52 (69737.49 to 678546.36)	1049.23 (181.47 to 2232.96)	0.02% (-0.04% to 0.06%)
Latvia	4088.12 (1615.91 to 7883.34)	421.56 (149.85 to 844.53)	0.01% (-0.04% to 0.06%)	8624.94 (3244.73 to 16692.39)	800.04 (266.40 to 1590.50)	0.00% (-0.03% to 0.04%)
Lithuania	5367.77 (2047.75 to 10550.65)	377.19 (132.14 to 761.61)	0.01% (-0.05% to 0.05%)	11835.40 (4134.77 to 23161.69)	752.52 (229.49 to 1528.20)	0.00% (-0.04% to 0.03%)

Luxembourg	1773.69 (415.55 to 3736.14)	497.39 (103.85 to 1064.70)	0.01% (-0.04% to 0.06%)	3269.10 (831.51 to 6579.89)	944.96 (215.19 to 1929.69)	0.00% (-0.03% to 0.03%)
Malta	1131.17 (247.14 to 2435.76)	490.02 (88.35 to 1087.21)	0.00% (-0.05% to 0.06%)	2142.87 (482.01 to 4411.82)	960.48 (181.64 to 2045.71)	0.00% (-0.03% to 0.03%)
Monaco	90.96 (20.53 to 191.79)	489.59 (87.80 to 1092.18)	0.00% (-0.05% to 0.05%)	183.19 (43.29 to 374.59)	957.44 (183.64 to 2036.52)	-0.01% (-0.04% to 0.03%)
Montenegro	1452.64 (464.57 to 2961.25)	432.13 (124.96 to 894.11)	0.00% (-0.04% to 0.06%)	2551.12 (722.61 to 5432.53)	747.55 (189.86 to 1619.27)	-0.01% (-0.04% to 0.03%)
Netherlands	41406.73 (8074.70 to 92831.79)	468.09 (78.36 to 1070.25)	0.07% (-0.05% to 0.19%)	81505.26 (16294.50 to 171216.98)	928.70 (157.97 to 1981.10)	0.04% (-0.04% to 0.11%)
North Macedonia	5484.49 (1752.60 to 11053.89)	431.69 (124.56 to 887.98)	0.00% (-0.05% to 0.05%)	9090.58 (2547.79 to 19218.16)	746.84 (191.54 to 1611.94)	0.00% (-0.04% to 0.03%)
Norway	14390.67 (2856.02 to 31524.09)	499.29 (87.89 to 1109.11)	0.09% (0.02% to 0.16%)	26422.71 (5385.36 to 55234.48)	961.46 (170.20 to 2049.84)	0.07% (0.00% to 0.12%)
Poland	95963.54 (33133.53 to 192959.82)	457.39 (137.89 to 955.96)	0.01% (-0.02% to 0.03%)	170082.73 (50749.31 to 348111.69)	785.46 (206.61 to 1680.95)	0.00% (-0.01% to 0.02%)
Portugal	25883.46 (5420.87 to 55524.75)	487.62 (83.55 to 1070.99)	0.01% (-0.05% to 0.06%)	54391.84 (12758.08 to 111585.95)	954.76 (184.12 to 2034.90)	0.00% (-0.03% to 0.03%)
Republic of Moldova	8454.21 (3330.41 to 16556.63)	422.67 (150.16 to 851.31)	0.00% (-0.04% to 0.05%)	17261.92 (6313.62 to 33503.43)	800.19 (266.08 to 1581.48)	0.00% (-0.03% to 0.04%)
Romania	44378.56 (14592.60 to 88512.92)	432.04 (127.38 to 877.21)	0.01% (-0.04% to 0.06%)	78636.56 (23554.33 to 164607.17)	751.34 (194.86 to 1617.96)	0.00% (-0.04% to 0.05%)
Russian Federation	373515.26 (147654.74 to 738518.28)	490.59 (182.01 to 1001.08)	0.01% (-0.01% to 0.02%)	753629.55 (298331.56 to 1446183.65)	875.09 (321.87 to 1741.34)	0.00% (-0.01% to 0.01%)
San Marino	80.08 (16.86 to 171.95)	489.26 (85.66 to 1078.25)	0.00% (-0.05% to 0.05%)	168.48 (38.73 to 346.51)	957.81 (183.29 to 2050.16)	-0.01% (-0.05% to 0.03%)
Serbia	21712.93 (6921.98 to 43923.53)	433.01 (126.43 to 900.79)	0.00% (-0.05% to 0.05%)	36900.12 (10740.76 to 77968.46)	750.37 (192.08 to 1600.07)	0.00% (-0.04% to 0.03%)

Slovakia	12950.31 (4148.10 to 25860.49)	431.78 (125.73 to 882.03)	0.01% (-0.05% to 0.06%)	22895.21 (6671.21 to 48873.55)	750.44 (193.99 to 1622.29)	0.00% (-0.04% to 0.04%)
Slovenia	4962.65 (1656.48 to 9790.50)	431.94 (126.39 to 880.93)	0.01% (-0.04% to 0.05%)	8340.18 (2454.28 to 17535.55)	750.26 (190.22 to 1625.18)	0.00% (-0.04% to 0.04%)
Spain	120492.37 (25368.92 to 260200.62)	507.44 (90.49 to 1122.00)	0.01% (-0.04% to 0.10%)	246689.17 (63992.83 to 497984.29)	1017.76 (216.78 to 2118.58)	0.00% (-0.06% to 0.05%)
Sweden	25969.88 (5265.00 to 54912.98)	483.47 (84.62 to 1037.44)	0.01% (-0.06% to 0.08%)	50475.24 (10255.52 to 106515.41)	981.10 (177.44 to 2084.33)	0.00% (-0.05% to 0.06%)
Switzerland	21074.77 (4923.31 to 44633.94)	445.27 (87.44 to 975.21)	0.02% (-0.05% to 0.10%)	40439.94 (9896.36 to 82678.81)	876.05 (186.46 to 1831.12)	0.01% (-0.05% to 0.07%)
Ukraine	103319.75 (40823.70 to 200958.67)	443.08 (164.50 to 890.88)	0.00% (-0.04% to 0.04%)	216629.76 (81765.09 to 416710.72)	825.76 (272.08 to 1658.70)	0.00% (-0.03% to 0.03%)
United Kingdom	167910.69 (36446.04 to 357634.14)	483.12 (93.82 to 1047.05)	0.01% (-0.04% to 0.05%)	339324.26 (77760.69 to 711127.93)	953.23 (191.24 to 2021.20)	0.00% (-0.04% to 0.04%)

Table S3e: Counts and age-standardized prevalence rates of migraine in 2021, and percentage changes from 1990 to 2021, by country and sex

	Male			Female		
	Absolute number, 2021	**Age-standardized rate, per 100 000 people, 2021**	**Percentage Change, 1990-2021**	**Absolute number, 2021**	**Age-standardized rate, per 100 000 people, 2021**	**Percentage Change, 1990-2021**
Europe	**47804150.91 (41171341.16 to 55104465.37)**	**10952.93 (9377.99 to 12681.88)**	**0.01% (0.00% to 0.03%)**	**95738019.23 (83608895.84 to 110149171.39)**	**21302.28 (18481.83 to 24506.50)**	**0.01% (0.00% to 0.03%)**
Albania	135864.69 (115232.75 to 158518.40)	9382.99 (7841.02 to 11025.35)	0.00% (0.00% to 0.00%)	256548.41 (220171.72 to 297051.82)	17916.74 (15246.53 to 20788.15)	0.00% (0.00% to 0.00%)
Andorra	5681.74 (4771.11 to 6729.07)	11791.08 (9929.64 to 13884.18)	0.00% (0.00% to 0.00%)	10501.06 (9013.06 to 12317.09)	23391.94 (19912.95 to 27680.34)	0.00% (0.00% to 0.00%)
Austria	512129.25 (438573.59 to 597328.23)	11049.39 (9355.28 to 12900.19)	0.00% (-0.01% to 0.00%)	1010553.72 (873611.02 to 1168780.23)	22064.97 (18789.78 to 25685.47)	0.00% (0.00% to 0.00%)
Belarus	408677.83 (350058.66 to 477373.54)	8529.51 (7257.76 to 9988.76)	0.00% (0.00% to 0.00%)	922787.21 (798738.28 to 1057180.97)	17309.81 (14881.07 to 20168.02)	0.00% (0.00% to 0.00%)
Belgium	824233.96 (702107.95 to 989858.66)	14264.66 (12009.21 to 17275.82)	0.04% (-0.03% to 0.13%)	1720374.41 (1481636.54 to 1990760.87)	29301.08 (25241.15 to 34155.34)	0.09% (0.00% to 0.19%)
Bosnia and Herzegovina	166072.15 (141700.29 to 193271.04)	9382.99 (7841.02 to 11025.35)	0.00% (0.00% to 0.00%)	324983.47 (278121.00 to 377983.37)	17916.74 (15246.53 to 20788.15)	0.00% (0.00% to 0.00%)
Bulgaria	337003.34 (289261.73 to 391036.48)	9382.99 (7841.02 to 11025.35)	0.00% (0.00% to 0.00%)	657942.02 (565341.51 to 765669.63)	17916.74 (15246.53 to 20788.15)	0.00% (0.00% to 0.00%)
Croatia	208206.12 (179327.72 to 242414.95)	9332.48 (7969.67 to 10997.50)	-0.01% (-0.06% to 0.05%)	407649.08 (350224.94 to 474154.46)	17894.26 (15212.37 to 20813.77)	0.00% (-0.06% to 0.05%)
Cyprus	84930.17 (71958.20 to 100902.17)	11791.08 (9929.64 to 13884.18)	0.00% (0.00% to 0.00%)	173697.43 (149425.96 to 204561.75)	23391.94 (19912.95 to 27680.34)	0.00% (0.00% to 0.00%)

Czechia	529675.79 (453450.98 to 614207.35)	9382.99 (7841.02 to 11025.35)	0.00% (0.00% to 0.00%)	1010131.35 (866422.01 to 1173184.20)	17916.74 (15246.53 to 20788.15)	0.00% (0.00% to 0.00%)
Denmark	306871.79 (260694.92 to 360457.95)	10342.14 (8688.50 to 12161.75)	0.03% (-0.04% to 0.09%)	599455.47 (518607.47 to 692934.87)	20656.93 (17587.22 to 24148.60)	0.03% (-0.03% to 0.11%)
Estonia	57555.80 (49556.78 to 67184.17)	8529.51 (7257.76 to 9988.76)	0.00% (0.00% to 0.00%)	122907.95 (106428.39 to 140431.01)	17309.81 (14881.07 to 20168.02)	0.00% (0.00% to 0.00%)
Finland	326204.56 (277114.90 to 383170.10)	11791.08 (9929.64 to 13884.18)	0.00% (0.00% to 0.00%)	632833.25 (545081.46 to 739422.59)	23391.94 (19912.95 to 27680.34)	0.00% (0.00% to 0.00%)
France	3965737.24 (3361196.24 to 4628060.63)	12238.19 (10241.73 to 14345.00)	-0.01% (-0.08% to 0.05%)	7542864.44 (6508733.29 to 8750271.28)	22645.95 (19412.66 to 26401.27)	-0.01% (-0.07% to 0.05%)
Germany	5521918.23 (4678965.41 to 6508061.29)	12667.06 (10674.82 to 15123.07)	0.03% (-0.03% to 0.10%)	11017404.14 (9524910.89 to 12856159.75)	26193.30 (22622.02 to 30688.11)	0.03% (-0.03% to 0.11%)
Greece	630737.62 (535523.86 to 743268.75)	12525.37 (10461.78 to 14948.73)	-0.01% (-0.07% to 0.06%)	1237763.01 (1055878.58 to 1436640.58)	23931.26 (20568.89 to 28186.22)	0.00% (-0.05% to 0.06%)
Hungary	470735.96 (401899.83 to 546406.66)	9382.99 (7841.02 to 11025.35)	0.00% (0.00% to 0.00%)	949422.87 (813902.78 to 1104305.83)	17916.74 (15246.53 to 20788.15)	0.00% (0.00% to 0.00%)
Iceland	21635.05 (18399.42 to 25410.78)	11791.08 (9929.64 to 13884.18)	0.00% (0.00% to 0.00%)	40939.09 (35145.88 to 48181.95)	23391.94 (19912.95 to 27680.34)	0.00% (0.00% to 0.00%)
Ireland	294996.81 (249802.71 to 346396.33)	11791.08 (9929.64 to 13884.18)	0.00% (0.00% to 0.00%)	595682.55 (512032.27 to 697561.08)	23391.94 (19912.95 to 27680.34)	0.00% (0.00% to 0.00%)
Israel	552843.86 (466451.14 to 651306.02)	11791.08 (9929.64 to 13884.18)	0.00% (0.00% to 0.00%)	1093227.59 (934107.43 to 1287811.11)	23391.94 (19912.95 to 27680.34)	0.00% (0.00% to 0.00%)
Italy	3865538.29 (3319200.11 to 4525121.96)	12883.94 (10989.60 to 14842.80)	0.01% (-0.03% to 0.06%)	7771391.44 (6802050.95 to 8924649.40)	25735.51 (22511.73 to 29431.95)	0.01% (-0.03% to 0.05%)
Latvia	79895.06 (68987.69 to 93418.51)	8529.51 (7257.76 to 9988.76)	0.00% (0.00% to 0.00%)	179291.31 (155088.63 to 204636.13)	17309.81 (14881.07 to 20168.02)	0.00% (0.00% to 0.00%)

Lithuania	103729.85 (88619.07 to 119495.36)	7535.66 (6370.84 to 8761.53)	0.00% (0.00% to 0.00%)	255113.49 (219660.85 to 295250.03)	16804.43 (14306.02 to 19693.80)	0.00% (0.00% to 0.00%)
Luxembourg	40973.03 (34812.25 to 48016.52)	11729.48 (9973.86 to 13795.19)	0.00% (0.00% to 0.00%)	75318.65 (64920.43 to 88453.51)	22311.90 (19072.94 to 26166.25)	0.00% (0.00% to 0.00%)
Malta	26597.53 (22535.87 to 31313.75)	11791.08 (9929.64 to 13884.18)	0.00% (0.00% to 0.00%)	50841.93 (43654.97 to 59533.91)	23391.94 (19912.95 to 27680.34)	0.00% (0.00% to 0.00%)
Monaco	2119.07 (1789.63 to 2498.22)	11791.08 (9929.64 to 13884.18)	0.00% (0.00% to 0.00%)	4319.15 (3711.88 to 5035.21)	23391.94 (19912.95 to 27680.34)	0.00% (0.00% to 0.00%)
Montenegro	30922.20 (26242.02 to 36053.55)	9382.99 (7841.02 to 11025.35)	0.00% (0.00% to 0.00%)	60022.03 (51408.98 to 69520.81)	17916.74 (15246.53 to 20788.15)	0.00% (0.00% to 0.00%)
Netherlands	973852.01 (833152.88 to 1128630.00)	11233.51 (9459.19 to 13211.79)	0.09% (0.00% to 0.20%)	1971048.50 (1691110.41 to 2279026.97)	22889.17 (19534.78 to 26569.03)	0.05% (-0.01% to 0.12%)
North Macedonia	116625.47 (99090.43 to 135826.13)	9382.99 (7841.02 to 11025.35)	0.00% (0.00% to 0.00%)	214555.40 (183956.13 to 248385.06)	17916.74 (15246.53 to 20788.15)	0.00% (0.00% to 0.00%)
Norway	342606.67 (294632.29 to 397633.12)	12083.92 (10313.97 to 13968.21)	0.09% (0.05% to 0.15%)	637900.28 (556247.63 to 729979.87)	23619.18 (20437.57 to 27075.49)	0.07% (0.03% to 0.12%)
Poland	2032711.38 (1754665.86 to 2337514.62)	9916.82 (8528.22 to 11435.96)	0.00% (0.00% to 0.00%)	3940649.87 (3459035.66 to 4528063.65)	18613.09 (16139.42 to 21202.63)	0.00% (0.00% to 0.00%)
Portugal	610568.70 (516191.71 to 717880.06)	11791.08 (9929.64 to 13884.18)	0.00% (0.00% to 0.00%)	1292515.80 (1114093.09 to 1508696.83)	23391.94 (19912.95 to 27680.34)	0.00% (0.00% to 0.00%)
Republic of Moldova	165878.79 (142079.90 to 194761.16)	8529.51 (7257.76 to 9988.76)	0.00% (0.00% to 0.00%)	361508.37 (312572.09 to 415084.81)	17309.81 (14881.07 to 20168.02)	0.00% (0.00% to 0.00%)
Romania	938218.22 (800956.51 to 1090652.18)	9382.99 (7841.02 to 11025.35)	0.00% (0.00% to 0.00%)	1828542.58 (1568212.61 to 2125384.34)	17916.74 (15246.53 to 20788.15)	0.00% (0.00% to 0.00%)
Russian Federation	7426093.76 (6381957.63 to 8628091.03)	10028.71 (8569.88 to 11598.56)	0.00% (0.00% to 0.00%)	15372973.84 (13408971.01 to 17503422.36)	18486.73 (16076.60 to 21034.84)	0.00% (0.00% to 0.00%)

San Marino	1880.34 (1589.79 to 2208.58)	11791.08 (9929.64 to 13884.18)	0.00% (0.00% to 0.00%)	3997.50 (3441.89 to 4673.15)	23391.94 (19912.95 to 27680.34)	0.00% (0.00% to 0.00%)
Serbia	461169.68 (391122.12 to 537443.07)	9390.11 (7845.03 to 11048.33)	0.00% (0.00% to 0.00%)	863912.78 (745437.08 to 999607.94)	17920.66 (15230.56 to 20840.87)	0.00% (0.00% to 0.00%)
Slovakia	274716.15 (234110.15 to 319309.43)	9382.99 (7841.02 to 11025.35)	0.00% (0.00% to 0.00%)	535560.14 (458700.05 to 621200.53)	17916.74 (15246.53 to 20788.15)	0.00% (0.00% to 0.00%)
Slovenia	104434.88 (89848.32 to 121163.82)	9382.99 (7841.02 to 11025.35)	0.00% (0.00% to 0.00%)	194245.84 (166754.54 to 226182.35)	17916.74 (15246.53 to 20788.15)	0.00% (0.00% to 0.00%)
Spain	2849844.70 (2429896.86 to 3357801.62)	12294.82 (10416.21 to 14559.42)	0.00% (0.00% to 0.01%)	5688032.86 (4877275.32 to 6694068.94)	24288.78 (20947.42 to 28631.13)	0.00% (0.00% to 0.01%)
Sweden	614086.14 (533241.19 to 699782.68)	11627.66 (9967.06 to 13397.83)	0.01% (-0.05% to 0.07%)	1232618.19 (1075133.47 to 1409329.82)	24346.12 (21267.80 to 27911.26)	0.00% (-0.04% to 0.05%)
Switzerland	492200.35 (418023.91 to 574444.73)	10647.37 (8861.49 to 12500.01)	0.01% (-0.03% to 0.08%)	952616.85 (822701.34 to 1099136.22)	21201.67 (18152.09 to 24537.87)	0.01% (-0.04% to 0.06%)
Ukraine	2043637.59 (1763346.05 to 2339641.56)	9012.74 (7707.94 to 10364.12)	0.00% (0.00% to 0.00%)	4550514.83 (3985815.08 to 5176898.33)	17952.84 (15634.09 to 20439.68)	0.00% (0.00% to 0.00%)
United Kingdom	3947591.69 (3415573.64 to 4554397.26)	11571.82 (9875.84 to 13359.52)	0.01% (-0.04% to 0.06%)	8117178.78 (7088297.27 to 9415131.97)	23251.25 (20090.63 to 26808.28)	0.00% (-0.04% to 0.05%)

Table S3f: Counts and age-standardized DALY rates of migraine in 2021, and percentage changes from 1990 to 2021, by country and sex

	Male			Female		
	Absolute number, 2021	**Age-standardized rate, per 100 000 people, 2021**	**Percentage Change, 1990-2021**	**Absolute number, 2021**	**Age-standardized rate, per 100 000 people, 2021**	**Percentage Change, 1990-2021**
Europe	**1859028.36 (409180.70 to 3972660.88)**	**420.49 (81.01 to 930.36)**	**0.01% (-0.01% to 0.03%)**	**3718057.71 (824559.40 to 7770294.82)**	**815.91 (151.00 to 1739.13)**	**0.01% (-0.02% to 0.03%)**
Albania	5418.86 (1424.13 to 11543.52)	369.75 (87.33 to 805.44)	0.00% (-0.05% to 0.05%)	9653.43 (2133.16 to 21050.44)	666.44 (130.79 to 1501.37)	0.00% (-0.04% to 0.04%)
Andorra	211.91 (35.42 to 473.98)	433.55 (59.17 to 988.63)	0.00% (-0.06% to 0.06%)	399.05 (68.84 to 848.52)	875.21 (126.15 to 1922.32)	0.00% (-0.04% to 0.04%)
Austria	19296.15 (3742.42 to 43852.38)	410.80 (67.64 to 956.56)	0.00% (-0.06% to 0.06%)	38424.10 (7117.37 to 80266.90)	827.22 (125.95 to 1782.41)	0.00% (-0.04% to 0.05%)
Belarus	17202.86 (5514.54 to 36102.47)	350.44 (98.93 to 756.24)	0.00% (-0.05% to 0.05%)	37973.25 (11431.93 to 77840.45)	695.14 (181.04 to 1471.83)	0.00% (-0.04% to 0.03%)
Belgium	30216.94 (4047.17 to 67008.94)	520.07 (59.41 to 1159.94)	0.04% (-0.06% to 0.13%)	63797.92 (8812.30 to 143038.98)	1083.08 (125.37 to 2466.04)	0.08% (-0.04% to 0.20%)
Bosnia and Herzegovina	6629.91 (1764.56 to 14128.60)	368.05 (84.79 to 812.04)	0.00% (-0.05% to 0.06%)	12185.43 (2752.79 to 26670.29)	663.69 (130.29 to 1502.15)	-0.01% (-0.04% to 0.04%)
Bulgaria	13484.33 (3658.19 to 28927.95)	368.37 (85.20 to 810.50)	0.00% (-0.05% to 0.05%)	24732.94 (5650.78 to 53721.10)	664.18 (127.33 to 1500.17)	0.00% (-0.04% to 0.04%)
Croatia	8356.32 (2246.14 to 17455.42)	368.16 (86.56 to 801.60)	0.00% (-0.07% to 0.07%)	15387.87 (3502.10 to 33924.87)	666.82 (130.26 to 1502.15)	0.00% (-0.06% to 0.07%)
Cyprus	3152.56 (471.28 to 7215.94)	435.05 (58.41 to 1002.07)	0.00% (-0.05% to 0.07%)	6579.36 (1078.81 to 14085.57)	876.83 (126.31 to 1918.37)	0.00% (-0.04% to 0.03%)
Czechia	21198.92 (5597.92 to 45330.46)	368.76 (85.22 to 811.75)	0.00% (-0.05% to 0.06%)	37897.68 (8417.90 to 83289.48)	664.87 (127.05 to 1517.91)	0.00% (-0.04% to 0.04%)

Denmark	11658.53 (2170.29 to 26019.65)	388.17 (60.66 to 895.77)	0.03% (-0.05% to 0.11%)	22908.40 (3942.39 to 49148.67)	779.90 (114.24 to 1689.65)	0.03% (-0.05% to 0.10%)
Estonia	2423.28 (771.80 to 5064.63)	350.71 (98.90 to 762.74)	0.00% (-0.04% to 0.06%)	5053.57 (1528.82 to 10382.41)	696.55 (182.37 to 1477.68)	0.00% (-0.03% to 0.04%)
Finland	12060.45 (1911.18 to 26943.61)	432.34 (56.76 to 986.09)	0.00% (-0.05% to 0.06%)	23951.67 (4321.47 to 51422.39)	876.04 (125.05 to 1939.10)	0.00% (-0.04% to 0.04%)
France	149881.54 (26306.55 to 330810.56)	457.45 (69.26 to 1040.00)	-0.01% (-0.09% to 0.07%)	291519.25 (58169.25 to 604091.44)	861.81 (144.52 to 1826.00)	-0.01% (-0.07% to 0.07%)
Germany	203766.88 (34397.63 to 458687.39)	462.90 (63.18 to 1074.57)	0.03% (-0.06% to 0.12%)	411970.87 (70087.16 to 873933.68)	968.50 (138.04 to 2089.72)	0.02% (-0.06% to 0.10%)
Greece	23224.23 (3661.95 to 53112.46)	456.26 (59.23 to 1067.04)	-0.01% (-0.09% to 0.08%)	46761.71 (8138.33 to 100780.90)	890.95 (122.25 to 1978.71)	-0.01% (-0.08% to 0.07%)
Hungary	18888.42 (4962.58 to 40308.14)	369.86 (85.43 to 809.53)	0.01% (-0.05% to 0.07%)	35699.42 (8101.90 to 78199.98)	665.38 (129.81 to 1488.51)	0.00% (-0.04% to 0.05%)
Iceland	803.29 (119.74 to 1830.76)	435.08 (57.39 to 1002.07)	0.00% (-0.05% to 0.06%)	1549.19 (251.80 to 3341.26)	878.48 (127.83 to 1932.61)	0.00% (-0.04% to 0.04%)
Ireland	10914.14 (1661.93 to 24505.01)	432.28 (57.31 to 991.34)	0.00% (-0.06% to 0.05%)	22446.14 (3767.42 to 47864.64)	872.58 (127.06 to 1904.33)	0.00% (-0.04% to 0.03%)
Israel	20461.67 (2908.77 to 47162.36)	435.56 (59.60 to 1007.18)	0.00% (-0.06% to 0.05%)	41228.52 (6263.11 to 90236.41)	879.48 (124.91 to 1935.81)	0.00% (-0.04% to 0.04%)
Italy	143803.30 (22379.71 to 314245.48)	474.46 (58.87 to 1062.93)	0.01% (-0.05% to 0.06%)	294765.35 (47051.64 to 630401.09)	964.57 (119.79 to 2154.27)	0.02% (-0.04% to 0.07%)
Latvia	3367.67 (1105.00 to 6920.88)	350.44 (100.79 to 757.58)	0.01% (-0.04% to 0.07%)	7393.37 (2256.50 to 14891.16)	696.51 (180.66 to 1478.42)	0.00% (-0.04% to 0.04%)
Lithuania	4375.61 (1366.48 to 8965.66)	309.96 (85.57 to 659.07)	0.01% (-0.05% to 0.06%)	10209.14 (2879.02 to 21001.01)	658.58 (155.23 to 1393.95)	0.00% (-0.04% to 0.03%)

Luxembourg	1548.80 (282.15 to 3390.05)	438.03 (69.36 to 1001.47)	0.00% (-0.04% to 0.06%)	2924.12 (577.08 to 6060.70)	853.88 (145.86 to 1832.66)	0.00% (-0.04% to 0.03%)
Malta	990.43 (158.87 to 2207.34)	434.32 (58.91 to 979.82)	0.00% (-0.06% to 0.06%)	1930.77 (349.32 to 4132.86)	877.19 (126.55 to 1930.52)	0.00% (-0.04% to 0.03%)
Monaco	79.21 (13.63 to 177.69)	433.81 (57.70 to 996.00)	0.00% (-0.06% to 0.05%)	164.32 (31.05 to 347.27)	873.91 (128.54 to 1928.36)	-0.01% (-0.04% to 0.04%)
Montenegro	1235.16 (321.33 to 2642.46)	369.75 (87.99 to 812.66)	0.00% (-0.05% to 0.06%)	2248.09 (474.45 to 4979.21)	663.96 (123.82 to 1517.12)	-0.01% (-0.04% to 0.03%)
Netherlands	35975.33 (5355.13 to 81654.54)	411.30 (50.97 to 954.34)	0.08% (-0.04% to 0.20%)	73709.98 (10825.59 to 159757.40)	849.15 (103.99 to 1892.15)	0.04% (-0.04% to 0.11%)
North Macedonia	4663.65 (1221.23 to 10098.26)	369.44 (86.63 to 813.46)	0.00% (-0.05% to 0.05%)	8018.79 (1715.64 to 17798.76)	663.32 (127.85 to 1502.98)	0.00% (-0.05% to 0.03%)
Norway	12610.14 (1890.42 to 28627.45)	441.24 (57.01 to 1020.14)	0.10% (0.02% to 0.17%)	23859.23 (3670.83 to 52177.73)	876.41 (114.29 to 1934.27)	0.07% (0.01% to 0.13%)
Poland	81387.15 (21358.41 to 172032.04)	390.86 (91.99 to 835.61)	0.01% (-0.01% to 0.02%)	149218.49 (34739.85 to 323797.87)	696.09 (140.89 to 1561.34)	0.00% (-0.01% to 0.02%)
Portugal	22647.67 (3742.33 to 50574.80)	432.16 (57.57 to 985.96)	0.00% (-0.05% to 0.06%)	48911.68 (9004.43 to 103950.60)	871.59 (127.90 to 1919.25)	0.00% (-0.04% to 0.03%)
Republic of Moldova	6983.09 (2221.98 to 14735.93)	351.38 (101.96 to 771.73)	0.00% (-0.05% to 0.05%)	14863.49 (4476.62 to 30422.60)	696.66 (184.04 to 1481.75)	0.00% (-0.04% to 0.04%)
Romania	37653.57 (10068.49 to 80040.11)	369.83 (86.14 to 808.07)	0.01% (-0.05% to 0.07%)	69065.12 (15099.10 to 150552.11)	667.42 (125.92 to 1515.63)	0.00% (-0.04% to 0.05%)
Russian Federation	310833.48 (99201.01 to 643002.66)	411.02 (118.16 to 865.34)	0.01% (-0.01% to 0.02%)	644320.11 (209482.12 to 1295534.20)	757.11 (218.95 to 1552.26)	0.00% (-0.01% to 0.01%)
San Marino	70.01 (11.55 to 155.62)	433.59 (56.25 to 988.74)	0.00% (-0.04% to 0.05%)	151.71 (27.38 to 322.70)	874.55 (126.95 to 1898.54)	-0.01% (-0.05% to 0.03%)
Serbia	18439.96 (4754.58 to 39537.33)	370.43 (85.91 to 807.54)	0.00% (-0.06% to 0.05%)	32466.15 (7285.07 to 71033.00)	666.52 (131.18 to 1497.74)	0.00% (-0.05% to 0.04%)

Slovakia	10996.42 (2837.94 to 23480.96)	369.44 (85.86 to 807.94)	0.01% (-0.05% to 0.06%)	20143.50 (4339.25 to 44080.34)	666.60 (125.60 to 1518.48)	0.00% (-0.04% to 0.05%)
Slovenia	4201.33 (1135.79 to 8914.99)	369.63 (85.48 to 815.65)	0.01% (-0.05% to 0.06%)	7315.73 (1623.12 to 15946.09)	666.33 (124.68 to 1513.27)	0.00% (-0.04% to 0.04%)
Spain	106033.00 (16708.56 to 239714.82)	451.70 (58.64 to 1040.45)	0.01% (-0.04% to 0.11%)	221209.61 (44574.92 to 465367.26)	926.36 (152.61 to 2013.43)	0.00% (-0.06% to 0.05%)
Sweden	22826.38 (3477.71 to 49914.22)	428.90 (57.67 to 960.55)	0.01% (-0.06% to 0.08%)	45768.66 (6903.83 to 98656.65)	898.52 (113.88 to 1976.66)	0.00% (-0.06% to 0.07%)
Switzerland	18372.89 (3219.95 to 40997.15)	392.55 (58.18 to 906.93)	0.02% (-0.06% to 0.10%)	36264.43 (7152.93 to 76255.59)	795.72 (127.27 to 1735.98)	0.01% (-0.06% to 0.08%)
Ukraine	85325.67 (27058.09 to 175417.14)	368.27 (106.41 to 780.95)	0.00% (-0.05% to 0.04%)	186205.65 (57036.17 to 371400.12)	718.61 (192.42 to 1502.06)	0.00% (-0.04% to 0.04%)
United Kingdom	146363.05 (25019.41 to 326086.07)	425.00 (62.17 to 970.44)	0.01% (-0.04% to 0.06%)	305684.02 (50958.60 to 653960.03)	867.27 (125.08 to 1890.38)	0.00% (-0.05% to 0.05%)

Table S3g: Counts and age-standardized incidence rates of migraine in 2021, and percentage changes from 1990 to 2021, by country and sex

	Male			Female		
	Absolute number, 2021	**Age-standardized rate, per 100 000 people, 2021**	**Percentage Change, 1990-2021**	**Absolute number, 2021**	**Age-standardized rate, per 100 000 people, 2021**	**Percentage Change, 1990-2021**
Europe	**3217801.56 (2771062.45 to 3686607.65)**	**877.41 (752.49 to 1006.54)**	**0.02% (0.01% to 0.03%)**	**5839809.20 (5101893.46 to 6597893.91)**	**1631.07 (1422.68 to 1851.11)**	**0.01% (0.01% to 0.02%)**
Albania	9529.55 (8046.95 to 11056.51)	766.27 (642.07 to 891.11)	0.00% (0.00% to 0.00%)	16769.22 (14424.23 to 19500.48)	1424.76 (1218.61 to 1646.79)	0.00% (0.00% to 0.00%)
Andorra	351.22 (296.36 to 412.22)	963.18 (806.41 to 1125.26)	0.00% (0.00% to 0.00%)	603.55 (516.46 to 695.46)	1789.91 (1524.73 to 2056.13)	0.00% (0.00% to 0.00%)
Austria	34273.36 (29015.30 to 40211.01)	919.23 (771.79 to 1074.06)	0.00% (0.00% to 0.00%)	61094.79 (53066.52 to 69874.28)	1731.89 (1494.06 to 1988.04)	0.00% (0.00% to 0.00%)
Belarus	27922.20 (23397.61 to 32568.52)	679.80 (566.79 to 793.99)	0.00% (0.00% to 0.00%)	56307.15 (48166.85 to 64933.33)	1346.39 (1146.54 to 1540.72)	0.00% (0.00% to 0.00%)
Belgium	50913.30 (43333.62 to 58924.63)	1077.29 (907.33 to 1241.02)	0.02% (-0.04% to 0.08%)	88505.24 (76259.64 to 100531.89)	1950.20 (1673.57 to 2231.28)	0.02% (-0.03% to 0.08%)
Bosnia and Herzegovina	11167.39 (9476.28 to 12953.55)	766.27 (642.07 to 891.11)	0.00% (0.00% to 0.00%)	20159.08 (17270.22 to 23300.97)	1424.76 (1218.61 to 1646.79)	0.00% (0.00% to 0.00%)
Bulgaria	22370.23 (18924.18 to 26001.48)	766.27 (642.07 to 891.11)	0.00% (0.00% to 0.00%)	39794.91 (34251.41 to 46322.84)	1424.76 (1218.61 to 1646.79)	0.00% (0.00% to 0.00%)
Croatia	13858.37 (11840.08 to 16162.66)	761.76 (644.17 to 887.86)	-0.01% (-0.05% to 0.03%)	25078.94 (21680.89 to 29080.85)	1427.55 (1204.55 to 1651.13)	0.00% (-0.04% to 0.04%)
Cyprus	5826.81 (4847.71 to 6935.00)	963.18 (806.41 to 1125.26)	0.00% (0.00% to 0.00%)	10503.81 (8938.25 to 12328.68)	1789.91 (1524.73 to 2056.13)	0.00% (0.00% to 0.00%)
Czechia	35702.04 (30110.71 to 41633.79)	766.27 (642.07 to 891.11)	0.00% (0.00% to 0.00%)	63066.42 (54129.42 to 73422.36)	1424.76 (1218.61 to 1646.79)	0.00% (0.00% to 0.00%)

Denmark	21749.39 (18357.47 to 25319.59)	878.53 (732.26 to 1018.79)	0.01% (-0.05% to 0.07%)	39445.74 (34019.14 to 45293.43)	1670.87 (1429.05 to 1924.59)	0.01% (-0.03% to 0.06%)
Estonia	3876.98 (3261.85 to 4519.02)	679.80 (566.79 to 793.99)	0.00% (0.00% to 0.00%)	7484.99 (6446.32 to 8613.80)	1346.39 (1146.54 to 1540.72)	0.00% (0.00% to 0.00%)
Finland	21905.16 (18474.72 to 25625.95)	963.18 (806.41 to 1125.26)	0.00% (0.00% to 0.00%)	38440.14 (32979.70 to 43989.55)	1789.91 (1524.73 to 2056.13)	0.00% (0.00% to 0.00%)
France	270006.21 (230141.66 to 312055.06)	983.53 (832.50 to 1149.39)	0.00% (-0.06% to 0.06%)	476307.99 (410568.60 to 542989.07)	1743.79 (1498.10 to 1998.13)	-0.01% (-0.05% to 0.04%)
Germany	342190.77 (289600.26 to 402936.81)	1003.32 (840.34 to 1172.65)	0.02% (-0.04% to 0.07%)	580663.85 (507240.96 to 657137.89)	1874.22 (1615.32 to 2133.18)	0.01% (-0.03% to 0.06%)
Greece	39530.49 (33692.99 to 46141.51)	1002.42 (841.99 to 1168.92)	-0.01% (-0.06% to 0.05%)	70452.21 (60518.77 to 80838.33)	1806.93 (1543.98 to 2071.82)	0.00% (-0.05% to 0.05%)
Hungary	31501.91 (26580.64 to 36603.24)	766.27 (642.07 to 891.11)	0.00% (0.00% to 0.00%)	57686.40 (49729.88 to 66895.85)	1424.76 (1218.61 to 1646.79)	0.00% (0.00% to 0.00%)
Iceland	1536.48 (1288.40 to 1802.13)	963.18 (806.41 to 1125.26)	0.00% (0.00% to 0.00%)	2672.67 (2283.53 to 3053.55)	1789.91 (1524.73 to 2056.13)	0.00% (0.00% to 0.00%)
Ireland	21329.74 (17986.26 to 24883.76)	963.18 (806.41 to 1125.26)	0.00% (0.00% to 0.00%)	39393.83 (33675.73 to 45267.58)	1789.91 (1524.73 to 2056.13)	0.00% (0.00% to 0.00%)
Israel	44616.75 (37494.37 to 52318.84)	963.18 (806.41 to 1125.26)	0.00% (0.00% to 0.00%)	80705.56 (68859.86 to 92442.59)	1789.91 (1524.73 to 2056.13)	0.00% (0.00% to 0.00%)
Italy	239054.27 (210852.47 to 268253.42)	1037.94 (911.72 to 1176.40)	0.01% (-0.03% to 0.04%)	434191.52 (388852.03 to 485899.50)	1973.05 (1758.59 to 2211.41)	0.01% (-0.02% to 0.04%)
Latvia	5339.34 (4507.72 to 6219.00)	679.80 (566.79 to 793.99)	0.00% (0.00% to 0.00%)	10628.25 (9155.70 to 12228.04)	1346.39 (1146.54 to 1540.72)	0.00% (0.00% to 0.00%)
Lithuania	7190.94 (6145.95 to 8401.47)	625.29 (526.75 to 732.48)	0.00% (0.00% to 0.00%)	15393.41 (13357.87 to 17874.05)	1335.21 (1138.73 to 1541.94)	0.00% (0.00% to 0.00%)

Luxembourg	2727.16 (2311.68 to 3230.54)	954.35 (804.08 to 1118.37)	0.00% (0.00% to 0.00%)	4666.35 (3994.11 to 5376.46)	1734.29 (1477.92 to 1990.38)	0.00% (0.00% to 0.00%)
Malta	1725.02 (1448.44 to 2035.28)	963.18 (806.41 to 1125.26)	0.00% (0.00% to 0.00%)	2955.96 (2532.42 to 3430.82)	1789.91 (1524.73 to 2056.13)	0.00% (0.00% to 0.00%)
Monaco	130.82 (111.56 to 151.46)	963.18 (806.41 to 1125.26)	0.00% (0.00% to 0.00%)	241.89 (209.73 to 275.61)	1789.91 (1524.73 to 2056.13)	0.00% (0.00% to 0.00%)
Montenegro	2195.88 (1855.24 to 2543.84)	766.27 (642.07 to 891.11)	0.00% (0.00% to 0.00%)	3947.93 (3388.64 to 4564.63)	1424.76 (1218.61 to 1646.79)	0.00% (0.00% to 0.00%)
Netherlands	66342.25 (56446.75 to 77243.92)	935.95 (787.99 to 1087.19)	0.06% (0.00% to 0.15%)	121673.43 (105974.23 to 138874.89)	1781.10 (1528.47 to 2043.56)	0.02% (-0.02% to 0.07%)
North Macedonia	7940.32 (6692.40 to 9270.02)	766.27 (642.07 to 891.11)	0.00% (0.00% to 0.00%)	13864.04 (11793.78 to 16247.49)	1424.76 (1218.61 to 1646.79)	0.00% (0.00% to 0.00%)
Norway	23798.83 (21000.32 to 26903.02)	997.03 (874.18 to 1131.91)	0.08% (0.05% to 0.13%)	41941.49 (37239.69 to 46981.80)	1878.96 (1662.44 to 2119.14)	0.06% (0.03% to 0.09%)
Poland	135003.76 (119088.16 to 153264.94)	792.42 (690.29 to 901.48)	0.00% (0.00% to 0.00%)	247963.29 (219456.29 to 282516.87)	1482.61 (1315.33 to 1674.93)	0.00% (0.00% to 0.00%)
Portugal	38984.57 (32954.70 to 45549.93)	963.18 (806.41 to 1125.26)	0.00% (0.00% to 0.00%)	73260.29 (62905.05 to 84271.64)	1789.91 (1524.73 to 2056.13)	0.00% (0.00% to 0.00%)
Republic of Moldova	11059.41 (9234.66 to 12992.51)	679.80 (566.79 to 793.99)	0.00% (0.00% to 0.00%)	21966.78 (18770.04 to 25598.39)	1346.39 (1146.54 to 1540.72)	0.00% (0.00% to 0.00%)
Romania	63934.98 (53901.49 to 74170.34)	766.27 (642.07 to 891.11)	0.00% (0.00% to 0.00%)	114129.27 (98508.37 to 132327.13)	1424.76 (1218.61 to 1646.79)	0.00% (0.00% to 0.00%)
Russian Federation	494399.77 (433115.09 to 558781.97)	767.37 (673.07 to 868.02)	0.00% (0.00% to 0.00%)	939350.95 (834379.17 to 1056351.42)	1411.48 (1243.69 to 1588.16)	0.00% (0.00% to 0.00%)
San Marino	121.95 (103.68 to 141.94)	963.18 (806.41 to 1125.26)	0.00% (0.00% to 0.00%)	230.24 (197.26 to 262.60)	1789.91 (1524.73 to 2056.13)	0.00% (0.00% to 0.00%)
Serbia	31913.71 (26902.78 to 37095.62)	766.27 (642.07 to 891.11)	0.00% (0.00% to 0.00%)	54901.06 (47012.06 to 63770.52)	1424.76 (1218.61 to 1646.79)	0.00% (0.00% to 0.00%)

Slovakia	18693.72 (15719.75 to 21836.37)	766.27 (642.07 to 891.11)	0.00% (0.00% to 0.00%)	33703.04 (28825.39 to 39430.65)	1424.76 (1218.61 to 1646.79)	0.00% (0.00% to 0.00%)
Slovenia	6910.88 (5864.11 to 8045.49)	766.27 (642.07 to 891.11)	0.00% (0.00% to 0.00%)	11933.41 (10280.37 to 13888.61)	1424.76 (1218.61 to 1646.79)	0.00% (0.00% to 0.00%)
Spain	180943.02 (153556.57 to 208875.66)	987.99 (833.43 to 1145.50)	0.00% (0.00% to 0.00%)	322002.41 (277545.88 to 372307.11)	1813.88 (1558.01 to 2105.75)	0.00% (0.00% to 0.00%)
Sweden	42879.21 (37750.50 to 48441.80)	959.44 (841.87 to 1087.20)	0.00% (-0.05% to 0.05%)	78156.30 (69537.84 to 87686.94)	1888.43 (1678.46 to 2120.58)	0.00% (-0.03% to 0.03%)
Switzerland	33537.10 (28449.06 to 39346.43)	897.55 (754.94 to 1050.91)	0.01% (-0.04% to 0.07%)	59488.64 (51303.48 to 68197.42)	1693.43 (1444.77 to 1954.31)	0.00% (-0.04% to 0.05%)
Ukraine	134816.68 (117819.51 to 153078.47)	703.84 (611.75 to 803.21)	0.00% (0.00% to 0.00%)	273313.59 (242377.47 to 306997.49)	1393.99 (1231.44 to 1570.25)	0.00% (0.00% to 0.00%)
United Kingdom	274264.40 (240052.58 to 309615.76)	948.69 (824.97 to 1078.25)	0.01% (-0.03% to 0.05%)	523205.73 (466705.72 to 589485.48)	1830.27 (1616.88 to 2070.98)	0.00% (-0.03% to 0.03%)

Table S3h: Counts and age-standardized YLD rates of migraine in 2021, and percentage changes from 1990 to 2021, by country and sex

	Male			Female		
	Absolute number, 2021	**Age-standardized rate, per 100 000 people, 2021**	**Percentage Change, 1990-2021**	**Absolute number, 2021**	**Age-standardized rate, per 100 000 people, 2021**	**Percentage Change, 1990-2021**
Europe	**1859028.36 (409180.70 to 3972660.88)**	**420.49 (81.01 to 930.36)**	**0.01% (-0.01% to 0.03%)**	**3718057.71 (824559.40 to 7770294.82)**	**815.91 (151.00 to 1739.13)**	**0.01% (-0.02% to 0.03%)**
Albania	5418.86 (1424.13 to 11543.52)	369.75 (87.33 to 805.44)	0.00% (-0.05% to 0.05%)	9653.43 (2133.16 to 21050.44)	666.44 (130.79 to 1501.37)	0.00% (-0.04% to 0.04%)
Andorra	211.91 (35.42 to 473.98)	433.55 (59.17 to 988.63)	0.00% (-0.06% to 0.06%)	399.05 (68.84 to 848.52)	875.21 (126.15 to 1922.32)	0.00% (-0.04% to 0.04%)
Austria	19296.15 (3742.42 to 43852.38)	410.80 (67.64 to 956.56)	0.00% (-0.06% to 0.06%)	38424.10 (7117.37 to 80266.90)	827.22 (125.95 to 1782.41)	0.00% (-0.04% to 0.05%)
Belarus	17202.86 (5514.54 to 36102.47)	350.44 (98.93 to 756.24)	0.00% (-0.05% to 0.05%)	37973.25 (11431.93 to 77840.45)	695.14 (181.04 to 1471.83)	0.00% (-0.04% to 0.03%)
Belgium	30216.94 (4047.17 to 67008.94)	520.07 (59.41 to 1159.94)	0.04% (-0.06% to 0.13%)	63797.92 (8812.30 to 143038.98)	1083.08 (125.37 to 2466.04)	0.08% (-0.04% to 0.20%)
Bosnia and Herzegovina	6629.91 (1764.56 to 14128.60)	368.05 (84.79 to 812.04)	0.00% (-0.05% to 0.06%)	12185.43 (2752.79 to 26670.29)	663.69 (130.29 to 1502.15)	-0.01% (-0.04% to 0.04%)
Bulgaria	13484.33 (3658.19 to 28927.95)	368.37 (85.20 to 810.50)	0.00% (-0.05% to 0.05%)	24732.94 (5650.78 to 53721.10)	664.18 (127.33 to 1500.17)	0.00% (-0.04% to 0.04%)
Croatia	8356.32 (2246.14 to 17455.42)	368.16 (86.56 to 801.60)	0.00% (-0.07% to 0.07%)	15387.87 (3502.10 to 33924.87)	666.82 (130.26 to 1502.15)	0.00% (-0.06% to 0.07%)
Cyprus	3152.56 (471.28 to 7215.94)	435.05 (58.41 to 1002.07)	0.00% (-0.05% to 0.07%)	6579.36 (1078.81 to 14085.57)	876.83 (126.31 to 1918.37)	0.00% (-0.04% to 0.03%)
Czechia	21198.92 (5597.92 to 45330.46)	368.76 (85.22 to 811.75)	0.00% (-0.05% to 0.06%)	37897.68 (8417.90 to 83289.48)	664.87 (127.05 to 1517.91)	0.00% (-0.04% to 0.04%)

Denmark	11658.53 (2170.29 to 26019.65)	388.17 (60.66 to 895.77)	0.03% (-0.05% to 0.11%)	22908.40 (3942.39 to 49148.67)	779.90 (114.24 to 1689.65)	0.03% (-0.05% to 0.10%)
Estonia	2423.28 (771.80 to 5064.63)	350.71 (98.90 to 762.74)	0.00% (-0.04% to 0.06%)	5053.57 (1528.82 to 10382.41)	696.55 (182.37 to 1477.68)	0.00% (-0.03% to 0.04%)
Finland	12060.45 (1911.18 to 26943.61)	432.34 (56.76 to 986.09)	0.00% (-0.05% to 0.06%)	23951.67 (4321.47 to 51422.39)	876.04 (125.05 to 1939.10)	0.00% (-0.04% to 0.04%)
France	149881.54 (26306.55 to 330810.56)	457.45 (69.26 to 1040.00)	-0.01% (-0.09% to 0.07%)	291519.25 (58169.25 to 604091.44)	861.81 (144.52 to 1826.00)	-0.01% (-0.07% to 0.07%)
Germany	203766.88 (34397.63 to 458687.39)	462.90 (63.18 to 1074.57)	0.03% (-0.06% to 0.12%)	411970.87 (70087.16 to 873933.68)	968.50 (138.04 to 2089.72)	0.02% (-0.06% to 0.10%)
Greece	23224.23 (3661.95 to 53112.46)	456.26 (59.23 to 1067.04)	-0.01% (-0.09% to 0.08%)	46761.71 (8138.33 to 100780.90)	890.95 (122.25 to 1978.71)	-0.01% (-0.08% to 0.07%)
Hungary	18888.42 (4962.58 to 40308.14)	369.86 (85.43 to 809.53)	0.01% (-0.05% to 0.07%)	35699.42 (8101.90 to 78199.98)	665.38 (129.81 to 1488.51)	0.00% (-0.04% to 0.05%)
Iceland	803.29 (119.74 to 1830.76)	435.08 (57.39 to 1002.07)	0.00% (-0.05% to 0.06%)	1549.19 (251.80 to 3341.26)	878.48 (127.83 to 1932.61)	0.00% (-0.04% to 0.04%)
Ireland	10914.14 (1661.93 to 24505.01)	432.28 (57.31 to 991.34)	0.00% (-0.06% to 0.05%)	22446.14 (3767.42 to 47864.64)	872.58 (127.06 to 1904.33)	0.00% (-0.04% to 0.03%)
Israel	20461.67 (2908.77 to 47162.36)	435.56 (59.60 to 1007.18)	0.00% (-0.06% to 0.05%)	41228.52 (6263.11 to 90236.41)	879.48 (124.91 to 1935.81)	0.00% (-0.04% to 0.04%)
Italy	143803.30 (22379.71 to 314245.48)	474.46 (58.87 to 1062.93)	0.01% (-0.05% to 0.06%)	294765.35 (47051.64 to 630401.09)	964.57 (119.79 to 2154.27)	0.02% (-0.04% to 0.07%)
Latvia	3367.67 (1105.00 to 6920.88)	350.44 (100.79 to 757.58)	0.01% (-0.04% to 0.07%)	7393.37 (2256.50 to 14891.16)	696.51 (180.66 to 1478.42)	0.00% (-0.04% to 0.04%)
Lithuania	4375.61 (1366.48 to 8965.66)	309.96 (85.57 to 659.07)	0.01% (-0.05% to 0.06%)	10209.14 (2879.02 to 21001.01)	658.58 (155.23 to 1393.95)	0.00% (-0.04% to 0.03%)

Luxembourg	1548.80 (282.15 to 3390.05)	438.03 (69.36 to 1001.47)	0.00% (-0.04% to 0.06%)	2924.12 (577.08 to 6060.70)	853.88 (145.86 to 1832.66)	0.00% (-0.04% to 0.03%)
Malta	990.43 (158.87 to 2207.34)	434.32 (58.91 to 979.82)	0.00% (-0.06% to 0.06%)	1930.77 (349.32 to 4132.86)	877.19 (126.55 to 1930.52)	0.00% (-0.04% to 0.03%)
Monaco	79.21 (13.63 to 177.69)	433.81 (57.70 to 996.00)	0.00% (-0.06% to 0.05%)	164.32 (31.05 to 347.27)	873.91 (128.54 to 1928.36)	-0.01% (-0.04% to 0.04%)
Montenegro	1235.16 (321.33 to 2642.46)	369.75 (87.99 to 812.66)	0.00% (-0.05% to 0.06%)	2248.09 (474.45 to 4979.21)	663.96 (123.82 to 1517.12)	-0.01% (-0.04% to 0.03%)
Netherlands	35975.33 (5355.13 to 81654.54)	411.30 (50.97 to 954.34)	0.08% (-0.04% to 0.20%)	73709.98 (10825.59 to 159757.40)	849.15 (103.99 to 1892.15)	0.04% (-0.04% to 0.11%)
North Macedonia	4663.65 (1221.23 to 10098.26)	369.44 (86.63 to 813.46)	0.00% (-0.05% to 0.05%)	8018.79 (1715.64 to 17798.76)	663.32 (127.85 to 1502.98)	0.00% (-0.05% to 0.03%)
Norway	12610.14 (1890.42 to 28627.45)	441.24 (57.01 to 1020.14)	0.10% (0.02% to 0.17%)	23859.23 (3670.83 to 52177.73)	876.41 (114.29 to 1934.27)	0.07% (0.01% to 0.13%)
Poland	81387.15 (21358.41 to 172032.04)	390.86 (91.99 to 835.61)	0.01% (-0.01% to 0.02%)	149218.49 (34739.85 to 323797.87)	696.09 (140.89 to 1561.34)	0.00% (-0.01% to 0.02%)
Portugal	22647.67 (3742.33 to 50574.80)	432.16 (57.57 to 985.96)	0.00% (-0.05% to 0.06%)	48911.68 (9004.43 to 103950.60)	871.59 (127.90 to 1919.25)	0.00% (-0.04% to 0.03%)
Republic of Moldova	6983.09 (2221.98 to 14735.93)	351.38 (101.96 to 771.73)	0.00% (-0.05% to 0.05%)	14863.49 (4476.62 to 30422.60)	696.66 (184.04 to 1481.75)	0.00% (-0.04% to 0.04%)
Romania	37653.57 (10068.49 to 80040.11)	369.83 (86.14 to 808.07)	0.01% (-0.05% to 0.07%)	69065.12 (15099.10 to 150552.11)	667.42 (125.92 to 1515.63)	0.00% (-0.04% to 0.05%)
Russian Federation	310833.48 (99201.01 to 643002.66)	411.02 (118.16 to 865.34)	0.01% (-0.01% to 0.02%)	644320.11 (209482.12 to 1295534.20)	757.11 (218.95 to 1552.26)	0.00% (-0.01% to 0.01%)
San Marino	70.01 (11.55 to 155.62)	433.59 (56.25 to 988.74)	0.00% (-0.04% to 0.05%)	151.71 (27.38 to 322.70)	874.55 (126.95 to 1898.54)	-0.01% (-0.05% to 0.03%)
Serbia	18439.96 (4754.58 to 39537.33)	370.43 (85.91 to 807.54)	0.00% (-0.06% to 0.05%)	32466.15 (7285.07 to 71033.00)	666.52 (131.18 to 1497.74)	0.00% (-0.05% to 0.04%)

Slovakia	10996.42 (2837.94 to 23480.96)	369.44 (85.86 to 807.94)	0.01% (-0.05% to 0.06%)	20143.50 (4339.25 to 44080.34)	666.60 (125.60 to 1518.48)	0.00% (-0.04% to 0.05%)
Slovenia	4201.33 (1135.79 to 8914.99)	369.63 (85.48 to 815.65)	0.01% (-0.05% to 0.06%)	7315.73 (1623.12 to 15946.09)	666.33 (124.68 to 1513.27)	0.00% (-0.04% to 0.04%)
Spain	106033.00 (16708.56 to 239714.82)	451.70 (58.64 to 1040.45)	0.01% (-0.04% to 0.11%)	221209.61 (44574.92 to 465367.26)	926.36 (152.61 to 2013.43)	0.00% (-0.06% to 0.05%)
Sweden	22826.38 (3477.71 to 49914.22)	428.90 (57.67 to 960.55)	0.01% (-0.06% to 0.08%)	45768.66 (6903.83 to 98656.65)	898.52 (113.88 to 1976.66)	0.00% (-0.06% to 0.07%)
Switzerland	18372.89 (3219.95 to 40997.15)	392.55 (58.18 to 906.93)	0.02% (-0.06% to 0.10%)	36264.43 (7152.93 to 76255.59)	795.72 (127.27 to 1735.98)	0.01% (-0.06% to 0.08%)
Ukraine	85325.67 (27058.09 to 175417.14)	368.27 (106.41 to 780.95)	0.00% (-0.05% to 0.04%)	186205.65 (57036.17 to 371400.12)	718.61 (192.42 to 1502.06)	0.00% (-0.04% to 0.04%)
United Kingdom	146363.05 (25019.41 to 326086.07)	425.00 (62.17 to 970.44)	0.01% (-0.04% to 0.06%)	305684.02 (50958.60 to 653960.03)	867.27 (125.08 to 1890.38)	0.00% (-0.05% to 0.05%)

Table S3i: Counts and age-standardized prevalence rates of tension-type headache in 2021, and percentage changes from 1990 to 2021, by country and sex

	Male			Female		
	Absolute number, 2021	**Age-standardized rate, per 100 000 people, 2021**	**Percentage Change, 1990-2021**	**Absolute number, 2021**	**Age-standardized rate, per 100 000 people, 2021**	**Percentage Change, 1990-2021**
Europe	**133449338.95 (118544091.44 to 149064034.63)**	**30043.09 (26465.42 to 33994.50)**	**-0.01% (-0.02% to 0.01%)**	**149044989.85 (133037481.88 to 165493921.45)**	**31538.63 (27993.01 to 35543.12)**	**-0.01% (-0.02% to 0.00%)**
Albania	412649.41 (356270.48 to 474668.53)	28499.84 (24463.48 to 32957.21)	0.00% (-0.01% to 0.01%)	451683.76 (397782.67 to 511215.26)	31393.94 (27424.02 to 35977.41)	0.00% (-0.01% to 0.01%)
Andorra	15635.50 (13466.49 to 17851.07)	31377.90 (26821.63 to 36028.77)	0.00% (-0.01% to 0.01%)	15787.99 (13812.62 to 17887.61)	33395.89 (29218.20 to 38101.13)	0.00% (0.00% to 0.01%)
Austria	1515290.49 (1316783.61 to 1714033.61)	31445.25 (27055.38 to 36011.08)	0.00% (-0.01% to 0.01%)	1588067.33 (1390258.44 to 1790919.35)	32059.98 (28074.90 to 36713.69)	0.00% (-0.01% to 0.01%)
Belarus	1405021.66 (1227687.55 to 1603669.90)	30136.67 (26260.73 to 34594.93)	0.00% (-0.01% to 0.01%)	1627595.80 (1432092.88 to 1857943.68)	30507.31 (26473.60 to 34848.30)	0.00% (0.00% to 0.00%)
Belgium	1889130.32 (1635933.92 to 2144015.17)	31377.98 (26837.07 to 36060.40)	0.00% (-0.01% to 0.01%)	2080486.52 (1828931.28 to 2340554.08)	33395.49 (29244.64 to 38012.29)	0.00% (-0.01% to 0.00%)
Bosnia and Herzegovina	500018.03 (433643.29 to 568577.42)	28499.90 (24473.50 to 32934.79)	0.00% (-0.01% to 0.01%)	577380.56 (509316.23 to 652024.24)	31393.86 (27429.10 to 36025.12)	0.00% (-0.01% to 0.01%)
Bulgaria	1017611.18 (886396.40 to 1154350.03)	28499.62 (24457.39 to 32815.59)	0.00% (-0.01% to 0.01%)	1191971.14 (1048262.85 to 1342117.15)	31394.48 (27426.63 to 36015.14)	0.00% (-0.01% to 0.01%)
Croatia	633768.36 (553739.82 to 718823.98)	28540.20 (24952.55 to 32773.31)	0.00% (-0.05% to 0.06%)	738718.99 (636133.70 to 828291.17)	31347.71 (27394.95 to 35896.52)	0.00% (-0.05% to 0.06%)
Cyprus	230098.40 (198306.36 to 262905.72)	31376.81 (26834.51 to 36002.39)	0.00% (-0.01% to 0.01%)	256313.02 (224624.47 to 290812.31)	33395.99 (29286.36 to 37996.48)	0.00% (-0.01% to 0.01%)

Czechia	1601962.32 (1394874.29 to 1817682.43)	28499.27 (24464.46 to 32918.57)	0.00% (0.00% to 0.01%)	1819236.87 (1605900.00 to 2048240.94)	31393.36 (27430.02 to 36106.70)	0.00% (-0.01% to 0.01%)
Denmark	981541.12 (855617.41 to 1112566.27)	31596.76 (27485.71 to 36270.57)	-0.01% (-0.06% to 0.04%)	1134464.41 (994926.65 to 1280537.53)	35951.39 (31046.59 to 41046.02)	-0.04% (-0.09% to 0.02%)
Estonia	199847.12 (174843.48 to 227599.29)	30137.01 (26224.39 to 34663.36)	0.00% (-0.01% to 0.01%)	224117.46 (197727.39 to 253654.52)	30507.46 (26476.55 to 35027.72)	0.00% (-0.01% to 0.01%)
Finland	917539.42 (795034.21 to 1041823.20)	31377.83 (26852.18 to 36057.52)	0.00% (-0.01% to 0.01%)	1000293.96 (876745.19 to 1123953.35)	33395.96 (29286.77 to 38057.83)	0.00% (-0.01% to 0.01%)
France	10567799.82 (9183718.50 to 11952746.91)	31228.79 (26894.92 to 36100.77)	0.00% (-0.01% to 0.01%)	11417028.21 (10056377.75 to 12839025.18)	31581.39 (27677.44 to 36176.12)	0.00% (-0.01% to 0.01%)
Germany	14608281.76 (12695667.72 to 16515388.55)	31757.22 (27594.68 to 36142.21)	0.02% (-0.03% to 0.08%)	15958010.23 (14125161.84 to 17936558.67)	34502.99 (30463.94 to 39176.13)	0.02% (-0.03% to 0.07%)
Greece	1670647.45 (1448679.38 to 1895277.09)	31377.01 (26776.51 to 36023.14)	0.00% (-0.01% to 0.01%)	1900235.83 (1664266.41 to 2133680.92)	33396.24 (29258.10 to 38087.75)	0.00% (-0.01% to 0.01%)
Hungary	1415675.69 (1229845.63 to 1607518.17)	28500.16 (24454.53 to 32932.08)	0.00% (-0.01% to 0.01%)	1711377.23 (1510142.58 to 1923519.09)	31394.63 (27428.75 to 36022.36)	0.00% (-0.01% to 0.01%)
Iceland	59186.69 (51325.88 to 67401.64)	31378.83 (26895.33 to 36043.25)	0.00% (-0.01% to 0.01%)	61345.71 (54135.50 to 69646.60)	33395.60 (29274.60 to 38083.67)	0.00% (-0.01% to 0.01%)
Ireland	806720.26 (698010.45 to 915157.04)	31377.92 (26857.95 to 36082.83)	0.00% (-0.01% to 0.01%)	890125.05 (782982.95 to 1003836.39)	33395.22 (29223.76 to 38000.69)	0.00% (-0.01% to 0.01%)
Israel	1487411.91 (1276038.07 to 1696942.55)	31377.31 (26855.79 to 35991.18)	0.00% (-0.01% to 0.01%)	1607332.29 (1414233.70 to 1825828.11)	33395.70 (29270.97 to 38102.77)	0.00% (-0.01% to 0.01%)
Italy	10385376.36 (9295299.95 to 11438055.76)	32853.87 (29324.10 to 36867.11)	0.00% (-0.03% to 0.04%)	11454276.99 (10179696.08 to 12632166.36)	34270.64 (30617.95 to 38169.79)	0.00% (-0.03% to 0.03%)
Latvia	276597.19 (241743.29 to 314800.10)	30136.51 (26227.52 to 34609.93)	0.00% (-0.01% to 0.01%)	326394.51 (287234.71 to 368787.26)	30506.02 (26482.99 to 34940.80)	0.00% (-0.01% to 0.01%)

Lithuania	427700.91 (371178.05 to 487467.99)	31721.93 (27438.72 to 36290.84)	0.00% (-0.01% to 0.01%)	497064.88 (438275.21 to 557103.96)	31722.27 (27426.29 to 35956.90)	0.00% (-0.01% to 0.01%)
Luxembourg	113290.77 (98675.81 to 129998.04)	31760.66 (27542.01 to 36706.28)	0.00% (-0.01% to 0.01%)	115680.49 (101576.71 to 130915.67)	32798.22 (28453.87 to 37474.93)	0.00% (-0.01% to 0.01%)
Malta	74563.53 (64516.27 to 84852.61)	31376.76 (26813.62 to 36048.94)	0.00% (-0.01% to 0.01%)	79607.74 (69715.27 to 89758.71)	33395.77 (29243.60 to 38094.23)	0.00% (-0.01% to 0.01%)
Monaco	6122.61 (5323.38 to 6984.93)	31378.38 (26877.91 to 36074.98)	0.00% (-0.01% to 0.01%)	6966.58 (6060.91 to 7837.46)	33395.79 (29261.44 to 38091.41)	0.00% (-0.01% to 0.01%)
Montenegro	92994.83 (80583.45 to 106189.71)	28499.88 (24483.78 to 32933.71)	0.00% (-0.01% to 0.01%)	105596.73 (93210.74 to 119273.26)	31394.19 (27406.99 to 35913.81)	0.00% (-0.01% to 0.01%)
Netherlands	3127198.27 (2710362.29 to 3564271.50)	34154.58 (29195.05 to 39268.16)	0.00% (-0.01% to 0.01%)	3348863.20 (2947171.44 to 3772965.56)	35804.31 (30725.33 to 40725.15)	0.00% (-0.01% to 0.01%)
North Macedonia	347411.84 (300571.15 to 396930.91)	28499.42 (24505.41 to 32922.36)	0.00% (-0.01% to 0.01%)	371056.50 (327106.54 to 421395.41)	31394.06 (27430.50 to 36040.79)	0.00% (-0.01% to 0.01%)
Norway	984250.09 (871706.16 to 1091227.61)	33588.77 (29810.44 to 37568.02)	0.02% (-0.02% to 0.06%)	1078993.34 (969357.80 to 1191574.79)	37461.39 (33539.48 to 41766.70)	0.00% (-0.04% to 0.04%)
Poland	6061931.73 (5376094.11 to 6758679.84)	30066.67 (26780.03 to 33699.29)	0.00% (0.00% to 0.00%)	7078323.15 (6293877.64 to 7811316.86)	32956.50 (29157.74 to 36821.22)	0.00% (0.00% to 0.00%)
Portugal	1713044.66 (1483800.55 to 1945011.38)	31378.24 (26864.36 to 35958.55)	0.00% (-0.01% to 0.01%)	2034545.69 (1778615.51 to 2285255.15)	33395.51 (29283.07 to 37992.90)	0.00% (-0.01% to 0.01%)
Republic of Moldova	570546.02 (495187.68 to 652049.74)	30136.03 (26230.19 to 34622.39)	0.00% (-0.01% to 0.01%)	631577.81 (555209.42 to 721359.86)	30507.40 (26503.46 to 34972.42)	0.00% (-0.01% to 0.01%)
Romania	2825977.39 (2452161.77 to 3209783.43)	28499.70 (24471.58 to 32896.01)	0.00% (-0.01% to 0.00%)	3291220.21 (2903995.74 to 3698590.98)	31393.51 (27400.20 to 36067.57)	0.00% (-0.01% to 0.01%)
Russian Federation	22137249.52 (19651675.13 to 24784626.24)	30677.05 (27299.81 to 34502.64)	0.01% (-0.03% to 0.06%)	26088741.65 (23415523.10 to 28694110.76)	31557.05 (27907.37 to 35435.34)	0.01% (-0.03% to 0.05%)

San Marino	5335.72 (4610.06 to 6072.36)	31377.30 (26855.05 to 36019.36)	0.00% (-0.01% to 0.01%)	6214.66 (5445.75 to 6991.89)	33395.39 (29212.82 to 38045.29)	0.00% (-0.01% to 0.01%)
Serbia	1395497.15 (1211643.98 to 1587185.37)	28501.85 (24469.52 to 32920.80)	0.00% (-0.01% to 0.01%)	1542013.90 (1358637.66 to 1733100.35)	31395.72 (27436.77 to 35957.14)	0.00% (-0.01% to 0.01%)
Slovakia	821423.09 (713004.57 to 933300.53)	28500.29 (24461.91 to 32942.68)	0.00% (-0.01% to 0.01%)	946916.82 (833756.10 to 1066127.38)	31393.70 (27419.97 to 35992.94)	0.00% (-0.01% to 0.01%)
Slovenia	316014.59 (274838.05 to 358922.68)	28500.52 (24484.56 to 32948.23)	0.00% (-0.01% to 0.01%)	351476.55 (310546.99 to 394912.93)	31394.23 (27424.13 to 35955.67)	0.00% (-0.01% to 0.01%)
Spain	7564549.77 (6610293.81 to 8562792.49)	31231.70 (26932.03 to 35856.15)	0.00% (-0.01% to 0.01%)	8075943.93 (7011161.11 to 9185196.05)	31818.27 (27794.41 to 36453.31)	0.00% (-0.01% to 0.01%)
Sweden	1751447.96 (1561216.76 to 1945888.99)	31790.27 (28302.59 to 35807.51)	0.00% (-0.04% to 0.04%)	2020269.73 (1817536.34 to 2219642.71)	36887.92 (33102.18 to 40972.22)	0.00% (-0.03% to 0.04%)
Switzerland	1389472.50 (1202698.63 to 1580124.92)	28846.37 (24857.03 to 33176.44)	0.05% (-0.02% to 0.12%)	1494776.43 (1308685.20 to 1691224.63)	30825.50 (26843.70 to 35204.93)	0.05% (-0.01% to 0.12%)
Ukraine	6947519.75 (6197608.27 to 7767363.42)	31625.32 (28174.40 to 35411.47)	0.00% (-0.01% to 0.01%)	8115481.54 (7188089.23 to 9010667.15)	32082.25 (28414.53 to 36075.87)	0.00% (0.00% to 0.01%)
United Kingdom	11474737.07 (10241611.51 to 12748287.12)	32434.77 (28746.26 to 36320.98)	0.00% (0.00% to 0.00%)	12819430.45 (11517741.51 to 14160915.17)	34492.86 (30830.66 to 38310.59)	0.00% (0.00% to 0.00%)

Table S3j: Counts and age-standardized DALY rates of tension-type headache in 2021, and percentage changes from 1990 to 2021, by country and sex

	Male			Female		
	Absolute number, 2021	**Age-standardized rate, per 100 000 people, 2021**	**Percentage Change, 1990-2021**	**Absolute number, 2021**	**Age-standardized rate, per 100 000 people, 2021**	**Percentage Change, 1990-2021**
Europe	**297654.68 (83195.64 to 1044194.41)**	**62.87 (16.40 to 232.91)**	**0.00% (-0.06% to 0.03%)**	**470322.34 (162163.34 to 1359954.49)**	**92.26 (30.36 to 280.15)**	**-0.01% (-0.05% to 0.01%)**
Albania	951.50 (265.62 to 3254.72)	62.15 (16.59 to 219.67)	0.01% (-0.13% to 0.15%)	1300.24 (430.81 to 3875.29)	83.88 (26.64 to 264.81)	0.00% (-0.10% to 0.13%)
Andorra	30.00 (6.79 to 118.16)	55.69 (11.20 to 229.80)	0.00% (-0.17% to 0.20%)	43.16 (13.03 to 139.38)	83.33 (23.51 to 288.42)	0.00% (-0.13% to 0.10%)
Austria	3019.30 (723.28 to 12261.99)	59.07 (13.14 to 248.86)	0.00% (-0.17% to 0.21%)	4424.68 (1415.89 to 13946.15)	83.44 (24.87 to 281.00)	0.00% (-0.14% to 0.14%)
Belarus	3647.45 (1068.44 to 11746.48)	71.21 (19.64 to 247.08)	0.01% (-0.12% to 0.16%)	6213.38 (2262.44 to 16489.58)	103.42 (34.82 to 292.34)	0.00% (-0.09% to 0.09%)
Belgium	3526.05 (811.17 to 14261.41)	55.60 (11.68 to 232.63)	0.00% (-0.18% to 0.24%)	5468.74 (1651.21 to 17717.23)	83.20 (24.04 to 283.30)	0.00% (-0.13% to 0.11%)
Bosnia and Herzegovina	1187.67 (350.51 to 3906.06)	62.00 (17.24 to 216.93)	0.01% (-0.15% to 0.14%)	1679.50 (572.15 to 4874.67)	83.26 (26.56 to 261.67)	0.00% (-0.13% to 0.12%)
Bulgaria	2440.40 (695.07 to 8031.90)	62.19 (16.50 to 220.42)	0.01% (-0.13% to 0.17%)	3466.25 (1140.02 to 10233.12)	83.46 (25.66 to 263.51)	0.00% (-0.12% to 0.10%)
Croatia	1510.56 (444.46 to 4960.61)	62.31 (16.79 to 222.14)	0.01% (-0.13% to 0.13%)	2146.54 (722.99 to 6468.99)	83.78 (25.97 to 269.17)	0.00% (-0.12% to 0.11%)
Cyprus	425.88 (93.67 to 1697.77)	55.68 (11.79 to 228.91)	0.01% (-0.22% to 0.18%)	685.12 (203.07 to 2235.29)	83.43 (23.81 to 288.71)	0.00% (-0.13% to 0.11%)
Czechia	3818.49 (1077.78 to 12475.21)	62.18 (16.29 to 223.62)	0.01% (-0.14% to 0.14%)	5235.99 (1765.68 to 15681.31)	83.50 (25.99 to 269.46)	0.00% (-0.12% to 0.13%)
Denmark	1865.51 (427.83 to 7431.85)	57.15 (11.94 to 233.08)	0.00% (-0.18% to 0.22%)	2767.13 (761.22 to 9684.86)	83.77 (22.39 to 300.34)	-0.01% (-0.16% to 0.13%)

Estonia	516.79 (152.26 to 1677.48)	71.39 (19.83 to 246.06)	0.01% (-0.11% to 0.13%)	833.21 (308.63 to 2260.49)	103.74 (35.70 to 296.32)	0.00% (-0.10% to 0.10%)
Finland	1708.83 (389.20 to 6812.26)	55.52 (11.69 to 230.71)	0.01% (-0.19% to 0.20%)	2627.59 (810.06 to 8441.99)	83.35 (24.75 to 280.78)	0.00% (-0.12% to 0.13%)
France	21185.62 (4989.61 to 78003.39)	59.33 (13.59 to 229.31)	0.00% (-0.17% to 0.18%)	34637.35 (11360.81 to 100985.71)	89.92 (27.82 to 272.53)	0.00% (-0.11% to 0.11%)
Germany	27746.71 (6784.05 to 107485.62)	56.65 (12.84 to 230.15)	0.01% (-0.18% to 0.19%)	43869.75 (13647.77 to 131154.59)	88.39 (26.43 to 278.10)	0.00% (-0.14% to 0.15%)
Greece	3161.62 (711.86 to 12335.57)	55.62 (11.25 to 230.15)	0.01% (-0.17% to 0.17%)	5110.44 (1563.99 to 16333.62)	83.24 (23.82 to 282.96)	0.00% (-0.11% to 0.12%)
Hungary	3371.13 (972.96 to 11085.44)	62.16 (16.62 to 222.24)	0.01% (-0.12% to 0.16%)	4969.09 (1701.31 to 14785.27)	83.67 (26.55 to 268.23)	0.01% (-0.12% to 0.13%)
Iceland	109.17 (25.25 to 437.82)	55.77 (11.96 to 230.05)	0.01% (-0.16% to 0.20%)	160.15 (48.42 to 529.26)	83.59 (24.58 to 282.87)	0.00% (-0.11% to 0.13%)
Ireland	1494.54 (324.41 to 5975.98)	55.58 (11.22 to 229.63)	0.00% (-0.17% to 0.20%)	2342.90 (700.55 to 7606.41)	83.14 (24.07 to 283.87)	0.00% (-0.13% to 0.11%)
Israel	2672.65 (567.26 to 10944.28)	55.87 (11.52 to 230.88)	0.01% (-0.17% to 0.22%)	4080.97 (1181.10 to 13658.33)	83.53 (23.77 to 284.49)	0.00% (-0.13% to 0.11%)
Italy	19669.24 (4438.99 to 82617.85)	58.16 (11.88 to 254.33)	0.01% (-0.08% to 0.10%)	30507.18 (9596.48 to 100133.40)	84.66 (24.78 to 294.53)	0.01% (-0.06% to 0.11%)
Latvia	720.45 (219.36 to 2362.17)	71.12 (20.09 to 248.91)	0.01% (-0.13% to 0.19%)	1231.57 (459.70 to 3300.97)	103.52 (36.19 to 292.33)	0.00% (-0.09% to 0.11%)
Lithuania	992.16 (281.68 to 3349.51)	67.24 (17.70 to 245.17)	0.01% (-0.13% to 0.15%)	1626.27 (569.24 to 4710.80)	93.94 (30.61 to 292.46)	0.00% (-0.11% to 0.10%)
Luxembourg	224.89 (54.88 to 850.44)	59.36 (13.70 to 236.48)	0.01% (-0.15% to 0.22%)	344.98 (117.88 to 995.93)	91.09 (29.94 to 280.56)	0.00% (-0.11% to 0.12%)
Malta	140.74 (31.03 to 556.28)	55.71 (11.23 to 230.18)	0.01% (-0.20% to 0.26%)	212.09 (63.99 to 678.53)	83.28 (24.34 to 283.78)	0.00% (-0.13% to 0.14%)
Monaco	11.75 (2.70 to 46.55)	55.78 (11.62 to 232.46)	0.00% (-0.16% to 0.23%)	18.87 (5.65 to 60.28)	83.54 (23.80 to 289.13)	0.00% (-0.11% to 0.14%)

Montenegro	217.48 (62.07 to 731.93)	62.38 (16.84 to 223.73)	0.00% (-0.12% to 0.12%)	303.02 (99.60 to 905.86)	83.59 (25.41 to 267.03)	0.00% (-0.13% to 0.11%)
Netherlands	5431.40 (1104.01 to 24980.94)	56.79 (10.20 to 268.89)	0.00% (-0.20% to 0.28%)	7795.28 (2204.70 to 29384.67)	79.55 (21.07 to 313.51)	0.00% (-0.15% to 0.16%)
North Macedonia	820.83 (237.89 to 2715.02)	62.25 (17.00 to 218.66)	0.00% (-0.14% to 0.19%)	1071.79 (364.76 to 3166.03)	83.52 (27.09 to 263.39)	0.00% (-0.11% to 0.13%)
Norway	1780.53 (394.34 to 7285.99)	58.05 (11.72 to 244.88)	0.04% (-0.08% to 0.17%)	2563.48 (718.21 to 9250.32)	85.05 (22.81 to 319.58)	0.03% (-0.06% to 0.15%)
Poland	14576.39 (4360.78 to 47048.08)	66.53 (18.45 to 230.27)	0.01% (-0.07% to 0.06%)	20864.24 (7203.50 to 62228.41)	89.37 (28.71 to 278.69)	0.01% (-0.07% to 0.05%)
Portugal	3235.78 (764.96 to 12673.79)	55.45 (11.58 to 230.33)	0.01% (-0.17% to 0.24%)	5480.17 (1641.37 to 17313.38)	83.17 (23.55 to 280.89)	0.01% (-0.11% to 0.12%)
Republic of Moldova	1471.12 (446.12 to 4808.76)	71.29 (20.43 to 247.57)	0.01% (-0.11% to 0.16%)	2398.44 (867.00 to 6415.98)	103.52 (36.20 to 288.81)	0.00% (-0.09% to 0.10%)
Romania	6724.99 (1898.65 to 22183.74)	62.21 (16.73 to 219.86)	0.01% (-0.13% to 0.16%)	9571.44 (3172.16 to 28734.90)	83.91 (25.84 to 268.04)	0.01% (-0.12% to 0.11%)
Russian Federation	62681.78 (20013.62 to 195485.51)	79.56 (24.13 to 263.24)	0.01% (-0.04% to 0.05%)	109309.44 (43244.49 to 269262.85)	117.97 (44.56 to 309.96)	0.00% (-0.02% to 0.03%)
San Marino	10.06 (2.32 to 40.04)	55.67 (11.80 to 233.52)	0.00% (-0.17% to 0.21%)	16.77 (5.22 to 53.66)	83.26 (24.57 to 283.78)	0.00% (-0.11% to 0.13%)
Serbia	3272.97 (942.64 to 11022.94)	62.59 (16.98 to 224.04)	0.00% (-0.14% to 0.14%)	4433.96 (1476.63 to 13222.23)	83.86 (26.49 to 266.47)	0.00% (-0.13% to 0.12%)
Slovakia	1953.89 (571.96 to 6494.10)	62.34 (17.13 to 222.66)	0.01% (-0.12% to 0.15%)	2751.71 (890.42 to 7970.61)	83.84 (25.31 to 265.84)	0.00% (-0.11% to 0.13%)
Slovenia	761.32 (226.19 to 2477.55)	62.30 (16.68 to 222.21)	0.01% (-0.14% to 0.17%)	1024.45 (353.07 to 2981.43)	83.93 (26.60 to 265.35)	0.01% (-0.10% to 0.13%)
Spain	14459.37 (3245.04 to 58174.80)	55.74 (11.32 to 233.67)	0.03% (-0.13% to 0.32%)	25479.55 (8416.87 to 75936.44)	91.40 (28.26 to 290.92)	0.00% (-0.13% to 0.16%)
Sweden	3143.50 (715.28 to 12568.87)	54.57 (11.70 to 220.82)	0.01% (-0.13% to 0.20%)	4706.58 (1361.10 to 15748.67)	82.58 (22.70 to 291.31)	0.00% (-0.14% to 0.13%)

Switzerland	2701.88 (657.54 to 10400.04)	52.72 (11.77 to 216.49)	0.04% (-0.18% to 0.24%)	4175.51 (1319.01 to 12666.79)	80.33 (24.46 to 262.00)	0.02% (-0.10% to 0.15%)
Ukraine	17994.08 (5546.67 to 57463.60)	74.81 (21.63 to 252.24)	0.00% (-0.10% to 0.13%)	30424.11 (11308.13 to 79935.04)	107.15 (37.44 to 302.59)	0.00% (-0.09% to 0.09%)
United Kingdom	21547.64 (4986.40 to 85157.88)	58.11 (12.48 to 238.83)	0.00% (-0.07% to 0.04%)	33640.25 (10314.71 to 109589.26)	85.96 (25.56 to 289.18)	0.00% (-0.06% to 0.03%)

Table S3k: Counts and age-standardized incidence rates of tension-type headache in 2021, and percentage changes from 1990 to 2021, by country and sex

	Male			Female		
	Absolute number, 2021	**Age-standardized rate, per 100 000 people, 2021**	**Percentage Change, 1990-2021**	**Absolute number, 2021**	**Age-standardized rate, per 100 000 people, 2021**	**Percentage Change, 1990-2021**
Europe	**45338106.97 (39635650.34 to 50694953.06)**	**10601.67 (9245.89 to 11946.76)**	**-0.01% (-0.02% to 0.00%)**	**49897119.51 (43827321.21 to 55512992.28)**	**11031.48 (9595.45 to 12389.90)**	**-0.01% (-0.02% to 0.00%)**
Albania	142984.17 (123982.03 to 160625.69)	10199.58 (8819.55 to 11548.48)	0.00% (-0.01% to 0.01%)	151195.06 (131315.64 to 168892.89)	10947.71 (9420.24 to 12318.32)	0.00% (-0.01% to 0.01%)
Andorra	5031.85 (4322.54 to 5712.20)	10710.53 (9219.66 to 12222.42)	0.00% (-0.01% to 0.01%)	5029.23 (4382.38 to 5696.17)	11282.50 (9699.53 to 12804.00)	0.00% (-0.01% to 0.01%)
Austria	492661.12 (428246.02 to 555571.18)	10701.66 (9168.44 to 12203.46)	0.00% (-0.01% to 0.01%)	527377.67 (461287.00 to 591982.22)	11167.06 (9715.02 to 12719.18)	0.00% (-0.01% to 0.01%)
Belarus	477492.39 (414746.21 to 537809.22)	10577.91 (9195.44 to 11976.66)	0.00% (-0.01% to 0.01%)	543932.44 (474787.77 to 610678.46)	10637.15 (9206.62 to 12023.60)	0.00% (-0.01% to 0.01%)
Belgium	619899.38 (541898.72 to 697645.86)	10710.45 (9235.74 to 12247.11)	0.00% (-0.01% to 0.01%)	673953.72 (595972.61 to 757827.35)	11282.41 (9728.34 to 12810.06)	0.00% (-0.01% to 0.01%)
Bosnia and Herzegovina	171627.29 (150033.37 to 193700.02)	10199.47 (8827.45 to 11573.91)	0.00% (-0.01% to 0.00%)	191730.77 (166996.09 to 213348.08)	10947.56 (9420.78 to 12327.86)	0.00% (-0.01% to 0.01%)
Bulgaria	347671.82 (303495.42 to 391329.77)	10199.64 (8849.39 to 11552.89)	0.00% (-0.01% to 0.01%)	393867.45 (343412.59 to 438989.49)	10948.19 (9432.93 to 12343.79)	0.00% (-0.01% to 0.01%)
Croatia	216490.04 (190353.80 to 242105.61)	10194.93 (8880.69 to 11517.25)	0.00% (-0.04% to 0.04%)	245835.36 (217468.31 to 275398.69)	10989.76 (9557.24 to 12378.04)	0.00% (-0.04% to 0.05%)
Cyprus	75313.91 (64639.01 to 85677.67)	10710.77 (9218.76 to 12252.55)	0.00% (-0.01% to 0.01%)	82246.61 (71924.68 to 93085.21)	11282.54 (9701.00 to 12825.03)	0.00% (-0.01% to 0.00%)

Czechia	548901.18 (480783.13 to 617377.86)	10199.65 (8823.66 to 11547.30)	0.00% (-0.01% to 0.01%)	604681.87 (528127.57 to 673913.93)	10947.80 (9421.13 to 12329.17)	0.00% (-0.01% to 0.01%)
Denmark	320349.47 (278312.22 to 359422.33)	10722.01 (9222.10 to 12087.45)	0.00% (-0.04% to 0.04%)	342977.60 (294815.84 to 386451.32)	11385.98 (9760.85 to 12971.36)	0.01% (-0.05% to 0.07%)
Estonia	67645.23 (59017.73 to 76056.50)	10578.27 (9197.20 to 11952.86)	0.00% (-0.01% to 0.01%)	74853.81 (65820.80 to 83366.04)	10637.05 (9195.76 to 11991.45)	0.00% (-0.01% to 0.01%)
Finland	300486.18 (262504.87 to 336968.39)	10710.61 (9203.40 to 12251.34)	0.00% (-0.01% to 0.01%)	323845.87 (287134.23 to 363395.97)	11282.82 (9710.17 to 12793.68)	0.00% (0.00% to 0.01%)
France	3489206.79 (3068925.23 to 3921140.27)	10666.22 (9223.19 to 12104.16)	0.00% (-0.01% to 0.01%)	3874386.89 (3410055.70 to 4312012.07)	11106.98 (9617.33 to 12662.34)	0.00% (-0.01% to 0.01%)
Germany	4688453.04 (4064388.63 to 5266123.59)	10726.77 (9231.72 to 12304.93)	0.00% (-0.04% to 0.06%)	4942149.01 (4304413.48 to 5632421.88)	11308.92 (9795.98 to 12872.16)	0.00% (-0.04% to 0.05%)
Greece	542690.49 (473338.34 to 608495.00)	10710.62 (9215.60 to 12276.10)	0.00% (-0.01% to 0.01%)	607890.72 (535574.53 to 682305.19)	11282.36 (9700.95 to 12815.70)	0.00% (-0.01% to 0.01%)
Hungary	485278.08 (425741.67 to 546745.35)	10199.49 (8827.84 to 11526.12)	0.00% (-0.01% to 0.01%)	566960.75 (495626.41 to 631358.71)	10947.93 (9418.02 to 12343.93)	0.00% (-0.01% to 0.01%)
Iceland	19575.45 (17012.01 to 22168.14)	10710.72 (9210.83 to 12242.53)	0.00% (-0.01% to 0.01%)	20075.59 (17516.86 to 22544.56)	11282.22 (9687.57 to 12828.53)	0.00% (-0.01% to 0.01%)
Ireland	267623.98 (233630.06 to 302429.45)	10710.40 (9211.70 to 12242.78)	0.00% (-0.01% to 0.01%)	290844.92 (254310.32 to 326581.86)	11282.53 (9703.81 to 12786.30)	0.00% (-0.01% to 0.01%)
Israel	506554.20 (437600.77 to 575503.25)	10710.31 (9211.60 to 12244.34)	0.00% (-0.01% to 0.01%)	539051.89 (469243.55 to 607898.46)	11282.46 (9683.78 to 12789.29)	0.00% (-0.01% to 0.01%)
Italy	3494775.35 (3054206.65 to 3908595.80)	11654.45 (10132.15 to 13129.68)	0.00% (-0.03% to 0.04%)	3835625.55 (3382231.37 to 4252572.08)	12155.73 (10603.87 to 13601.81)	0.00% (-0.04% to 0.03%)
Latvia	93619.49 (81854.66 to 105337.19)	10578.21 (9191.54 to 11980.76)	0.00% (0.00% to 0.01%)	108670.89 (95347.10 to 121397.07)	10637.06 (9189.64 to 12010.49)	0.00% (0.00% to 0.01%)

Lithuania	139282.73 (120903.56 to 157776.93)	10746.82 (9221.04 to 12239.33)	0.00% (-0.01% to 0.01%)	160886.38 (141043.52 to 179323.62)	10772.99 (9320.13 to 12213.78)	0.00% (-0.01% to 0.00%)
Luxembourg	36530.58 (31673.75 to 41561.53)	10724.56 (9216.64 to 12169.56)	0.00% (-0.01% to 0.01%)	37780.26 (32632.24 to 42732.93)	11216.87 (9639.29 to 12751.12)	0.00% (0.00% to 0.01%)
Malta	24236.92 (21024.25 to 27250.00)	10710.35 (9219.83 to 12268.75)	0.00% (-0.01% to 0.01%)	25552.63 (22651.48 to 28676.02)	11282.31 (9752.47 to 12795.30)	0.00% (-0.01% to 0.01%)
Monaco	1982.44 (1729.38 to 2226.47)	10710.62 (9213.19 to 12256.90)	0.00% (-0.01% to 0.01%)	2228.04 (1967.41 to 2500.39)	11282.21 (9686.72 to 12831.67)	0.00% (-0.01% to 0.01%)
Montenegro	32269.12 (28101.64 to 36507.97)	10199.56 (8824.49 to 11561.35)	0.00% (0.00% to 0.01%)	35392.29 (30845.06 to 39461.33)	10947.62 (9414.66 to 12340.79)	0.00% (-0.01% to 0.00%)
Netherlands	947614.97 (827369.89 to 1073587.83)	10848.95 (9200.27 to 12455.53)	0.00% (-0.01% to 0.01%)	1013504.15 (882328.61 to 1144953.57)	11377.64 (9608.58 to 13036.64)	0.00% (-0.01% to 0.01%)
North Macedonia	119281.29 (104031.76 to 135169.91)	10199.55 (8826.74 to 11564.02)	0.00% (-0.01% to 0.01%)	123612.91 (107452.71 to 138603.67)	10947.69 (9417.75 to 12335.71)	0.00% (-0.01% to 0.00%)
Norway	333496.01 (294549.99 to 373986.97)	11800.12 (10401.90 to 13303.11)	0.02% (-0.02% to 0.06%)	349964.85 (302979.70 to 391877.01)	12665.85 (10929.87 to 14278.29)	0.00% (-0.05% to 0.05%)
Poland	2115569.80 (1847967.19 to 2365704.97)	10944.84 (9590.60 to 12281.96)	0.00% (0.00% to 0.00%)	2410144.82 (2110311.61 to 2679346.59)	11776.68 (10203.65 to 13237.29)	0.00% (0.00% to 0.00%)
Portugal	555467.99 (484385.39 to 622742.52)	10710.44 (9235.28 to 12255.19)	0.00% (-0.01% to 0.01%)	649310.92 (572363.75 to 729097.68)	11282.68 (9729.74 to 12788.23)	0.00% (-0.01% to 0.01%)
Republic of Moldova	192364.24 (166796.87 to 217302.39)	10578.05 (9180.46 to 11983.80)	0.00% (-0.01% to 0.01%)	210113.67 (183386.49 to 237153.92)	10636.86 (9184.34 to 12012.49)	0.00% (-0.01% to 0.01%)
Romania	972735.49 (854831.74 to 1094231.44)	10199.69 (8825.76 to 11530.53)	0.00% (-0.01% to 0.01%)	1096093.41 (956668.83 to 1221453.98)	10947.76 (9417.27 to 12329.62)	0.00% (-0.01% to 0.01%)
Russian Federation	7751157.40 (6747137.64 to 8665152.75)	11088.07 (9651.69 to 12388.18)	0.00% (-0.04% to 0.04%)	8959134.36 (7809549.89 to 10010286.93)	11298.64 (9892.07 to 12710.82)	0.01% (-0.04% to 0.05%)

San Marino	1741.37 (1529.45 to 1956.72)	10710.61 (9215.38 to 12258.43)	0.00% (-0.01% to 0.01%)	1989.66 (1750.97 to 2243.39)	11282.24 (9684.36 to 12816.99)	0.00% (-0.01% to 0.01%)
Serbia	480651.97 (419249.16 to 541727.22)	10199.62 (8831.72 to 11537.48)	0.00% (-0.01% to 0.01%)	513387.05 (449628.06 to 572468.45)	10947.72 (9428.38 to 12336.31)	0.00% (0.00% to 0.01%)
Slovakia	281983.50 (246468.03 to 318808.51)	10199.68 (8822.14 to 11535.30)	0.00% (-0.01% to 0.01%)	314783.67 (275244.28 to 351321.57)	10947.71 (9427.35 to 12326.79)	0.00% (-0.01% to 0.01%)
Slovenia	108110.63 (94598.77 to 121645.29)	10199.40 (8823.15 to 11555.80)	0.00% (-0.01% to 0.01%)	116706.07 (102333.77 to 129662.20)	10948.08 (9413.71 to 12330.20)	0.00% (-0.01% to 0.01%)
Spain	2467662.85 (2134475.83 to 2776687.41)	10700.65 (9151.58 to 12132.70)	0.00% (-0.01% to 0.01%)	2678698.15 (2348469.35 to 3008586.85)	11084.23 (9650.25 to 12493.53)	0.00% (0.00% to 0.01%)
Sweden	610898.31 (537204.60 to 676187.62)	11485.53 (10042.81 to 12847.14)	0.01% (-0.03% to 0.04%)	652757.18 (571880.76 to 727505.08)	12445.65 (10861.59 to 14016.10)	0.00% (-0.04% to 0.04%)
Switzerland	480769.55 (418315.16 to 537980.21)	10413.42 (9030.64 to 11720.72)	0.01% (-0.03% to 0.07%)	511072.53 (448930.46 to 568056.97)	11018.46 (9457.41 to 12374.00)	0.01% (-0.04% to 0.06%)
Ukraine	2403869.80 (2101236.38 to 2710731.50)	11381.86 (9943.97 to 12793.28)	0.00% (-0.01% to 0.01%)	2748687.50 (2415132.52 to 3078681.35)	11419.25 (9924.74 to 12878.41)	0.00% (-0.01% to 0.01%)
United Kingdom	3921065.02 (3449765.71 to 4386838.85)	11495.59 (10022.64 to 12930.13)	0.00% (0.00% to 0.00%)	4326591.06 (3793026.15 to 4838917.05)	12117.18 (10549.45 to 13627.58)	0.00% (0.00% to 0.00%)

Table S3I: Counts and age-standardized YLD rates of tension-type headache in 2021, and percentage changes from 1990 to 2021, by country and sex

	Male			Female		
	Absolute number, 2021	**Age-standardized rate, per 100 000 people, 2021**	**Percentage Change, 1990-2021**	**Absolute number, 2021**	**Age-standardized rate, per 100 000 people, 2021**	**Percentage Change, 1990-2021**
Europe	**297654.68 (83195.64 to 1044194.41)**	**62.87 (16.40 to 232.91)**	**0.00% (-0.06% to 0.03%)**	**470322.34 (162163.34 to 1359954.49)**	**92.26 (30.36 to 280.15)**	**-0.01% (-0.05% to 0.01%)**
Albania	951.50 (265.62 to 3254.72)	62.15 (16.59 to 219.67)	0.01% (-0.13% to 0.15%)	1300.24 (430.81 to 3875.29)	83.88 (26.64 to 264.81)	0.00% (-0.10% to 0.13%)
Andorra	30.00 (6.79 to 118.16)	55.69 (11.20 to 229.80)	0.00% (-0.17% to 0.20%)	43.16 (13.03 to 139.38)	83.33 (23.51 to 288.42)	0.00% (-0.13% to 0.10%)
Austria	3019.30 (723.28 to 12261.99)	59.07 (13.14 to 248.86)	0.00% (-0.17% to 0.21%)	4424.68 (1415.89 to 13946.15)	83.44 (24.87 to 281.00)	0.00% (-0.14% to 0.14%)
Belarus	3647.45 (1068.44 to 11746.48)	71.21 (19.64 to 247.08)	0.01% (-0.12% to 0.16%)	6213.38 (2262.44 to 16489.58)	103.42 (34.82 to 292.34)	0.00% (-0.09% to 0.09%)
Belgium	3526.05 (811.17 to 14261.41)	55.60 (11.68 to 232.63)	0.00% (-0.18% to 0.24%)	5468.74 (1651.21 to 17717.23)	83.20 (24.04 to 283.30)	0.00% (-0.13% to 0.11%)
Bosnia and Herzegovina	1187.67 (350.51 to 3906.06)	62.00 (17.24 to 216.93)	0.01% (-0.15% to 0.14%)	1679.50 (572.15 to 4874.67)	83.26 (26.56 to 261.67)	0.00% (-0.13% to 0.12%)
Bulgaria	2440.40 (695.07 to 8031.90)	62.19 (16.50 to 220.42)	0.01% (-0.13% to 0.17%)	3466.25 (1140.02 to 10233.12)	83.46 (25.66 to 263.51)	0.00% (-0.12% to 0.10%)
Croatia	1510.56 (444.46 to 4960.61)	62.31 (16.79 to 222.14)	0.01% (-0.13% to 0.13%)	2146.54 (722.99 to 6468.99)	83.78 (25.97 to 269.17)	0.00% (-0.12% to 0.11%)
Cyprus	425.88 (93.67 to 1697.77)	55.68 (11.79 to 228.91)	0.01% (-0.22% to 0.18%)	685.12 (203.07 to 2235.29)	83.43 (23.81 to 288.71)	0.00% (-0.13% to 0.11%)
Czechia	3818.49 (1077.78 to 12475.21)	62.18 (16.29 to 223.62)	0.01% (-0.14% to 0.14%)	5235.99 (1765.68 to 15681.31)	83.50 (25.99 to 269.46)	0.00% (-0.12% to 0.13%)
Denmark	1865.51 (427.83 to 7431.85)	57.15 (11.94 to 233.08)	0.00% (-0.18% to 0.22%)	2767.13 (761.22 to 9684.86)	83.77 (22.39 to 300.34)	-0.01% (-0.16% to 0.13%)

Estonia	516.79 (152.26 to 1677.48)	71.39 (19.83 to 246.06)	0.01% (-0.11% to 0.13%)	833.21 (308.63 to 2260.49)	103.74 (35.70 to 296.32)	0.00% (-0.10% to 0.10%)
Finland	1708.83 (389.20 to 6812.26)	55.52 (11.69 to 230.71)	0.01% (-0.19% to 0.20%)	2627.59 (810.06 to 8441.99)	83.35 (24.75 to 280.78)	0.00% (-0.12% to 0.13%)
France	21185.62 (4989.61 to 78003.39)	59.33 (13.59 to 229.31)	0.00% (-0.17% to 0.18%)	34637.35 (11360.81 to 100985.71)	89.92 (27.82 to 272.53)	0.00% (-0.11% to 0.11%)
Germany	27746.71 (6784.05 to 107485.62)	56.65 (12.84 to 230.15)	0.01% (-0.18% to 0.19%)	43869.75 (13647.77 to 131154.59)	88.39 (26.43 to 278.10)	0.00% (-0.14% to 0.15%)
Greece	3161.62 (711.86 to 12335.57)	55.62 (11.25 to 230.15)	0.01% (-0.17% to 0.17%)	5110.44 (1563.99 to 16333.62)	83.24 (23.82 to 282.96)	0.00% (-0.11% to 0.12%)
Hungary	3371.13 (972.96 to 11085.44)	62.16 (16.62 to 222.24)	0.01% (-0.12% to 0.16%)	4969.09 (1701.31 to 14785.27)	83.67 (26.55 to 268.23)	0.01% (-0.12% to 0.13%)
Iceland	109.17 (25.25 to 437.82)	55.77 (11.96 to 230.05)	0.01% (-0.16% to 0.20%)	160.15 (48.42 to 529.26)	83.59 (24.58 to 282.87)	0.00% (-0.11% to 0.13%)
Ireland	1494.54 (324.41 to 5975.98)	55.58 (11.22 to 229.63)	0.00% (-0.17% to 0.20%)	2342.90 (700.55 to 7606.41)	83.14 (24.07 to 283.87)	0.00% (-0.13% to 0.11%)
Israel	2672.65 (567.26 to 10944.28)	55.87 (11.52 to 230.88)	0.01% (-0.17% to 0.22%)	4080.97 (1181.10 to 13658.33)	83.53 (23.77 to 284.49)	0.00% (-0.13% to 0.11%)
Italy	19669.24 (4438.99 to 82617.85)	58.16 (11.88 to 254.33)	0.01% (-0.08% to 0.10%)	30507.18 (9596.48 to 100133.40)	84.66 (24.78 to 294.53)	0.01% (-0.06% to 0.11%)
Latvia	720.45 (219.36 to 2362.17)	71.12 (20.09 to 248.91)	0.01% (-0.13% to 0.19%)	1231.57 (459.70 to 3300.97)	103.52 (36.19 to 292.33)	0.00% (-0.09% to 0.11%)
Lithuania	992.16 (281.68 to 3349.51)	67.24 (17.70 to 245.17)	0.01% (-0.13% to 0.15%)	1626.27 (569.24 to 4710.80)	93.94 (30.61 to 292.46)	0.00% (-0.11% to 0.10%)
Luxembourg	224.89 (54.88 to 850.44)	59.36 (13.70 to 236.48)	0.01% (-0.15% to 0.22%)	344.98 (117.88 to 995.93)	91.09 (29.94 to 280.56)	0.00% (-0.11% to 0.12%)
Malta	140.74 (31.03 to 556.28)	55.71 (11.23 to 230.18)	0.01% (-0.20% to 0.26%)	212.09 (63.99 to 678.53)	83.28 (24.34 to 283.78)	0.00% (-0.13% to 0.14%)
Monaco	11.75 (2.70 to 46.55)	55.78 (11.62 to 232.46)	0.00% (-0.16% to 0.23%)	18.87 (5.65 to 60.28)	83.54 (23.80 to 289.13)	0.00% (-0.11% to 0.14%)

Montenegro	217.48 (62.07 to 731.93)	62.38 (16.84 to 223.73)	0.00% (-0.12% to 0.12%)	303.02 (99.60 to 905.86)	83.59 (25.41 to 267.03)	0.00% (-0.13% to 0.11%)
Netherlands	5431.40 (1104.01 to 24980.94)	56.79 (10.20 to 268.89)	0.00% (-0.20% to 0.28%)	7795.28 (2204.70 to 29384.67)	79.55 (21.07 to 313.51)	0.00% (-0.15% to 0.16%)
North Macedonia	820.83 (237.89 to 2715.02)	62.25 (17.00 to 218.66)	0.00% (-0.14% to 0.19%)	1071.79 (364.76 to 3166.03)	83.52 (27.09 to 263.39)	0.00% (-0.11% to 0.13%)
Norway	1780.53 (394.34 to 7285.99)	58.05 (11.72 to 244.88)	0.04% (-0.08% to 0.17%)	2563.48 (718.21 to 9250.32)	85.05 (22.81 to 319.58)	0.03% (-0.06% to 0.15%)
Poland	14576.39 (4360.78 to 47048.08)	66.53 (18.45 to 230.27)	0.01% (-0.07% to 0.06%)	20864.24 (7203.50 to 62228.41)	89.37 (28.71 to 278.69)	0.01% (-0.07% to 0.05%)
Portugal	3235.78 (764.96 to 12673.79)	55.45 (11.58 to 230.33)	0.01% (-0.17% to 0.24%)	5480.17 (1641.37 to 17313.38)	83.17 (23.55 to 280.89)	0.01% (-0.11% to 0.12%)
Republic of Moldova	1471.12 (446.12 to 4808.76)	71.29 (20.43 to 247.57)	0.01% (-0.11% to 0.16%)	2398.44 (867.00 to 6415.98)	103.52 (36.20 to 288.81)	0.00% (-0.09% to 0.10%)
Romania	6724.99 (1898.65 to 22183.74)	62.21 (16.73 to 219.86)	0.01% (-0.13% to 0.16%)	9571.44 (3172.16 to 28734.90)	83.91 (25.84 to 268.04)	0.01% (-0.12% to 0.11%)
Russian Federation	62681.78 (20013.62 to 195485.51)	79.56 (24.13 to 263.24)	0.01% (-0.04% to 0.05%)	109309.44 (43244.49 to 269262.85)	117.97 (44.56 to 309.96)	0.00% (-0.02% to 0.03%)
San Marino	10.06 (2.32 to 40.04)	55.67 (11.80 to 233.52)	0.00% (-0.17% to 0.21%)	16.77 (5.22 to 53.66)	83.26 (24.57 to 283.78)	0.00% (-0.11% to 0.13%)
Serbia	3272.97 (942.64 to 11022.94)	62.59 (16.98 to 224.04)	0.00% (-0.14% to 0.14%)	4433.96 (1476.63 to 13222.23)	83.86 (26.49 to 266.47)	0.00% (-0.13% to 0.12%)
Slovakia	1953.89 (571.96 to 6494.10)	62.34 (17.13 to 222.66)	0.01% (-0.12% to 0.15%)	2751.71 (890.42 to 7970.61)	83.84 (25.31 to 265.84)	0.00% (-0.11% to 0.13%)
Slovenia	761.32 (226.19 to 2477.55)	62.30 (16.68 to 222.21)	0.01% (-0.14% to 0.17%)	1024.45 (353.07 to 2981.43)	83.93 (26.60 to 265.35)	0.01% (-0.10% to 0.13%)
Spain	14459.37 (3245.04 to 58174.80)	55.74 (11.32 to 233.67)	0.03% (-0.13% to 0.32%)	25479.55 (8416.87 to 75936.44)	91.40 (28.26 to 290.92)	0.00% (-0.13% to 0.16%)
Sweden	3143.50 (715.28 to 12568.87)	54.57 (11.70 to 220.82)	0.01% (-0.13% to 0.20%)	4706.58 (1361.10 to 15748.67)	82.58 (22.70 to 291.31)	0.00% (-0.14% to 0.13%)

Switzerland	2701.88 (657.54 to 10400.04)	52.72 (11.77 to 216.49)	0.04% (-0.18% to 0.24%)	4175.51 (1319.01 to 12666.79)	80.33 (24.46 to 262.00)	0.02% (-0.10% to 0.15%)
Ukraine	17994.08 (5546.67 to 57463.60)	74.81 (21.63 to 252.24)	0.00% (-0.10% to 0.13%)	30424.11 (11308.13 to 79935.04)	107.15 (37.44 to 302.59)	0.00% (-0.09% to 0.09%)
United Kingdom	21547.64 (4986.40 to 85157.88)	58.11 (12.48 to 238.83)	0.00% (-0.07% to 0.04%)	33640.25 (10314.71 to 109589.26)	85.96 (25.56 to 289.18)	0.00% (-0.06% to 0.03%)

Table S4a: Prevalence, DALY, and incidence rates of headache disorders, by age and sex, 2021

	Prevalence (95% UI)		DALYs (95% UI)		Incidence (95% UI)	
	Male	Female	Male	Female	Male	Female
<5 years	0.00 (0.00 to 0.00)	0.00 (0.00 to 0.00)	0.00 (0.00 to 0.00)	0.00 (0.00 to 0.00)	0.00 (0.00 to 0.00)	0.00 (0.00 to 0.00)
5 to 9	9802.81 (6692.45 to 13677.53)	10824.92 (7801.45 to 14792.33)	77.85 (3.38 to 206.01)	126.36 (4.63 to 338.70)	8221.42 (5605.40 to 11681.07)	8864.78 (6323.49 to 12293.59)
10 to 14	35256.48 (27597.62 to 43881.32)	40328.09 (32775.20 to 48757.59)	385.35 (29.23 to 931.90)	645.05 (44.18 to 1533.57)	14258.84 (9714.75 to 19391.43)	16246.01 (11348.35 to 21487.23)
15 to 19	44556.55 (33350.55 to 55319.53)	53728.30 (43522.61 to 63507.79)	570.20 (73.65 to 1326.28)	1038.76 (134.19 to 2428.99)	14054.76 (9391.89 to 19553.59)	16214.27 (11275.47 to 22303.84)
20 to 24	47264.64 (38228.44 to 59280.75)	58375.66 (49595.42 to 68615.85)	631.57 (93.81 to 1485.29)	1235.90 (183.77 to 2756.13)	14151.96 (9308.19 to 19878.71)	16147.62 (10900.58 to 22420.34)
25 to 29	49931.13 (40130.43 to 61435.05)	61097.68 (52409.10 to 71711.60)	650.82 (104.87 to 1469.46)	1285.75 (201.46 to 2811.88)	15740.07 (10869.76 to 21970.40)	17111.96 (11988.28 to 23647.65)
30 to 34	53236.14 (42821.73 to 64986.16)	63195.68 (53273.98 to 73671.73)	683.74 (140.06 to 1448.93)	1330.24 (272.19 to 2820.83)	15553.81 (10478.14 to 20816.38)	16753.68 (11447.68 to 22301.34)
35 to 39	51900.89 (40828.01 to 63932.16)	62379.25 (52197.56 to 72899.58)	725.15 (198.59 to 1522.27)	1400.24 (368.41 to 2831.92)	14431.77 (9611.12 to 19995.70)	15789.69 (10737.96 to 21563.21)
40 to 44	49976.25 (40258.58 to 62484.68)	60950.89 (51783.06 to 71723.55)	756.33 (217.47 to 1568.07)	1453.89 (375.62 to 3049.19)	13561.92 (8666.92 to 18760.33)	14721.82 (9737.18 to 20299.83)
45 to 49	46895.56 (37883.28 to 57300.25)	57748.53 (48969.82 to 67086.18)	720.43 (217.08 to 1431.48)	1375.74 (392.54 to 2723.43)	12168.94 (8015.05 to 17095.11)	13200.74 (8701.37 to 18452.01)
50 to 54	44792.60 (34704.41 to 55987.44)	55161.44 (45599.17 to 65469.47)	662.67 (213.63 to 1334.26)	1262.35 (394.21 to 2396.64)	12372.20 (8220.18 to 17083.38)	13313.65 (8956.29 to 18291.07)
55 to 59	43723.95 (34069.98 to 55949.24)	52493.79 (43167.20 to 63367.68)	599.61 (210.39 to 1170.25)	1121.97 (394.05 to 2222.90)	11114.89 (7475.54 to 15863.36)	11676.06 (7865.77 to 16570.99)
60 to 64	38780.91 (29596.68 to 50287.51)	46464.55 (37485.92 to 57350.96)	547.91 (219.26 to 1060.84)	992.68 (388.29 to 1834.51)	9923.00 (6359.80 to 14794.44)	10555.51 (6833.53 to 15816.57)
65 to 69	36965.17 (28437.80 to 48320.43)	44432.72 (35724.06 to 55122.19)	455.86 (184.29 to 871.28)	798.59 (343.33 to 1477.47)	10689.92 (6796.24 to 15831.28)	12025.80 (7761.83 to 17639.90)
70 to 74	35089.17 (26728.14 to 47075.83)	42456.79 (33760.87 to 54378.74)	351.66 (128.46 to 676.10)	599.75 (226.90 to 1165.81)	9655.86 (6368.91 to 13449.12)	10904.96 (7353.18 to 15142.57)
75 to 79	31190.79 (21287.67 to 41773.39)	37209.36 (27001.64 to 47992.44)	279.40 (93.87 to 583.20)	466.76 (160.76 to 949.32)	8754.71 (5705.34 to 12385.81)	9680.47 (6383.33 to 13580.45)
80 to 84	30426.14 (22052.46 to 41003.56)	35822.57 (26725.25 to 47074.45)	249.69 (86.59 to 520.95)	405.50 (150.11 to 802.89)	8876.85 (5775.38 to 12372.53)	9935.48 (6511.53 to 13802.37)

85 to 89	28119.17 (19890.95 to 38862.67)	33132.89 (24093.29 to 44122.85)	222.35 (84.78 to 447.50)	353.58 (139.45 to 672.63)	7624.73 (4700.84 to 11231.10)	8512.98 (5233.40 to 12410.20)
90 to 94	26894.21 (18680.84 to 37191.10)	30409.14 (21980.51 to 41282.16)	182.15 (65.03 to 368.57)	275.24 (106.68 to 541.84)	9174.92 (5864.11 to 13125.17)	9599.19 (6107.45 to 13665.45)
95 plus	35037.81 (23581.28 to 48066.61)	37098.14 (25690.30 to 50202.58)	131.94 (30.43 to 319.55)	190.29 (46.45 to 430.92)	12757.19 (6913.68 to 19295.43)	12896.11 (7019.66 to 19665.43)

Table S4b: Prevalence, DALY, and incidence rates of migraine, by age and sex, 2021

	Prevalence (95% UI)		DALYs (95% UI)		Incidence (95% UI)	
	Male	Female	Male	Female	Male	Female
<5 years	0.00 (0.00 to 0.00)	0.00 (0.00 to 0.00)	0.00 (0.00 to 0.00)	0.00 (0.00 to 0.00)	0.00 (0.00 to 0.00)	0.00 (0.00 to 0.00)
5 to 9	2023.59 (1312.76 to 2878.76)	3474.16 (2217.68 to 4962.30)	68.47 (1.84 to 191.13)	116.89 (2.79 to 330.27)	1281.14 (830.45 to 1854.65)	2204.21 (1404.86 to 3161.03)
10 to 14	9588.32 (6913.81 to 12992.65)	16670.26 (12204.92 to 22294.28)	348.61 (17.81 to 861.12)	603.38 (28.44 to 1494.34)	1878.29 (1393.05 to 2464.90)	3397.65 (2438.45 to 4508.84)
15 to 19	13717.34 (10197.61 to 17742.68)	25781.16 (19115.20 to 32505.81)	511.81 (50.95 to 1211.79)	960.30 (90.71 to 2337.87)	1231.57 (708.69 to 1926.79)	2637.59 (1528.10 to 4021.67)
20 to 24	15209.05 (11442.65 to 19301.51)	30550.33 (23482.56 to 38361.66)	563.75 (63.91 to 1400.19)	1137.58 (127.65 to 2650.13)	1121.27 (670.18 to 1688.80)	2326.28 (1405.80 to 3443.17)
25 to 29	15772.07 (12315.82 to 19996.51)	32049.72 (25824.89 to 39672.18)	578.69 (64.78 to 1372.57)	1180.70 (130.80 to 2723.06)	1082.10 (649.40 to 1639.87)	2007.21 (1199.09 to 2964.41)
30 to 34	15984.59 (12443.60 to 20424.14)	32087.85 (25594.51 to 40249.92)	598.75 (89.66 to 1356.15)	1205.17 (172.35 to 2684.24)	1018.58 (612.26 to 1608.17)	1839.07 (1139.47 to 2811.06)
35 to 39	16263.43 (12945.70 to 20171.29)	32500.29 (26297.41 to 40154.19)	629.54 (130.19 to 1379.91)	1255.18 (247.61 to 2636.88)	1072.41 (665.43 to 1689.05)	2045.11 (1291.85 to 3116.69)
40 to 44	16520.23 (13214.92 to 20887.62)	33112.77 (26713.93 to 40992.93)	655.49 (147.55 to 1428.52)	1299.40 (273.21 to 2820.26)	903.93 (556.13 to 1334.65)	1721.12 (1076.58 to 2505.17)
45 to 49	15331.97 (12162.09 to 19456.45)	30547.90 (24395.34 to 38192.04)	619.02 (154.90 to 1287.06)	1218.29 (281.00 to 2502.28)	641.78 (368.15 to 962.00)	1139.18 (657.47 to 1739.49)
50 to 54	13932.95 (11318.62 to 17760.67)	27488.74 (22324.42 to 34529.29)	564.45 (146.64 to 1190.22)	1107.09 (278.45 to 2258.06)	553.58 (317.37 to 857.60)	968.00 (554.17 to 1480.94)
55 to 59	12306.09 (9879.45 to 15698.40)	23971.23 (19249.33 to 30340.67)	502.50 (146.81 to 1058.65)	971.98 (271.04 to 2034.17)	415.18 (241.14 to 638.07)	708.91 (411.57 to 1104.32)
60 to 64	10685.77 (8573.32 to 13512.29)	20224.71 (16319.97 to 25471.26)	451.79 (149.71 to 904.10)	845.76 (273.64 to 1666.74)	282.06 (162.09 to 440.49)	419.59 (246.23 to 662.78)
65 to 69	8823.64 (6937.95 to 11205.14)	16106.73 (12647.39 to 20337.04)	370.07 (120.63 to 756.32)	670.48 (213.00 to 1333.81)	223.90 (123.82 to 327.55)	276.99 (151.20 to 414.15)
70 to 74	7144.90 (5591.27 to 9177.06)	12552.72 (9793.83 to 16116.40)	283.41 (90.94 to 589.32)	499.99 (159.07 to 1024.12)	216.60 (129.57 to 330.64)	262.03 (158.52 to 405.30)
75 to 79	5939.79 (4617.89 to 7591.86)	10133.43 (7834.45 to 13179.29)	224.84 (65.02 to 479.09)	388.77 (114.22 to 805.60)	217.36 (136.83 to 332.54)	278.73 (175.25 to 426.70)
80 to 84	5354.78 (4196.23 to 7000.20)	8818.29 (6865.57 to 11577.09)	199.58 (61.31 to 427.29)	334.21 (107.52 to 696.46)	212.43 (128.55 to 326.22)	284.91 (177.95 to 438.02)
85 to 89	4782.43 (3675.36 to 6106.09)	7698.76 (5871.24 to 9983.55)	176.66 (61.86 to 360.39)	289.38 (102.80 to 567.16)	167.22 (103.35 to 249.82)	217.56 (132.18 to 330.05)

90 to 94	4027.63 (3132.98 to 5177.56)	6259.67 (4831.51 to 8138.41)	143.51 (41.83 to 289.41)	224.21 (68.41 to 458.27)	102.15 (68.30 to 146.20)	121.16 (80.21 to 174.00)
95 plus	2989.26 (2191.19 to 4025.82)	4624.74 (3331.58 to 6350.98)	95.14 (18.83 to 221.86)	147.39 (30.67 to 330.93)	25.29 (16.95 to 36.29)	30.35 (20.04 to 43.72)

Table S4c: Prevalence, DALY, and incidence rates of tension-type headache, by age and sex, 2021

	Prevalence (95% UI)		DALYs (95% UI)		Incidence (95% UI)	
	Male	Female	Male	Female	Male	Female
<5 years	0.00 (0.00 to 0.00)	0.00 (0.00 to 0.00)	0.00 (0.00 to 0.00)	0.00 (0.00 to 0.00)	0.00 (0.00 to 0.00)	0.00 (0.00 to 0.00)
5 to 9	7939.32 (4749.88 to 11883.15)	7611.82 (4482.00 to 11351.93)	9.38 (0.42 to 55.37)	9.47 (0.56 to 56.17)	6940.28 (4318.93 to 10532.19)	6660.58 (4085.70 to 10018.39)
10 to 14	28374.82 (20502.47 to 37501.09)	28354.11 (20285.35 to 36914.35)	36.74 (3.51 to 202.75)	41.67 (5.40 to 208.53)	12380.55 (7923.46 to 17451.75)	12848.36 (8115.56 to 18038.76)
15 to 19	35723.71 (22721.77 to 48235.43)	37718.03 (24474.62 to 50369.93)	58.39 (9.14 to 273.69)	78.47 (17.29 to 312.96)	12823.20 (8149.97 to 18083.97)	13576.68 (8644.84 to 19272.00)
20 to 24	37827.14 (27506.78 to 51827.20)	40262.30 (29212.61 to 54650.69)	67.83 (12.86 to 303.05)	98.32 (25.42 to 341.53)	13030.69 (8088.37 to 18658.88)	13821.33 (8589.67 to 20033.30)
25 to 29	40585.42 (28826.45 to 54301.22)	42919.24 (30881.66 to 57359.58)	72.13 (13.22 to 322.34)	105.05 (25.81 to 393.35)	14657.97 (9707.18 to 20552.07)	15104.76 (9963.85 to 21192.74)
30 to 34	44399.86 (31938.63 to 57593.80)	45944.20 (33256.26 to 59291.35)	84.99 (17.45 to 336.26)	125.07 (35.74 to 398.47)	14535.24 (9550.70 to 19873.55)	14914.60 (9806.34 to 20331.01)
35 to 39	42649.58 (28859.39 to 56684.26)	44480.88 (31101.18 to 58457.42)	95.62 (21.43 to 349.55)	145.06 (41.87 to 427.57)	13359.36 (8463.05 to 18894.87)	13744.58 (8603.94 to 19625.20)
40 to 44	40179.75 (29077.46 to 54856.75)	41906.83 (30511.73 to 56738.89)	100.84 (28.27 to 336.19)	154.50 (52.92 to 408.25)	12657.99 (7671.02 to 17879.88)	13000.69 (8101.57 to 18499.33)
45 to 49	37364.21 (26256.10 to 49145.06)	39395.08 (28243.94 to 51910.58)	101.42 (27.12 to 306.95)	157.45 (50.58 to 394.68)	11527.16 (7476.32 to 16461.54)	12061.56 (7828.14 to 17177.06)
50 to 54	35930.52 (24942.56 to 48003.21)	38366.15 (26833.58 to 50812.84)	98.21 (26.55 to 299.80)	155.26 (49.32 to 383.08)	11818.62 (7556.66 to 16635.51)	12345.65 (7917.67 to 17246.94)
55 to 59	35869.42 (25549.77 to 49222.51)	37631.01 (26931.88 to 50932.02)	97.11 (25.61 to 304.33)	149.99 (46.19 to 378.63)	10699.71 (7003.94 to 15481.16)	10967.15 (7130.76 to 15769.93)
60 to 64	31464.10 (21312.23 to 44659.27)	32926.04 (22563.69 to 46626.56)	96.12 (27.54 to 295.39)	146.92 (49.32 to 364.48)	9640.94 (6074.46 to 14540.56)	10135.92 (6339.76 to 15364.77)
65 to 69	30875.75 (21672.83 to 43737.33)	33779.84 (24237.83 to 46657.16)	85.79 (24.36 to 275.02)	128.11 (42.96 to 338.17)	10466.01 (6571.84 to 15589.27)	11748.81 (7421.19 to 17320.16)
70 to 74	30105.05 (21098.06 to 42705.91)	34202.19 (24585.61 to 47543.62)	68.25 (19.01 to 247.73)	99.76 (31.64 to 306.52)	9439.27 (6157.73 to 13201.58)	10642.92 (7089.32 to 14876.16)
75 to 79	26851.86 (16611.97 to 37640.74)	30138.28 (19158.83 to 41581.00)	54.55 (13.76 to 203.96)	77.99 (23.23 to 252.34)	8537.35 (5510.52 to 12152.55)	9401.74 (6079.83 to 13306.97)
80 to 84	26495.16 (17732.17 to 37966.23)	29624.62 (19961.35 to 41686.73)	50.11 (11.71 to 191.80)	71.30 (20.59 to 240.33)	8664.42 (5596.16 to 12062.50)	9650.57 (6239.09 to 13481.25)

85 to 89	24513.98 (15776.28 to 35785.45)	27560.21 (18086.33 to 39177.17)	45.69 (9.59 to 177.75)	64.19 (17.07 to 210.15)	7457.51 (4522.15 to 11043.17)	8295.42 (5021.21 to 12199.25)
90 to 94	23832.15 (15412.75 to 34280.10)	25763.84 (16840.71 to 36924.81)	38.64 (8.16 to 150.78)	51.03 (13.23 to 176.53)	9072.77 (5759.81 to 13021.22)	9478.03 (5961.77 to 13543.95)
95 plus	33037.47 (21222.06 to 46428.71)	34045.53 (22050.72 to 48131.45)	36.80 (3.43 to 185.61)	42.90 (5.09 to 198.48)	12731.90 (6885.51 to 19273.80)	12865.76 (6985.87 to 19632.24)

Table S5a: Prevalence, DALY, incidence, and YLD rates of headache disorders for both sexes, by age, 2021

	Prevalence (95% UI)	DALYs (95% UI)	Incidence (95% UI)	YLDs (95% UI)
<5 years	0.00 (0.00 to 0.00)	0.00 (0.00 to 0.00)	0.00 (0.00 to 0.00)	0.00 (0.00 to 0.00)
5 to 9	10299.81 (7276.70 to 14222.85)	101.43 (4.07 to 269.06)	8534.25 (5958.83 to 11919.82)	101.43 (4.07 to 269.06)
10 to 14	37721.11 (30163.92 to 45907.65)	511.55 (36.09 to 1235.14)	15224.54 (10508.11 to 20436.54)	511.55 (36.09 to 1235.14)
15 to 19	49006.83 (38657.12 to 59353.26)	797.56 (102.13 to 1841.17)	15102.59 (10395.02 to 20918.31)	797.56 (102.13 to 1841.17)
20 to 24	52659.68 (43791.25 to 63509.04)	925.01 (137.46 to 2087.72)	15120.96 (10083.47 to 21228.25)	925.01 (137.46 to 2087.72)
25 to 29	55403.49 (46297.47 to 66497.29)	961.98 (149.36 to 2144.34)	16412.39 (11392.69 to 22792.85)	961.98 (149.36 to 2144.34)
30 to 34	58159.15 (48361.23 to 69430.09)	1003.30 (205.46 to 2115.97)	16146.91 (10946.99 to 21595.29)	1003.30 (205.46 to 2115.97)
35 to 39	57124.70 (46620.70 to 68023.89)	1061.71 (287.20 to 2158.98)	15108.74 (10175.62 to 20810.45)	1061.71 (287.20 to 2158.98)
40 to 44	55484.67 (46007.03 to 67188.83)	1106.45 (296.23 to 2312.11)	14144.10 (9294.53 to 19544.38)	1106.45 (296.23 to 2312.11)
45 to 49	52380.80 (43761.96 to 62587.50)	1051.63 (302.08 to 2101.16)	12690.42 (8339.31 to 17674.75)	1051.63 (302.08 to 2101.16)
50 to 54	50064.23 (40166.18 to 60898.73)	967.55 (304.46 to 1880.11)	12850.84 (8596.30 to 17718.59)	967.55 (304.46 to 1880.11)
55 to 59	48263.78 (38687.98 to 59879.86)	870.02 (310.29 to 1694.91)	11405.39 (7650.63 to 16196.15)	870.02 (310.29 to 1694.91)
60 to 64	42865.10 (33924.66 to 53888.37)	784.33 (305.94 to 1441.63)	10259.21 (6572.30 to 15301.54)	784.33 (305.94 to 1441.63)
65 to 69	41059.56 (32565.37 to 52172.47)	643.77 (277.83 to 1194.03)	11422.37 (7274.27 to 16791.67)	643.77 (277.83 to 1194.03)
70 to 74	39243.94 (30780.76 to 51236.88)	491.56 (185.55 to 950.04)	10360.26 (6906.33 to 14393.76)	491.56 (185.55 to 950.04)
75 to 79	34679.12 (24523.19 to 45341.70)	387.99 (132.51 to 783.12)	9291.27 (6085.58 to 13085.67)	387.99 (132.51 to 783.12)
80 to 84	33782.21 (25135.69 to 44815.91)	346.59 (125.63 to 686.15)	9535.22 (6209.02 to 13262.82)	346.59 (125.63 to 686.15)
85 to 89	31385.21 (22642.69 to 42338.10)	307.83 (120.40 to 591.30)	8203.35 (5060.90 to 12017.93)	307.83 (120.40 to 591.30)
90 to 94	29359.43 (21084.09 to 40037.27)	247.44 (95.63 to 488.55)	9472.48 (6059.32 to 13553.49)	247.44 (95.63 to 488.55)
95 plus	36604.35 (25303.66 to 49755.85)	176.31 (42.77 to 408.46)	12862.81 (6979.37 to 19587.83)	176.31 (42.77 to 408.46)

Table S5b: Prevalence, DALY, incidence, and YLD rates of migraine for both sexes, by age, 2021

	Prevalence (95% UI)	DALYs (95% UI)	Incidence (95% UI)	YLDs (95% UI)
<5 years	0.00 (0.00 to 0.00)	0.00 (0.00 to 0.00)	0.00 (0.00 to 0.00)	0.00 (0.00 to 0.00)
5 to 9	2728.93 (1763.04 to 3855.41)	92.01 (2.26 to 260.02)	1729.98 (1107.72 to 2481.44)	92.01 (2.26 to 260.02)
10 to 14	13029.90 (9536.89 to 17443.16)	472.42 (23.40 to 1172.38)	2616.65 (1904.94 to 3418.63)	472.42 (23.40 to 1172.38)
15 to 19	19570.89 (14500.84 to 24887.41)	729.42 (71.30 to 1741.01)	1913.79 (1113.39 to 2928.92)	729.42 (71.30 to 1741.01)
20 to 24	22658.13 (17300.32 to 28727.17)	842.38 (97.00 to 2002.91)	1706.37 (1028.41 to 2523.98)	842.38 (97.00 to 2002.91)
25 to 29	23749.21 (19014.37 to 29644.62)	873.71 (96.40 to 2032.06)	1535.46 (923.60 to 2301.97)	873.71 (96.40 to 2032.06)
30 to 34	23944.44 (18968.14 to 30227.80)	898.50 (130.93 to 1985.61)	1424.15 (872.92 to 2199.24)	898.50 (130.93 to 1985.61)
35 to 39	24358.05 (19581.11 to 30093.92)	941.44 (187.95 to 2014.21)	1557.33 (963.09 to 2396.05)	941.44 (187.95 to 2014.21)
40 to 44	24848.40 (20063.88 to 30993.52)	978.68 (213.63 to 2128.45)	1314.10 (832.13 to 1930.85)	978.68 (213.63 to 2128.45)
45 to 49	23022.31 (18370.83 to 28957.84)	921.90 (216.19 to 1898.42)	893.17 (516.69 to 1354.50)	921.90 (216.19 to 1898.42)
50 to 54	20824.86 (16923.04 to 26353.69)	840.34 (214.29 to 1735.76)	764.27 (436.73 to 1172.13)	840.34 (214.29 to 1735.76)
55 to 59	18344.72 (14728.72 to 23232.12)	745.53 (208.99 to 1531.24)	567.24 (329.40 to 881.29)	745.53 (208.99 to 1531.24)
60 to 64	15756.14 (12711.01 to 19840.82)	661.20 (218.05 to 1312.46)	355.16 (206.35 to 556.33)	661.20 (218.05 to 1312.46)
65 to 69	12816.89 (10050.00 to 16221.27)	534.78 (172.17 to 1093.64)	253.01 (139.32 to 376.58)	534.78 (172.17 to 1093.64)
70 to 74	10194.49 (7989.24 to 13114.07)	405.54 (129.23 to 829.89)	242.22 (145.94 to 372.22)	405.54 (129.23 to 829.89)
75 to 79	8370.40 (6469.31 to 10832.46)	319.85 (93.66 to 666.41)	252.93 (159.55 to 387.53)	319.85 (93.66 to 666.41)
80 to 84	7508.76 (5884.05 to 9797.84)	283.30 (91.22 to 591.11)	257.50 (159.27 to 395.50)	283.30 (91.22 to 591.11)
85 to 89	6682.18 (5108.49 to 8600.61)	250.09 (88.35 to 495.51)	200.01 (122.24 to 301.46)	250.09 (88.35 to 495.51)
90 to 94	5593.08 (4336.62 to 7249.46)	200.11 (60.72 to 410.30)	115.48 (76.90 to 165.65)	200.11 (60.72 to 410.30)
95 plus	4232.77 (3058.66 to 5784.91)	134.87 (27.92 to 305.27)	29.14 (19.33 to 41.95)	134.87 (27.92 to 305.27)

Table S5c: Prevalence, DALY, incidence, and YLD rates of tension-type headache for both sexes, by age, 2021

	Prevalence (95% UI)	DALYs (95% UI)	Incidence (95% UI)	YLDs (95% UI)
<5 years	0.00 (0.00 to 0.00)	0.00 (0.00 to 0.00)	0.00 (0.00 to 0.00)	0.00 (0.00 to 0.00)
5 to 9	7780.07 (4650.73 to 11692.02)	9.42 (0.49 to 55.44)	6804.27 (4200.24 to 10360.93)	9.42 (0.49 to 55.44)
10 to 14	28364.75 (20380.24 to 37382.03)	39.13 (4.60 to 206.69)	12607.89 (8036.40 to 17722.33)	39.13 (4.60 to 206.69)
15 to 19	36691.38 (23506.26 to 49165.32)	68.13 (13.06 to 293.09)	13188.80 (8389.63 to 18696.38)	68.13 (13.06 to 293.09)
20 to 24	39009.55 (28278.09 to 53087.25)	82.63 (19.04 to 323.17)	13414.59 (8357.99 to 19264.19)	82.63 (19.04 to 323.17)
25 to 29	41729.15 (29971.92 to 55585.09)	88.27 (19.43 to 358.69)	14876.93 (9794.29 to 20826.21)	88.27 (19.43 to 358.69)
30 to 34	45163.23 (32592.08 to 58559.68)	104.80 (26.01 to 362.91)	14722.76 (9691.89 to 20100.99)	104.80 (26.01 to 362.91)
35 to 39	43562.55 (29993.50 to 57648.57)	120.27 (31.54 to 381.54)	13551.41 (8554.68 to 19211.14)	120.27 (31.54 to 381.54)
40 to 44	41046.61 (29847.30 to 55835.92)	127.77 (41.48 to 374.75)	12830.00 (7901.80 to 18260.63)	127.77 (41.48 to 374.75)
45 to 49	38390.64 (27294.50 to 50597.98)	129.74 (39.01 to 356.03)	11797.25 (7636.07 to 16737.84)	129.74 (39.01 to 356.03)
50 to 54	37168.82 (25848.64 to 49443.73)	127.21 (37.96 to 341.85)	12086.57 (7761.57 to 16914.47)	127.21 (37.96 to 341.85)
55 to 59	36781.33 (26274.97 to 49850.02)	124.49 (35.95 to 343.61)	10838.15 (7075.41 to 15644.18)	124.49 (35.95 to 343.61)
60 to 64	32241.18 (22131.72 to 45649.02)	123.12 (39.35 to 328.33)	9904.04 (6225.50 to 14919.77)	123.12 (39.35 to 328.33)
65 to 69	32468.04 (23069.77 to 45337.71)	108.99 (34.95 to 310.86)	11169.36 (7053.42 to 16490.12)	108.99 (34.95 to 310.86)
70 to 74	32415.52 (23058.52 to 45539.25)	86.02 (26.38 to 282.56)	10118.04 (6631.78 to 14136.75)	86.02 (26.38 to 282.56)
75 to 79	28756.65 (17987.60 to 39810.92)	68.14 (19.34 to 230.74)	9038.35 (5834.63 to 12796.69)	68.14 (19.34 to 230.74)
80 to 84	28441.39 (19181.22 to 40169.28)	63.29 (17.06 to 221.51)	9277.71 (5984.05 to 12963.86)	63.29 (17.06 to 221.51)
85 to 89	26498.36 (17371.25 to 37898.79)	57.74 (14.61 to 199.95)	8003.34 (4839.39 to 11798.63)	57.74 (14.61 to 199.95)
90 to 94	25186.96 (16417.75 to 35984.38)	47.33 (11.71 to 167.25)	9357.00 (5916.65 to 13445.97)	47.33 (11.71 to 167.25)
95 plus	33803.93 (21823.63 to 47781.27)	41.44 (4.72 to 192.04)	12833.68 (6946.96 to 19556.29)	41.44 (4.72 to 192.04)

Table S6a: Socio-demographic index (SDI) with prevalence, DALY, and incidence counts and age-standardized rates of headache disorders in 2021, and percentage changes from 1990 to 2021, by country

	Prevalence (95% UI)			DALYs (95% UI)			Incidence (95% UI)			
	Absolute number, 2021	Age-standardized rate, per 100 000 people, 2021	Percentage Change, 1990-2021	Absolute number, 2021	Age-standardized rate, per 100 000 people, 2021	Percentage Change, 1990-2021	Absolute number, 2021	Age-standardized rate, per 100 000 people, 2021	Percentage Change, 1990-2021	SDI
Albania	1111776.51 (1007725.71 to 1213009.19)	38476.42 (35215.99 to 42165.44)	0.00% (0.00% to 0.00%)	17324.03 (5088.78 to 35849.56)	589.37 (160.90 to 1235.42)	0.01% (-0.02% to 0.04%)	320478.01 (280353.07 to 358471.05)	11652.16 (10199.48 to 12977.90)	0.00% (0.00% to 0.00%)	0.707
Andorra	40911.79 (37313.09 to 44497.92)	42629.38 (39124.84 to 46322.45)	0.00% (0.00% to 0.01%)	684.12 (153.33 to 1435.71)	715.80 (134.58 to 1535.08)	0.01% (-0.02% to 0.04%)	11015.85 (9641.41 to 12349.81)	12350.39 (10776.00 to 13772.84)	0.00% (0.00% to 0.01%)	0.869
Austria	4016921.58 (3666215.10 to 4354768.63)	41651.10 (38182.12 to 45318.70)	0.00% (0.00% to 0.00%)	65164.23 (15869.01 to 134359.10)	686.95 (142.79 to 1453.30)	-0.01% (-0.04% to 0.03%)	1115406.93 (991102.41 to 1241004.89)	12249.61 (10746.42 to 13722.59)	0.00% (-0.01% to 0.00%)	0.854
Belarus	3874077.90 (3541232.58 to 4237754.83)	38495.04 (34961.22 to 42186.13)	0.00% (0.00% to 0.00%)	65036.94 (24155.20 to 126096.41)	614.94 (207.62 to 1230.78)	-0.01% (-0.03% to 0.02%)	1105654.19 (973547.29 to 1236978.18)	11622.85 (10191.79 to 13031.11)	0.00% (0.00% to 0.00%)	0.784
Belgium	5480159.61 (5049086.86 to 5925564.99)	45248.17 (41636.71 to 48749.14)	0.02% (0.00% to 0.04%)	103009.65 (18387.96 to 212966.24)	869.78 (135.03 to 1852.24)	0.06% (-0.03% to 0.14%)	1433271.64 (1282396.32 to 1589930.19)	12505.75 (10938.66 to 14009.21)	0.00% (0.00% to 0.01%)	0.854
Bosnia and Herzegovina	1387960.88 (1258671.53 to 1515572.43)	38524.65 (35242.06 to 42228.28)	0.00% (0.00% to 0.00%)	21682.51 (6568.01 to 44421.38)	587.96 (158.83 to 1242.84)	0.00% (-0.04% to 0.03%)	394684.53 (347513.14 to 437221.32)	11664.79 (10215.59 to 12982.50)	0.00% (0.00% to 0.00%)	0.723
Bulgaria	2840072.06 (2577614.10 to 3101871.06)	38499.72 (35228.89 to 42208.79)	0.00% (0.00% to 0.00%)	44123.92 (13609.75 to 89700.92)	587.23 (158.48 to 1230.04)	-0.01% (-0.04% to 0.02%)	803704.42 (706997.19 to 889925.34)	11662.08 (10212.16 to 12990.41)	0.00% (0.00% to 0.00%)	0.768
Croatia	1762780.35 (1609806.27 to 1915623.37)	38493.85 (35225.66 to 42260.45)	0.00% (-0.03% to 0.02%)	27401.29 (8495.51 to 55807.65)	589.57 (159.87 to 1241.63)	0.00% (-0.05% to 0.04%)	501262.71 (445516.66 to 556989.26)	11681.90 (10317.21 to 13028.42)	0.00% (-0.03% to 0.03%)	0.798
Cyprus	636602.10 (581234.28 to 692744.27)	42809.49 (39325.69 to 46508.94)	0.00% (0.00% to 0.00%)	10842.92 (2321.93 to 22608.43)	727.41 (137.72 to 1541.74)	0.00% (-0.03% to 0.04%)	173891.14 (151934.94 to 195682.45)	12370.83 (10786.01 to 13829.15)	0.00% (0.00% to 0.00%)	0.836

Czechia	4396217.24 (3991280.92 to 4789038.99)	38480.43 (35213.99 to 42132.30)	0.00% (-0.01% to 0.00%)	68151.08 (20846.91 to 140407.18)	587.19 (160.02 to 1241.70)	-0.01% (-0.03% to 0.02%)	1252351.51 (1106773.62 to 1383941.42)	11660.29 (10196.90 to 12991.89)	0.00% (0.00% to 0.00%)	0.828
Denmark	2633655.70 (2400503.68 to 2855589.05)	42540.25 (38862.44 to 46345.61)	-0.01% (-0.04% to 0.02%)	39199.57 (9007.06 to 82289.48)	651.55 (132.65 to 1386.15)	0.02% (-0.04% to 0.08%)	724522.20 (638718.69 to 807712.18)	12319.07 (10742.49 to 13807.05)	0.00% (-0.03% to 0.04%)	0.896
Estonia	538297.74 (492720.75 to 587196.07)	38419.23 (34900.22 to 42118.05)	0.00% (-0.01% to 0.00%)	8826.85 (3326.14 to 17185.89)	610.87 (207.24 to 1226.13)	-0.01% (-0.04% to 0.02%)	153861.00 (136813.21 to 171409.24)	11617.62 (10176.07 to 13006.44)	0.00% (0.00% to 0.00%)	0.845
Finland	2488242.24 (2271971.76 to 2702230.63)	42710.96 (39220.53 to 46431.90)	0.00% (0.00% to 0.00%)	40348.54 (8961.08 to 83700.94)	719.17 (135.45 to 1529.10)	-0.01% (-0.04% to 0.02%)	684677.35 (610842.21 to 759611.08)	12362.70 (10771.76 to 13786.81)	0.00% (0.00% to 0.00%)	0.860
France	29010154.31 (26651455.51 to 31426239.00)	41999.81 (38565.09 to 45577.12)	0.00% (-0.01% to 0.01%)	497223.76 (125805.05 to 1010566.32)	736.23 (162.86 to 1534.45)	-0.01% (-0.06% to 0.05%)	8109907.87 (7207921.81 to 8963033.64)	12253.78 (10759.92 to 13769.39)	0.00% (-0.01% to 0.00%)	0.838
Germany	40161640.04 (37151603.80 to 43400814.82)	44235.70 (40699.99 to 47770.99)	0.02% (-0.01% to 0.04%)	687354.21 (153335.90 to 1417108.01)	779.61 (144.64 to 1653.36)	0.01% (-0.05% to 0.07%)	10553456.66 (9352219.81 to 11817058.96)	12434.30 (10911.24 to 13926.21)	0.00% (-0.03% to 0.03%)	0.903
Greece	4679151.06 (4290076.59 to 5069667.12)	43194.93 (39684.70 to 46928.01)	0.00% (-0.01% to 0.01%)	78258.00 (16938.00 to 162791.45)	744.45 (133.84 to 1599.87)	-0.01% (-0.05% to 0.04%)	1260563.91 (1118939.75 to 1400818.38)	12402.96 (10852.34 to 13852.73)	0.00% (-0.01% to 0.00%)	0.792
Hungary	4025505.44 (3658080.84 to 4386843.28)	38557.99 (35300.01 to 42278.68)	0.00% (0.00% to 0.00%)	62928.05 (19452.36 to 128889.81)	591.05 (160.17 to 1242.28)	0.00% (-0.03% to 0.04%)	1141427.14 (1010855.04 to 1262524.79)	11669.91 (10227.19 to 12994.97)	0.00% (0.00% to 0.00%)	0.791
Iceland	157488.77 (143959.11 to 171266.58)	42675.73 (39162.20 to 46416.32)	0.00% (0.00% to 0.00%)	2621.80 (550.21 to 5498.98)	720.38 (136.27 to 1543.73)	0.00% (-0.03% to 0.03%)	43860.19 (38771.25 to 49020.54)	12357.34 (10770.86 to 13805.78)	0.00% (0.00% to 0.00%)	0.876
Ireland	2222729.68 (2034750.37 to 2419564.76)	42809.50 (39341.31 to 46529.01)	0.00% (0.00% to 0.00%)	37197.72 (7844.75 to 77324.11)	723.70 (135.77 to 1547.14)	0.00% (-0.03% to 0.03%)	619192.46 (549749.60 to 688617.94)	12374.49 (10797.48 to 13842.21)	0.00% (0.00% to 0.00%)	0.874
Israel	4071252.52 (3737278.24 to 4419946.04)	42776.43 (39289.20 to 46515.46)	0.00% (0.00% to 0.00%)	68443.81 (13115.27 to 145947.55)	726.71 (134.37 to 1561.47)	-0.01% (-0.04% to 0.02%)	1170928.40 (1026555.13 to 1306687.84)	12370.15 (10792.25 to 13796.17)	0.00% (0.00% to 0.00%)	0.809

Italy	28602742.38 (26621545.37 to 30483272.94)	44664.39 (41565.61 to 47645.63)	0.00% (-0.01% to 0.01%)	488745.07 (101535.37 to 1015636.58)	788.66 (136.79 to 1690.55)	0.01% (-0.03% to 0.04%)	8003646.68 (7125062.44 to 8832112.56)	13401.93 (11857.95 to 14855.31)	0.00% (-0.02% to 0.02%)	0.806
Latvia	767765.78 (702010.93 to 835785.64)	38469.64 (34919.44 to 42160.71)	0.00% (0.00% to 0.00%)	12713.06 (4842.33 to 24503.72)	613.97 (208.75 to 1223.66)	-0.01% (-0.04% to 0.02%)	218257.98 (193757.82 to 243170.42)	11621.25 (10181.76 to 12999.80)	0.00% (0.00% to 0.00%)	0.831
Lithuania	1147273.33 (1040503.57 to 1249506.09)	39204.94 (35687.04 to 43235.42)	0.00% (0.00% to 0.00%)	17203.17 (6174.47 to 33996.92)	568.25 (181.60 to 1159.12)	-0.01% (-0.04% to 0.02%)	322753.46 (285018.22 to 359165.60)	11740.46 (10177.45 to 13176.82)	0.00% (0.00% to 0.00%)	0.856
Luxembourg	297366.50 (271670.20 to 323621.43)	42321.23 (38657.06 to 46167.66)	0.00% (0.00% to 0.00%)	5042.79 (1259.66 to 10353.77)	716.84 (158.71 to 1504.34)	0.00% (-0.03% to 0.03%)	81704.35 (71729.03 to 91839.71)	12303.05 (10729.98 to 13812.22)	0.00% (0.00% to 0.00%)	0.884
Malta	199940.71 (182443.28 to 217443.59)	42687.11 (39180.77 to 46392.29)	0.00% (-0.01% to 0.00%)	3274.04 (728.92 to 6824.83)	719.60 (137.05 to 1536.08)	-0.01% (-0.04% to 0.02%)	54470.53 (48314.32 to 60396.72)	12357.67 (10783.33 to 13780.26)	0.00% (0.00% to 0.00%)	0.802
Monaco	16933.99 (15417.91 to 18425.67)	42818.98 (39327.13 to 46456.39)	0.00% (0.00% to 0.00%)	274.15 (63.57 to 570.20)	725.81 (137.03 to 1558.23)	-0.01% (-0.03% to 0.02%)	4583.19 (4063.75 to 5111.50)	12376.21 (10776.57 to 13822.46)	0.00% (0.00% to 0.00%)	0.908
Montenegro	255948.00 (233410.83 to 279151.74)	38520.16 (35235.84 to 42273.68)	0.00% (0.00% to 0.00%)	4003.76 (1178.76 to 8345.83)	589.31 (157.90 to 1246.55)	-0.01% (-0.03% to 0.03%)	73805.22 (64938.86 to 81882.58)	11661.89 (10200.64 to 12979.07)	0.00% (0.00% to 0.00%)	0.796
Netherlands	8131656.55 (7435484.94 to 8826297.48)	44512.20 (40494.96 to 48384.33)	0.01% (0.00% to 0.03%)	122912.00 (24445.30 to 261170.84)	696.70 (117.88 to 1511.79)	0.05% (-0.03% to 0.12%)	2149134.80 (1901819.17 to 2406246.44)	12465.75 (10787.29 to 14085.75)	0.00% (0.00% to 0.01%)	0.888
North Macedonia	926551.19 (840702.74 to 1011371.31)	38432.02 (35156.80 to 42138.56)	0.00% (0.00% to 0.00%)	14575.07 (4314.51 to 30049.00)	585.04 (157.02 to 1233.25)	-0.01% (-0.04% to 0.02%)	264698.56 (232576.54 to 295362.27)	11651.74 (10205.74 to 12978.36)	0.00% (0.00% to 0.00%)	0.751
Norway	2603309.44 (2417933.43 to 2778893.13)	45218.08 (42206.51 to 48434.97)	0.02% (0.00% to 0.04%)	40813.38 (8271.52 to 86951.30)	724.37 (128.04 to 1565.65)	0.07% (0.01% to 0.11%)	749201.18 (669057.21 to 834462.06)	13651.16 (12119.39 to 15249.30)	0.02% (-0.01% to 0.04%)	0.916
Poland	16785847.49 (15527329.82 to 18025893.44)	40194.33 (37217.06 to 43327.84)	0.00% (0.00% to 0.00%)	266046.27 (84278.07 to 546344.85)	621.37 (173.13 to 1320.28)	0.00% (-0.02% to 0.02%)	4908681.67 (4358461.87 to 5410021.27)	12497.09 (11012.62 to 13861.48)	0.00% (0.00% to 0.00%)	0.812
Portugal	4874791.29 (4460348.37 to 5288045.49)	42868.14 (39366.80 to 46559.82)	0.00% (0.00% to 0.00%)	80275.30 (18257.65 to 167123.25)	725.81 (135.60 to 1551.77)	0.00% (-0.03% to 0.03%)	1317023.77 (1171295.10	12381.99 (10816.95 to 13812.65)	0.00% (0.00% to 0.00%)	0.744

							to 1468448.09)			
Republic of Moldova	1533234.14 (1398128.93 to 1676699.52)	38461.40 (34929.08 to 42130.70)	0.00% (-0.01% to 0.00%)	25716.13 (9663.90 to 49963.76)	614.27 (210.48 to 1224.94)	-0.01% (-0.04% to 0.02%)	435504.09 (383513.81 to 489406.25)	11619.88 (10183.64 to 12996.22)	0.00% (0.00% to 0.00%)	0.732
Romania	7870577.20 (7138500.54 to 8577746.52)	38510.22 (35238.67 to 42208.33)	0.00% (0.00% to 0.00%)	123015.12 (37926.43 to 253248.30)	590.34 (159.82 to 1237.77)	0.00% (-0.03% to 0.03%)	2246893.14 (1985294.18 to 2478666.99)	11663.61 (10215.33 to 12986.62)	0.00% (0.00% to 0.00%)	0.768
Russian Federation	62332395.71 (57769445.66 to 67054482.23)	39965.73 (37115.45 to 43140.11)	0.00% (-0.01% to 0.02%)	1127144.82 (444266.70 to 2172711.79)	689.20 (252.96 to 1365.28)	0.00% (-0.01% to 0.01%)	18144042.49 (16020909.20 to 20054671.54)	12288.94 (10856.13 to 13655.23)	0.00% (-0.02% to 0.03%)	0.809
San Marino	15037.58 (13739.87 to 16332.56)	42886.77 (39405.77 to 46603.34)	0.00% (0.00% to 0.00%)	248.56 (56.23 to 523.85)	730.07 (136.36 to 1559.46)	0.00% (-0.03% to 0.03%)	4083.22 (3631.86 to 4560.59)	12380.14 (10805.04 to 13823.03)	0.00% (0.00% to 0.00%)	0.888
Serbia	3773827.15 (3427357.56 to 4116973.03)	38444.45 (35153.88 to 42117.43)	0.00% (-0.01% to 0.00%)	58613.04 (17828.78 to 120078.88)	587.77 (159.66 to 1226.17)	-0.01% (-0.04% to 0.02%)	1080853.79 (951961.43 to 1196947.71)	11646.64 (10204.49 to 12978.10)	0.00% (-0.01% to 0.00%)	0.792
Slovakia	2278919.51 (2064371.22 to 2487379.12)	38519.78 (35252.66 to 42253.64)	0.00% (-0.01% to 0.00%)	35845.52 (10936.92 to 74181.14)	590.07 (159.68 to 1245.05)	0.00% (-0.04% to 0.03%)	649163.93 (570678.42 to 720699.03)	11665.16 (10222.89 to 12980.30)	0.00% (0.00% to 0.00%)	0.811
Slovenia	857040.02 (778360.36 to 935158.22)	38434.96 (35169.02 to 42139.83)	0.00% (-0.01% to 0.00%)	13302.83 (4157.55 to 27205.83)	586.76 (158.64 to 1234.60)	-0.01% (-0.04% to 0.02%)	243660.99 (215054.78 to 269619.72)	11652.82 (10201.69 to 12990.49)	0.00% (-0.01% to 0.00%)	0.842
Spain	20805827.73 (19057607.99 to 22647098.48)	42562.89 (38998.75 to 46280.46)	0.00% (0.00% to 0.00%)	367181.53 (88646.61 to 743247.46)	761.92 (154.41 to 1604.50)	0.00% (-0.04% to 0.05%)	5649306.43 (5007437.48 to 6285855.36)	12290.65 (10804.21 to 13682.43)	0.00% (0.00% to 0.00%)	0.769
Sweden	4809269.99 (4460518.39 to 5114657.51)	44268.06 (41066.79 to 47368.75)	0.00% (-0.02% to 0.02%)	76445.12 (15602.64 to 163791.11)	726.13 (130.67 to 1552.67)	0.00% (-0.05% to 0.04%)	1384691.00 (1239973.97 to 1522185.67)	13366.95 (11894.52 to 14829.75)	0.00% (-0.02% to 0.03%)	0.887
Switzerland	3779862.07 (3455348.41 to 4118181.32)	39650.85 (36201.32 to 43093.39)	0.03% (-0.01% to 0.06%)	61514.71 (14884.79 to 126998.11)	656.54 (136.41 to 1398.70)	0.01% (-0.04% to 0.06%)	1084867.81 (956762.98 to 1201250.14)	11998.61 (10607.68 to 13311.18)	0.01% (-0.02% to 0.05%)	0.933
Ukraine	19092240.80 (17688362.53	40101.64 (37085.00 to 43123.07)	0.00% (0.00% to 0.00%)	319949.51 (121242.85	639.78 (220.30 to 1285.48)	-0.01% (-0.03% to 0.02%)	5560687.57 (4937700.70	12451.11 (11002.97 to 13877.76)	0.00% (0.00% to 0.00%)	0.761

	to 20602403.26)			to 619277.46)			to 6181265.61)			
United Kingdom	31251134.36 (29010848.37 to 33456243.13)	43534.09 (40481.89 to 46591.20)	0.00% (-0.01% to 0.01%)	507234.95 (114326.49 to 1066623.73)	720.61 (143.14 to 1541.48)	0.00% (-0.03% to 0.04%)	9045126.21 (8046636.68 to 10035284.86)	13199.69 (11724.90 to 14665.17)	0.00% (0.00% to 0.00%)	0.859
Statistical Test for SDI	Spearman's ρ = -0.131 p-value = 0.390	Spearman's ρ = 0.510 p-value < 0.001		Spearman's ρ = -0.140 p-value = 0.359	Spearman's ρ = 0.389 p-value = 0.008		Spearman's ρ = -0131. p-value = 0.392	Spearman's ρ = 0.455 p-value = 0.002		

Table S6b: Socio-demographic index (SDI) with prevalence, DALY, and incidence counts and age-standardized rates of migraine in 2021, and percentage changes from 1990 to 2021, by country

	Prevalence (95% UI)			DALYs (95% UI)			Incidence (95% UI)			
	Absolute number, 2021	Age-standardized rate, per 100 000 people, 2021	Percentage Change, 1990-2021	Absolute number, 2021	Age-standardized rate, per 100 000 people, 2021	Percentage Change, 1990-2021	Absolute number, 2021	Age-standardized rate, per 100 000 people, 2021	Percentage Change, 1990-2021	SDI
Albania	392413.10 (337140.67 to 452887.21)	13598.05 (11517.73 to 15739.28)	0.01% (0.00% to 0.01%)	15072.29 (3582.10 to 32681.51)	516.38 (111.31 to 1154.53)	0.01% (-0.02% to 0.04%)	26298.77 (22549.23 to 30543.77)	1084.70 (921.54 to 1253.10)	0.00% (0.00% to 0.00%)	0.707
Andorra	16182.80 (13861.95 to 18948.69)	17391.72 (14783.07 to 20499.22)	0.01% (0.01% to 0.01%)	610.96 (105.11 to 1323.79)	646.76 (91.47 to 1428.97)	0.01% (-0.02% to 0.05%)	954.77 (814.50 to 1109.18)	1364.67 (1158.41 to 1572.01)	0.01% (0.01% to 0.01%)	0.869
Austria	1522682.97 (1315123.42 to 1761091.77)	16466.12 (14043.90 to 19214.85)	-0.01% (-0.01% to 0.00%)	57720.25 (10769.14 to 124519.76)	615.73 (95.30 to 1358.32)	-0.01% (-0.04% to 0.03%)	95368.15 (81876.92 to 109644.93)	1314.38 (1125.54 to 1514.20)	0.00% (0.00% to 0.00%)	0.854
Belarus	1331465.04 (1154466.27 to 1524260.49)	13015.65 (11182.02 to 15082.62)	-0.01% (-0.01% to -0.01%)	55176.12 (17071.72 to 112397.35)	526.93 (143.58 to 1111.25)	-0.01% (-0.04% to 0.02%)	84229.35 (71470.98 to 97496.84)	1009.66 (855.42 to 1163.87)	0.00% (-0.01% to 0.00%)	0.784
Belgium	2544608.37 (2192801.83 to 2985664.82)	21751.47 (18730.05 to 25705.50)	0.08% (0.01% to 0.16%)	94014.86 (12767.28 to 205439.93)	800.36 (91.99 to 1772.02)	0.07% (-0.04% to 0.15%)	139418.54 (119851.61 to 158091.00)	1506.95 (1288.44 to 1714.30)	0.02% (-0.02% to 0.07%)	0.854
Bosnia and Herzegovina	491055.62 (425225.04 to 566028.59)	13632.57 (11539.12 to 15778.58)	0.00% (0.00% to 0.00%)	18815.34 (4515.30 to 40504.83)	515.27 (107.38 to 1145.56)	0.00% (-0.04% to 0.03%)	31326.47 (26867.56 to 36256.93)	1089.27 (925.71 to 1259.42)	0.00% (0.00% to 0.00%)	0.723
Bulgaria	994945.37 (861408.71 to 1144457.20)	13595.28 (11506.72 to 15736.87)	-0.01% (-0.01% to 0.00%)	38217.27 (9300.70 to 82359.53)	514.42 (106.41 to 1139.61)	-0.01% (-0.04% to 0.03%)	62165.15 (53191.04 to 72187.69)	1086.68 (923.30 to 1256.69)	-0.01% (-0.01% to 0.00%)	0.768
Croatia	615855.20 (536629.95 to 712210.72)	13584.21 (11643.92 to 15873.25)	-0.01% (-0.05% to 0.03%)	23744.19 (5717.80 to 50875.52)	516.50 (107.38 to 1142.33)	-0.01% (-0.05% to 0.04%)	38937.31 (33671.78 to 45359.32)	1087.90 (919.35 to 1261.92)	0.00% (-0.03% to 0.03%)	0.798
Cyprus	258627.60 (222725.23 to 302839.91)	17622.86 (14998.63 to 20771.18)	0.01% (0.00% to 0.01%)	9731.92 (1569.49 to 21129.20)	657.50 (94.31 to 1443.10)	0.00% (-0.03% to 0.04%)	16330.62 (13796.29 to 19224.21)	1370.05 (1163.83 to 1578.47)	0.00% (0.00% to 0.00%)	0.836

Czechia	1539807.14 (1332072.98 to 1769906.12)	13581.76 (11491.97 to 15721.88)	-0.01% (-0.01% to -0.01%)	59096.60 (14003.58 to 127917.20)	514.44 (105.14 to 1155.09)	-0.01% (-0.04% to 0.03%)	98768.46 (84436.15 to 114611.47)	1087.51 (924.05 to 1257.72)	0.00% (0.00% to 0.00%)	0.828
Denmark	906327.27 (783204.77 to 1046930.30)	15422.39 (13002.12 to 17919.21)	0.03% (-0.02% to 0.08%)	34566.93 (6198.30 to 72993.07)	581.19 (88.91 to 1273.05)	0.03% (-0.03% to 0.09%)	61195.13 (52310.56 to 70307.66)	1266.41 (1076.02 to 1458.59)	0.01% (-0.03% to 0.06%)	0.896
Estonia	180463.75 (156480.80 to 206209.93)	12900.48 (11078.06 to 14961.95)	-0.01% (-0.02% to -0.01%)	7476.86 (2289.15 to 15185.74)	523.11 (142.17 to 1110.52)	-0.01% (-0.04% to 0.02%)	11361.97 (9694.91 to 13121.80)	1004.87 (851.11 to 1158.00)	-0.01% (-0.01% to -0.01%)	0.845
Finland	959037.81 (826906.73 to 1120219.04)	17477.69 (14864.62 to 20595.43)	-0.01% (-0.01% to 0.00%)	36012.12 (6289.88 to 77781.08)	649.91 (91.00 to 1426.19)	-0.01% (-0.04% to 0.02%)	60345.30 (51402.29 to 69798.89)	1366.62 (1160.44 to 1574.69)	0.00% (0.00% to 0.00%)	0.860
France	11508601.68 (9881348.61 to 13376867.86)	17478.90 (14980.50 to 20463.93)	-0.01% (-0.05% to 0.04%)	441400.79 (84487.74 to 934151.12)	661.31 (107.65 to 1429.12)	-0.01% (-0.06% to 0.05%)	746314.19 (639834.58 to 855267.22)	1360.59 (1153.37 to 1566.45)	-0.01% (-0.04% to 0.03%)	0.838
Germany	16539322.38 (14277979.53 to 19290791.57)	19203.72 (16546.88 to 22548.90)	0.02% (-0.02% to 0.08%)	615737.75 (104953.06 to 1316251.10)	707.40 (101.69 to 1567.80)	0.02% (-0.05% to 0.08%)	922854.61 (800530.58 to 1048308.86)	1421.37 (1215.13 to 1626.46)	0.01% (-0.03% to 0.05%)	0.903
Greece	1868500.63 (1599645.43 to 2180107.87)	18254.82 (15571.69 to 21589.54)	0.00% (-0.04% to 0.05%)	69985.94 (11835.20 to 151360.14)	674.80 (91.73 to 1475.63)	-0.01% (-0.06% to 0.04%)	109982.70 (94130.93 to 125923.97)	1401.01 (1190.61 to 1612.85)	0.00% (-0.04% to 0.03%)	0.792
Hungary	1420158.83 (1231619.28 to 1633084.72)	13659.57 (11564.90 to 15808.12)	-0.01% (-0.01% to 0.00%)	54587.84 (13037.44 to 117434.66)	517.97 (106.21 to 1147.24)	0.00% (-0.03% to 0.04%)	89188.31 (76539.25 to 103431.50)	1090.02 (926.44 to 1260.30)	0.00% (0.00% to 0.00%)	0.791
Iceland	62574.14 (53834.22 to 72796.51)	17439.61 (14827.64 to 20549.55)	0.00% (-0.01% to 0.00%)	2352.48 (381.60 to 5109.59)	651.01 (92.73 to 1435.23)	0.00% (-0.03% to 0.03%)	4209.15 (3578.03 to 4867.64)	1366.05 (1159.56 to 1575.06)	0.00% (0.00% to 0.00%)	0.876
Ireland	890679.36 (765137.90 to 1040070.43)	17632.30 (14997.65 to 20793.88)	0.00% (0.00% to 0.00%)	33360.28 (5525.86 to 72824.76)	654.12 (94.34 to 1444.88)	0.00% (-0.03% to 0.03%)	60723.56 (51513.06 to 70019.49)	1374.16 (1167.95 to 1582.77)	0.00% (0.00% to 0.00%)	0.874
Israel	1646071.46 (1408912.11 to 1929109.68)	17572.11 (14949.33 to 20712.90)	-0.01% (-0.01% to -0.01%)	61690.19 (9154.26 to 135395.15)	656.91 (92.78 to 1443.76)	-0.01% (-0.04% to 0.02%)	125322.31 (106284.50 to 144414.74)	1370.09 (1163.93 to 1578.32)	0.00% (0.00% to 0.00%)	0.809

Italy	11636929.73 (10174340.39 to 13422449.68)	19244.27 (16729.30 to 22008.96)	0.01% (-0.02% to 0.04%)	438568.65 (68925.67 to 944341.92)	717.20 (89.24 to 1568.08)	0.01% (-0.03% to 0.05%)	673245.79 (599378.97 to 754102.43)	1494.64 (1329.20 to 1675.31)	0.00% (-0.02% to 0.03%)	0.806
Latvia	259186.37 (225126.13 to 296312.02)	12978.48 (11148.32 to 15044.14)	-0.01% (-0.01% to -0.01%)	10761.04 (3321.95 to 21824.39)	526.11 (142.47 to 1108.17)	-0.01% (-0.04% to 0.02%)	15967.60 (13654.18 to 18399.10)	1008.08 (854.07 to 1161.98)	-0.01% (-0.01% to -0.01%)	0.831
Lithuania	358843.34 (310510.04 to 412286.05)	12244.96 (10458.50 to 14260.23)	-0.01% (-0.01% to -0.01%)	14584.74 (4246.62 to 29905.12)	487.22 (121.55 to 1024.43)	-0.01% (-0.04% to 0.02%)	22584.35 (19514.17 to 26192.30)	976.09 (830.75 to 1129.22)	-0.01% (-0.01% to -0.01%)	0.856
Luxembourg	116291.68 (99994.13 to 136017.10)	16915.46 (14437.25 to 19829.86)	0.00% (0.00% to 0.00%)	4472.92 (872.26 to 9474.61)	641.87 (107.72 to 1397.18)	0.00% (-0.03% to 0.03%)	7393.51 (6283.54 to 8584.21)	1333.63 (1135.03 to 1536.23)	0.00% (0.00% to 0.00%)	0.884
Malta	77439.46 (66742.88 to 90119.67)	17448.60 (14837.97 to 20561.45)	-0.01% (-0.01% to -0.01%)	2921.20 (517.52 to 6307.73)	650.36 (92.31 to 1421.91)	-0.01% (-0.04% to 0.02%)	4680.98 (3976.12 to 5478.41)	1363.74 (1158.17 to 1572.08)	0.00% (-0.01% to 0.00%)	0.802
Monaco	6438.22 (5553.35 to 7523.67)	17639.08 (15006.93 to 20802.69)	0.00% (0.00% to 0.00%)	243.53 (45.70 to 521.42)	655.88 (96.05 to 1443.87)	-0.01% (-0.04% to 0.02%)	372.71 (320.19 to 427.62)	1375.74 (1168.80 to 1584.54)	0.00% (0.00% to 0.01%)	0.908
Montenegro	90944.24 (78570.22 to 104953.56)	13632.03 (11541.95 to 15776.95)	0.00% (0.00% to 0.00%)	3483.26 (786.48 to 7549.62)	516.27 (105.41 to 1149.24)	-0.01% (-0.04% to 0.03%)	6143.81 (5248.62 to 7111.43)	1087.93 (924.59 to 1257.63)	0.00% (0.00% to 0.00%)	0.796
Netherlands	2944900.50 (2542076.55 to 3405005.83)	17015.11 (14543.35 to 19738.31)	0.06% (0.01% to 0.13%)	109685.32 (16353.25 to 242318.90)	628.54 (78.22 to 1410.88)	0.06% (-0.02% to 0.12%)	188015.68 (162112.92 to 215993.19)	1351.72 (1157.08 to 1557.38)	0.04% (0.00% to 0.08%)	0.888
North Macedonia	331180.87 (284824.85 to 383702.41)	13534.57 (11451.17 to 15668.78)	-0.01% (-0.01% to -0.01%)	12682.44 (2942.47 to 27528.89)	512.39 (106.60 to 1141.21)	-0.01% (-0.04% to 0.02%)	21804.36 (18578.37 to 25492.37)	1084.44 (921.19 to 1254.10)	-0.01% (-0.01% to 0.00%)	0.751
Norway	980506.95 (852993.92 to 1124376.32)	17700.09 (15229.47 to 20234.71)	0.08% (0.04% to 0.12%)	36469.37 (5565.68 to 79611.21)	653.12 (84.81 to 1449.64)	0.08% (0.02% to 0.12%)	65740.32 (58406.10 to 73787.60)	1425.49 (1259.66 to 1603.91)	0.07% (0.04% to 0.09%)	0.916
Poland	5973361.25 (5222975.69 to 6772298.13)	14258.61 (12376.50 to 16315.58)	0.00% (-0.01% to 0.00%)	230605.64 (56407.91 to 492545.37)	543.31 (117.09 to 1189.22)	0.00% (-0.01% to 0.01%)	382967.05 (339974.28 to 433272.49)	1131.81 (999.78 to 1277.76)	0.00% (0.00% to 0.00%)	0.812
Portugal	1903084.50 (1643638.13	17692.88 (15059.18 to 20857.53)	0.00% (0.00% to 0.00%)	71559.35 (12909.69 to 153420.92)	656.01 (93.82 to 1444.85)	0.00% (-0.03% to 0.03%)	112244.87 (95860.44 to 129639.81)	1375.15 (1168.59 to 1583.65)	0.00% (0.00% to 0.00%)	0.744

	to 2225481.89)									
Republic of Moldova	527387.15 (457303.00 to 607970.50)	12971.64 (11140.99 to 15039.45)	-0.01% (-0.01% to -0.01%)	21846.58 (6672.59 to 44583.80)	526.37 (144.95 to 1120.24)	-0.01% (-0.04% to 0.02%)	33026.19 (28000.85 to 38566.09)	1008.23 (854.09 to 1162.23)	-0.01% (-0.01% to -0.01%)	0.732
Romania	2766760.79 (2398063.67 to 3185736.85)	13609.33 (11518.75 to 15752.39)	-0.01% (-0.01% to 0.00%)	106718.69 (25310.75 to 228723.74)	517.26 (105.21 to 1151.94)	0.00% (-0.03% to 0.03%)	178064.25 (153122.22 to 206093.00)	1087.77 (924.29 to 1257.83)	0.00% (0.00% to 0.00%)	0.768
Russian Federation	22799067.61 (19758993.61 to 25864413.57)	14379.09 (12456.59 to 16421.26)	0.00% (0.00% to 0.00%)	955153.59 (306140.85 to 1915841.84)	589.48 (172.15 to 1220.02)	0.00% (-0.01% to 0.00%)	1433750.72 (1272611.88 to 1615349.92)	1088.30 (959.74 to 1222.56)	0.00% (0.00% to 0.00%)	0.809
San Marino	5877.84 (5077.87 to 6881.18)	17738.70 (15098.00 to 20908.45)	0.01% (0.01% to 0.01%)	221.72 (39.07 to 478.47)	660.00 (94.00 to 1449.18)	0.00% (-0.03% to 0.03%)	352.19 (299.97 to 404.35)	1374.79 (1169.05 to 1583.39)	0.00% (0.00% to 0.00%)	0.888
Serbia	1325082.46 (1147908.98 to 1527772.03)	13545.29 (11487.32 to 15681.86)	-0.01% (-0.01% to -0.01%)	50906.11 (12097.85 to 109628.21)	514.68 (107.95 to 1136.79)	-0.01% (-0.04% to 0.02%)	86814.76 (74217.59 to 100956.48)	1080.23 (917.37 to 1248.49)	-0.01% (-0.01% to -0.01%)	0.792
Slovakia	810276.29 (699862.57 to 935455.64)	13618.05 (11526.24 to 15761.99)	-0.01% (-0.01% to -0.01%)	31139.92 (7227.28 to 67224.49)	516.94 (105.43 to 1156.64)	0.00% (-0.04% to 0.03%)	52396.76 (44649.51 to 61229.36)	1088.42 (924.96 to 1258.68)	0.00% (-0.01% to 0.00%)	0.811
Slovenia	298680.72 (258727.88 to 343964.28)	13531.47 (11447.95 to 15665.17)	-0.01% (-0.01% to -0.01%)	11517.06 (2765.60 to 24685.68)	513.87 (104.38 to 1148.52)	-0.01% (-0.04% to 0.03%)	18844.30 (16115.96 to 21877.66)	1084.46 (921.24 to 1254.18)	-0.01% (-0.01% to 0.00%)	0.842
Spain	8537877.56 (7350314.09 to 10025982.00)	18266.01 (15746.95 to 21477.00)	0.00% (-0.01% to 0.00%)	327242.61 (62354.28 to 698496.34)	688.24 (105.50 to 1469.69)	0.00% (-0.04% to 0.05%)	502945.43 (431506.28 to 580753.48)	1393.83 (1188.05 to 1607.19)	0.00% (0.00% to 0.00%)	0.769
Sweden	1846704.34 (1613904.80 to 2112037.97)	17826.53 (15449.25 to 20442.69)	0.00% (-0.03% to 0.03%)	68595.04 (10307.23 to 147741.68)	657.82 (84.47 to 1464.24)	0.00% (-0.05% to 0.05%)	121035.51 (107677.79 to 135701.62)	1409.70 (1249.25 to 1585.26)	0.00% (-0.03% to 0.02%)	0.887
Switzerland	1444817.20 (1250524.02 to 1670106.75)	15818.27 (13505.05 to 18301.38)	0.01% (-0.03% to 0.05%)	54637.32 (10398.48 to 117888.09)	590.17 (93.02 to 1295.68)	0.01% (-0.05% to 0.06%)	93025.73 (79679.06 to 107400.93)	1284.81 (1090.41 to 1475.61)	0.00% (-0.03% to 0.04%)	0.933

Ukraine	6594152.42 (5746869.78 to 7566954.18)	13592.26 (11831.93 to 15502.08)	-0.01% (-0.01% to -0.01%)	271531.32 (83932.12 to 543384.43)	548.06 (152.25 to 1136.00)	-0.01% (-0.04% to 0.02%)	408130.27 (360557.29 to 458775.83)	1046.04 (921.40 to 1181.66)	-0.01% (-0.01% to -0.01%)	0.761
United Kingdom	12064770.46 (10517925.66 to 13963773.48)	17467.16 (15069.84 to 20164.22)	0.01% (-0.02% to 0.04%)	452047.07 (77045.83 to 968291.88)	648.34 (93.61 to 1413.04)	0.01% (-0.03% to 0.04%)	797470.13 (708496.71 to 898063.33)	1387.52 (1222.47 to 1566.53)	0.01% (-0.02% to 0.03%)	0.859
Statistical Test for SDI	Spearman's ρ = -0.127 p-value = 0.405	Spearman's ρ = 0.391 p-value = 0.008		Spearman's ρ = -0.131 p-value = 0.391	Spearman's ρ = 0.392 p-value = 0.008		Spearman's ρ = -0.110 p-value = 0.470	Spearman's ρ = 0.438 p-value = 0.003		

Table S6c: Socio-demographic index (SDI) with prevalence, DALY, and incidence counts and age-standardized rates of tension-type headache in 2021, and percentage changes from 1990 to 2021, by country

	Prevalence (95% UI)			DALYs (95% UI)			Incidence (95% UI)			
	Absolute number, 2021	Age-standardized rate, per 100 000 people, 2021	Percentage Change, 1990-2021	Absolute number, 2021	Age-standardized rate, per 100 000 people, 2021	Percentage Change, 1990-2021	Absolute number, 2021	Age-standardized rate, per 100 000 people, 2021	Percentage Change, 1990-2021	SDI
Albania	864333.17 (756269.08 to 980673.58)	29929.00 (25981.73 to 34255.02)	0.00% (0.00% to 0.00%)	2251.74 (715.54 to 7082.91)	72.99 (21.94 to 242.13)	0.01% (-0.08% to 0.10%)	294179.24 (254647.38 to 331984.33)	10567.46 (9117.97 to 11922.52)	0.00% (0.00% to 0.00%)	0.707
Andorra	31423.49 (27452.80 to 35599.97)	32352.91 (28179.03 to 36861.21)	0.00% (0.00% to 0.01%)	73.15 (19.82 to 260.48)	69.04 (17.06 to 256.96)	0.01% (-0.09% to 0.11%)	10061.08 (8712.60 to 11398.53)	10985.72 (9464.72 to 12425.65)	0.00% (0.00% to 0.00%)	0.869
Austria	3103357.82 (2715444.43 to 3487542.35)	31759.67 (27635.41 to 36479.78)	0.00% (0.00% to 0.00%)	7443.98 (2141.41 to 26586.70)	71.22 (19.01 to 267.60)	0.00% (-0.12% to 0.10%)	1020038.78 (895524.56 to 1147065.04)	10935.23 (9446.25 to 12425.36)	0.00% (-0.01% to 0.00%)	0.854
Belarus	3032617.46 (2670381.18 to 3446845.49)	30340.65 (26426.41 to 34728.35)	0.00% (0.00% to 0.00%)	9860.82 (3328.76 to 28254.23)	88.01 (27.48 to 269.39)	0.00% (-0.09% to 0.09%)	1021424.83 (892205.65 to 1153585.45)	10613.19 (9181.14 to 11995.05)	0.00% (0.00% to 0.00%)	0.784
Belgium	3969616.84 (3489453.36 to 4488578.92)	32396.92 (28239.73 to 36903.59)	0.00% (-0.01% to 0.00%)	8994.79 (2463.24 to 32639.70)	69.42 (17.77 to 261.14)	0.00% (-0.11% to 0.10%)	1293853.10 (1138357.60 to 1449035.28)	10998.81 (9469.81 to 12445.79)	0.00% (0.00% to 0.00%)	0.854
Bosnia and Herzegovina	1077398.60 (944877.29 to 1215194.37)	29958.94 (26050.58 to 34343.35)	0.00% (-0.01% to 0.00%)	2867.17 (931.51 to 8679.88)	72.69 (21.99 to 238.70)	0.00% (-0.11% to 0.09%)	363358.06 (316378.13 to 404837.98)	10575.51 (9138.10 to 11929.93)	0.00% (0.00% to 0.00%)	0.723
Bulgaria	2209582.32 (1929372.70 to 2478332.40)	29955.10 (26079.24 to 34340.31)	0.00% (0.00% to 0.00%)	5906.65 (1871.44 to 17850.31)	72.81 (21.03 to 240.78)	0.00% (-0.10% to 0.08%)	741539.27 (647710.63 to 828288.01)	10575.40 (9134.59 to 11930.69)	0.00% (0.00% to 0.00%)	0.768
Croatia	1372487.35 (1199050.64 to 1544565.33)	29953.92 (26171.06 to 34212.29)	0.00% (-0.04% to 0.04%)	3657.10 (1163.29 to 11350.30)	73.08 (21.40 to 245.11)	0.00% (-0.10% to 0.08%)	462325.40 (407661.12 to 516379.53)	10594.00 (9213.94 to 11944.99)	0.00% (-0.03% to 0.03%)	0.798
Cyprus	486411.42 (421730.38 to 553681.48)	32411.95 (28254.01 to 37014.80)	0.00% (0.00% to 0.01%)	1111.01 (302.23 to 3982.28)	69.91 (18.09 to 259.22)	0.01% (-0.12% to 0.10%)	157560.52 (136812.54 to 178603.21)	11000.77 (9453.23 to 12466.52)	0.00% (0.00% to 0.00%)	0.836

Czechia	3421199.19 (2998773.73 to 3833393.42)	29944.15 (26025.75 to 34247.32)	0.00% (-0.01% to 0.00%)	9054.47 (2849.09 to 27930.03)	72.75 (21.07 to 244.46)	0.00% (-0.09% to 0.08%)	1153583.05 (1010386.84 to 1286485.72)	10572.78 (9122.21 to 11924.83)	0.00% (0.00% to 0.00%)	0.828
Denmark	2116005.52 (1858506.23 to 2388872.96)	33764.78 (29477.82 to 38545.83)	-0.03% (-0.07% to 0.02%)	4632.65 (1204.37 to 17116.71)	70.36 (16.92 to 266.48)	-0.01% (-0.13% to 0.13%)	663327.07 (575287.31 to 741568.53)	11052.66 (9475.52 to 12514.31)	0.00% (-0.03% to 0.04%)	0.896
Estonia	423964.58 (373686.42 to 481706.88)	30335.97 (26372.25 to 34759.24)	0.00% (0.00% to 0.00%)	1350.00 (466.04 to 3954.34)	87.75 (28.49 to 271.39)	0.00% (-0.08% to 0.08%)	142499.03 (126073.35 to 159809.83)	10612.76 (9186.97 to 11995.59)	0.00% (0.00% to 0.00%)	0.845
Finland	1917833.38 (1686801.86 to 2164471.63)	32383.20 (28196.63 to 36941.96)	0.00% (-0.01% to 0.00%)	4336.41 (1198.56 to 15480.41)	69.26 (18.66 to 256.04)	0.00% (-0.10% to 0.10%)	624332.05 (551698.78 to 699593.56)	10996.08 (9447.74 to 12448.71)	0.00% (-0.01% to 0.00%)	0.860
France	21984828.03 (19299481.34 to 24782861.99)	31418.48 (27367.37 to 36027.39)	0.00% (0.00% to 0.00%)	55822.97 (16584.78 to 177931.90)	74.92 (20.53 to 253.03)	0.00% (-0.10% to 0.09%)	7363593.68 (6490652.24 to 8178996.93)	10893.20 (9425.25 to 12363.67)	0.00% (0.00% to 0.00%)	0.838
Germany	30566291.99 (26922507.68 to 34354087.07)	33107.73 (28985.82 to 37680.86)	0.02% (-0.02% to 0.06%)	71616.46 (20869.31 to 238118.17)	72.21 (19.84 to 254.64)	0.00% (-0.14% to 0.10%)	9630602.05 (8384014.31 to 10837886.53)	11012.92 (9501.26 to 12540.99)	0.00% (-0.03% to 0.03%)	0.903
Greece	3570883.28 (3140584.30 to 4030948.66)	32408.70 (28249.91 to 36985.43)	0.00% (0.00% to 0.01%)	8272.06 (2284.34 to 29200.64)	69.65 (17.78 to 256.03)	0.00% (-0.12% to 0.12%)	1150581.21 (1011300.32 to 1290099.70)	11001.95 (9465.27 to 12446.06)	0.00% (0.00% to 0.00%)	0.792
Hungary	3127052.91 (2742043.15 to 3503148.54)	29976.16 (26046.38 to 34344.52)	0.00% (0.00% to 0.00%)	8340.21 (2696.69 to 25492.29)	73.07 (22.02 to 241.63)	0.00% (-0.09% to 0.09%)	1052238.83 (920670.88 to 1169347.07)	10579.89 (9135.77 to 11922.77)	0.00% (0.00% to 0.00%)	0.791
Iceland	120532.39 (105593.34 to 136816.06)	32368.67 (28203.02 to 36964.11)	0.00% (0.00% to 0.00%)	269.32 (73.19 to 973.80)	69.37 (18.13 to 256.86)	0.00% (-0.11% to 0.11%)	39651.04 (34649.68 to 44726.43)	10991.29 (9457.04 to 12473.55)	0.00% (0.00% to 0.00%)	0.876
Ireland	1696845.31 (1488430.77 to 1916001.36)	32406.02 (28242.61 to 36967.09)	0.00% (0.00% to 0.00%)	3837.44 (1033.02 to 13761.09)	69.58 (17.98 to 257.28)	0.00% (-0.11% to 0.12%)	558468.89 (487529.21 to 627633.09)	11000.32 (9468.17 to 12461.84)	0.00% (0.00% to 0.00%)	0.874
Israel	3094744.19 (2703221.12 to 3511141.26)	32400.54 (28232.98 to 37007.16)	0.00% (0.00% to 0.00%)	6753.62 (1761.98 to 24927.52)	69.80 (17.93 to 260.03)	0.00% (-0.09% to 0.08%)	1045606.10 (906143.83 to 1180491.08)	11000.06 (9471.90 to 12441.52)	0.00% (0.00% to 0.00%)	0.809

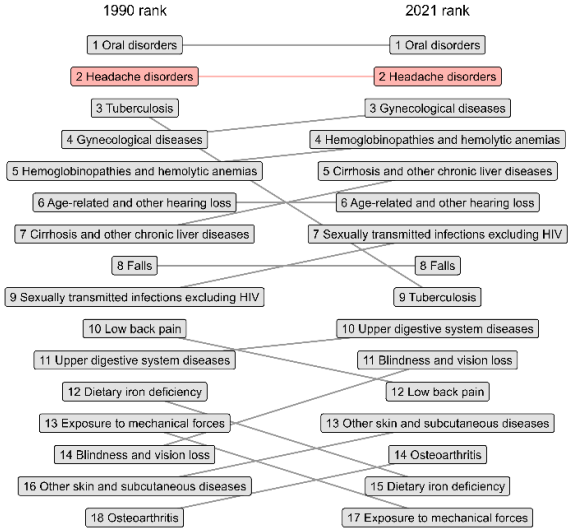
Italy	21839653.34 (19560998.04 to 23983501.55)	33572.31 (29964.27 to 37532.66)	0.00% (-0.02% to 0.02%)	50176.42 (14083.58 to 183683.64)	71.46 (18.10 to 278.39)	0.01% (-0.06% to 0.08%)	7330400.90 (6462462.45 to 8145999.80)	11907.30 (10379.71 to 13336.30)	0.00% (-0.03% to 0.03%)	0.806
Latvia	602991.70 (532225.52 to 685044.74)	30338.15 (26401.78 to 34724.16)	0.00% (0.00% to 0.00%)	1952.02 (673.71 to 5673.06)	87.86 (28.02 to 271.83)	0.00% (-0.09% to 0.08%)	202290.39 (178485.34 to 226744.01)	10613.17 (9181.93 to 11978.28)	0.00% (0.00% to 0.00%)	0.831
Lithuania	924765.79 (816741.20 to 1037971.84)	31729.84 (27557.16 to 36200.23)	0.00% (0.00% to 0.00%)	2618.43 (870.43 to 8137.19)	81.03 (24.53 to 266.39)	0.00% (-0.10% to 0.09%)	300169.11 (262686.32 to 335948.28)	10764.37 (9260.52 to 12195.19)	0.00% (0.00% to 0.00%)	0.856
Luxembourg	228971.26 (201257.60 to 258806.73)	32279.96 (28111.40 to 36828.77)	0.00% (0.00% to 0.00%)	569.87 (173.89 to 1852.64)	74.98 (21.88 to 262.84)	0.00% (-0.11% to 0.08%)	74310.84 (64648.15 to 84091.99)	10969.42 (9428.47 to 12453.80)	0.00% (0.00% to 0.00%)	0.884
Malta	154171.27 (135412.36 to 173757.30)	32376.71 (28207.45 to 36976.61)	0.00% (-0.01% to 0.00%)	352.83 (96.90 to 1261.74)	69.25 (17.73 to 258.90)	-0.01% (-0.14% to 0.10%)	49789.55 (43846.76 to 55672.87)	10993.94 (9458.99 to 12439.10)	0.00% (0.00% to 0.00%)	0.802
Monaco	13089.19 (11419.18 to 14774.06)	32411.21 (28250.66 to 36983.37)	0.00% (0.00% to 0.00%)	30.62 (8.57 to 108.75)	69.94 (17.66 to 261.90)	0.00% (-0.10% to 0.14%)	4210.49 (3702.57 to 4729.86)	11000.46 (9455.21 to 12458.07)	0.00% (0.00% to 0.00%)	0.908
Montenegro	198591.57 (174528.53 to 224394.71)	29955.13 (26063.60 to 34324.21)	0.00% (0.00% to 0.00%)	520.50 (164.52 to 1621.39)	73.04 (21.40 to 242.42)	0.00% (-0.09% to 0.09%)	67661.41 (58761.09 to 75703.66)	10573.96 (9116.30 to 11920.21)	0.00% (0.00% to 0.00%)	0.796
Netherlands	6476061.47 (5683170.58 to 7328480.75)	34984.91 (30123.30 to 39942.65)	0.00% (0.00% to 0.00%)	13226.68 (3311.93 to 54846.54)	68.16 (15.73 to 292.36)	0.00% (-0.14% to 0.16%)	1961119.12 (1710397.30 to 2217020.52)	11114.04 (9423.86 to 12741.29)	0.00% (0.00% to 0.00%)	0.888
North Macedonia	718468.34 (631223.15 to 814777.23)	29923.19 (25998.04 to 34281.34)	0.00% (0.00% to 0.00%)	1892.63 (606.06 to 5825.83)	72.65 (21.86 to 241.46)	0.00% (-0.10% to 0.10%)	242894.20 (211010.66 to 272508.80)	10567.30 (9129.20 to 11916.74)	0.00% (0.00% to 0.00%)	0.751
Norway	2063243.43 (1850471.07 to 2279055.63)	35492.44 (31718.03 to 39481.91)	0.01% (-0.02% to 0.04%)	4344.01 (1107.11 to 16723.17)	71.25 (16.88 to 282.32)	0.03% (-0.06% to 0.13%)	683460.86 (601089.99 to 764089.28)	12225.67 (10673.08 to 13778.10)	0.01% (-0.02% to 0.04%)	0.916
Poland	13140254.87 (11726101.46 to 14550075.33)	31533.24 (28135.30 to 35109.35)	0.00% (0.00% to 0.00%)	35440.63 (11577.11 to 107825.89)	78.06 (23.62 to 254.86)	0.01% (-0.07% to 0.05%)	4525714.61 (3987722.83 to 5023474.89)	11365.29 (9873.17 to 12708.66)	0.00% (0.00% to 0.00%)	0.812
Portugal	3747590.35 (3292299.65 to 4229981.77)	32429.23 (28267.44 to 37011.93)	0.00% (0.00% to 0.01%)	8715.95 (2435.10 to 30614.89)	69.80 (17.90 to 255.82)	0.01% (-0.12% to 0.12%)	1204778.90 (1058832.92	11006.84 (9472.07 to 12441.46)	0.00% (0.00% to 0.00%)	0.744

							to 1352803.91)			
Republic of Moldova	1202123.83 (1055850.88 to 1368268.37)	30334.65 (26376.91 to 34792.29)	0.00% (0.00% to 0.00%)	3869.56 (1331.83 to 11073.73)	87.90 (28.60 to 267.41)	0.00% (-0.08% to 0.06%)	402477.91 (350885.36 to 455567.93)	10611.66 (9177.32 to 11960.03)	0.00% (0.00% to 0.00%)	0.732
Romania	6117197.60 (5362639.88 to 6865043.34)	29957.47 (26033.17 to 34318.15)	0.00% (0.00% to 0.00%)	16296.43 (5103.52 to 49964.00)	73.08 (21.09 to 241.38)	0.00% (-0.10% to 0.09%)	2068828.89 (1804544.84 to 2300926.25)	10575.83 (9131.70 to 11915.94)	0.00% (0.00% to 0.00%)	0.768
Russian Federation	48225991.18 (43156672.65 to 53273636.20)	31147.27 (27732.82 to 35055.65)	0.01% (-0.02% to 0.03%)	171991.22 (63374.06 to 460776.63)	99.72 (34.79 to 288.43)	0.00% (-0.03% to 0.03%)	16710291.76 (14611029.07 to 18612991.82)	11200.64 (9779.76 to 12544.09)	0.00% (-0.02% to 0.03%)	0.809
San Marino	11550.38 (10155.90 to 13020.42)	32430.84 (28280.21 to 36962.56)	0.00% (0.00% to 0.01%)	26.84 (7.54 to 95.17)	70.07 (18.33 to 260.01)	0.01% (-0.09% to 0.13%)	3731.03 (3295.12 to 4197.34)	11005.36 (9469.08 to 12460.00)	0.00% (0.00% to 0.00%)	0.888
Serbia	2937511.06 (2582145.71 to 3314003.05)	29928.17 (26039.72 to 34277.48)	0.00% (-0.01% to 0.00%)	7706.93 (2462.84 to 23767.31)	73.08 (21.71 to 242.74)	0.00% (-0.10% to 0.08%)	994039.03 (868734.74 to 1107999.13)	10566.41 (9126.68 to 11909.54)	0.00% (-0.01% to 0.00%)	0.792
Slovakia	1768339.92 (1551603.50 to 1994579.56)	29962.05 (26021.42 to 34279.58)	0.00% (-0.01% to 0.00%)	4705.60 (1515.18 to 14451.14)	73.13 (21.84 to 243.89)	0.00% (-0.09% to 0.10%)	596767.17 (521035.46 to 665684.66)	10576.74 (9135.52 to 11920.58)	0.00% (0.00% to 0.00%)	0.811
Slovenia	667491.14 (581256.30 to 748537.64)	29927.39 (26032.45 to 34300.82)	0.00% (-0.01% to 0.00%)	1785.77 (582.53 to 5402.57)	72.89 (21.48 to 241.72)	0.00% (-0.10% to 0.10%)	224816.70 (196727.06 to 250133.70)	10568.36 (9125.70 to 11919.72)	0.00% (-0.01% to 0.00%)	0.842
Spain	15640493.70 (13676285.21 to 17704584.91)	31535.63 (27408.60 to 36010.06)	0.00% (0.00% to 0.01%)	39938.92 (11640.26 to 133191.27)	73.69 (20.11 to 267.06)	0.01% (-0.10% to 0.14%)	5146361.00 (4510583.95 to 5786216.14)	10896.83 (9420.95 to 12313.98)	0.00% (0.00% to 0.00%)	0.769
Sweden	3771717.69 (3381333.58 to 4156615.55)	34297.27 (30701.03 to 38326.02)	0.00% (-0.02% to 0.03%)	7850.08 (2084.21 to 28634.82)	68.31 (17.15 to 259.89)	0.00% (-0.09% to 0.09%)	1263655.49 (1114822.40 to 1402628.89)	11957.24 (10503.70 to 13393.96)	0.00% (-0.03% to 0.03%)	0.887
Switzerland	2884248.94 (2516060.47 to 3265068.87)	29829.20 (25864.17 to 34171.76)	0.05% (0.00% to 0.11%)	6877.39 (1979.57 to 23037.84)	66.36 (18.13 to 241.18)	0.03% (-0.10% to 0.12%)	991842.08 (864090.08 to 1108088.22)	10713.80 (9241.01 to 12024.54)	0.01% (-0.02% to 0.05%)	0.933
Ukraine	15063001.30 (13449448.58 to 16721250.84)	31872.74 (28432.01 to 35612.60)	0.00% (0.00% to 0.00%)	48418.19 (16949.09 to 137600.83)	91.72 (29.95 to 277.45)	0.00% (-0.07% to 0.07%)	5152557.31 (4530439.38 to 5776198.43)	11405.07 (9946.67 to 12812.49)	0.00% (0.00% to 0.00%)	0.761

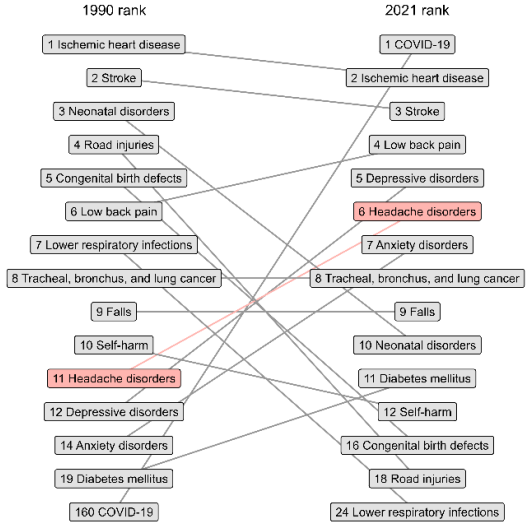
United Kingdom	24294167.52 (21795300.59 to 26912634.21)	33487.02 (29942.12 to 37299.08)	0.00% (0.00% to 0.00%)	55187.88 (15436.92 to 197681.55)	72.27 (19.01 to 266.15)	0.00% (-0.06% to 0.03%)	8247656.08 (7234881.30 to 9220731.37)	11812.17 (10329.04 to 13276.29)	0.00% (0.00% to 0.00%)	0.859
Statistical Test for SDI	Spearman's ρ = -0.131 p-value = 0.392	Spearman's ρ = 0.522 p-value < 0.001		Spearman's ρ = -0.170 p-value = 0.265	Spearman's ρ = -0.466 p-value = 0.001.		Spearman's ρ = -0.138 p-value = 0.367	Spearman's ρ = 0.474 p-value < 0.001		

Supplementary Figures

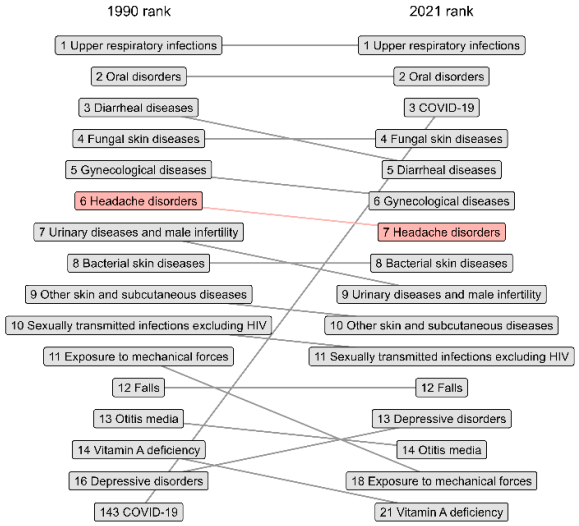
(A) Prevalence



(B) DALYs



(C) Incidence



(D) YLDs

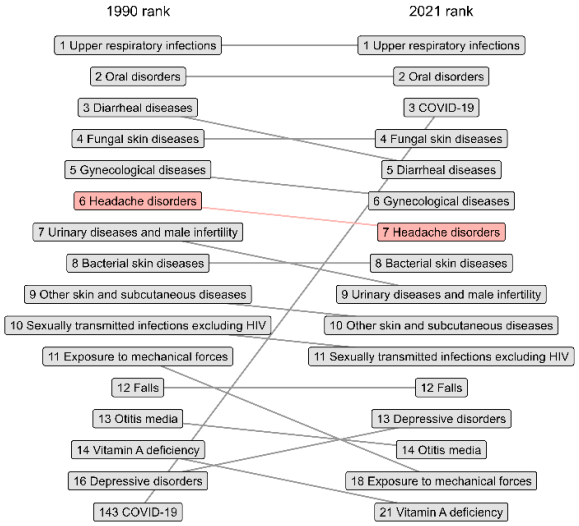
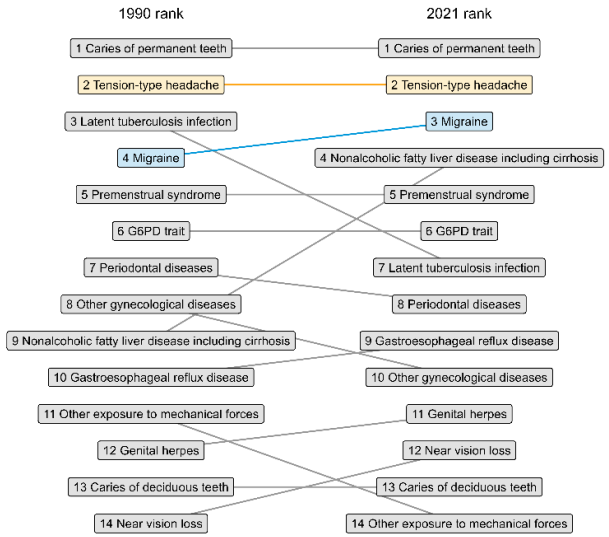
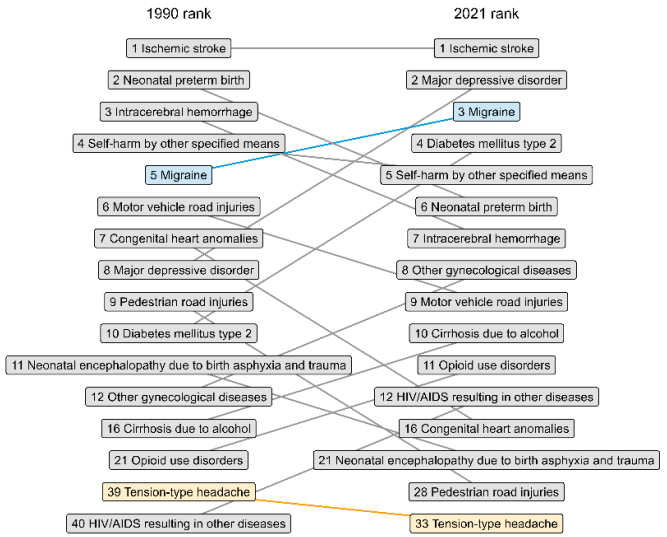


Figure S1a: Changes in top ranks of age-standardized (A) prevalence, (B) DALY, (C) incidence, and (D) YLD rates for cause level 3 conditions from 1990 to 2021

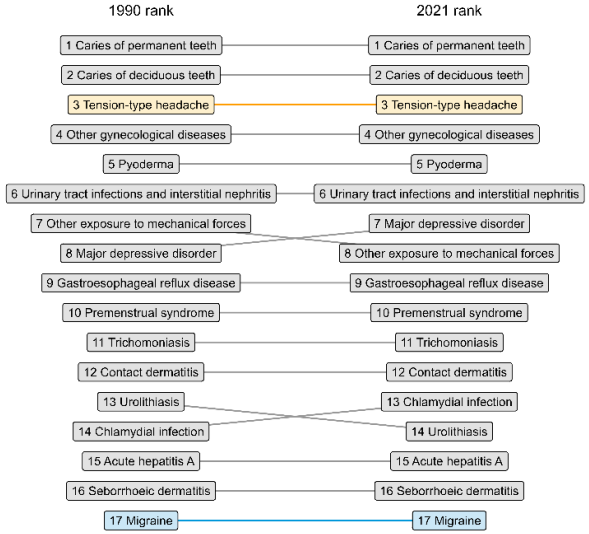
(A) Prevalence



(B) DALYs



(C) Incidence



(D) YLDs

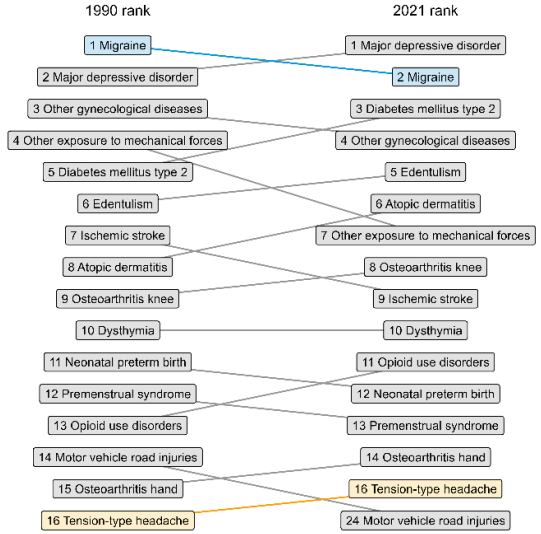


Figure S1b: Changes in top ranks of age-standardized (A) prevalence, (B) DALY, (C) incidence, and (D) YLD rates for cause level 4 conditions from 1990 to 2021

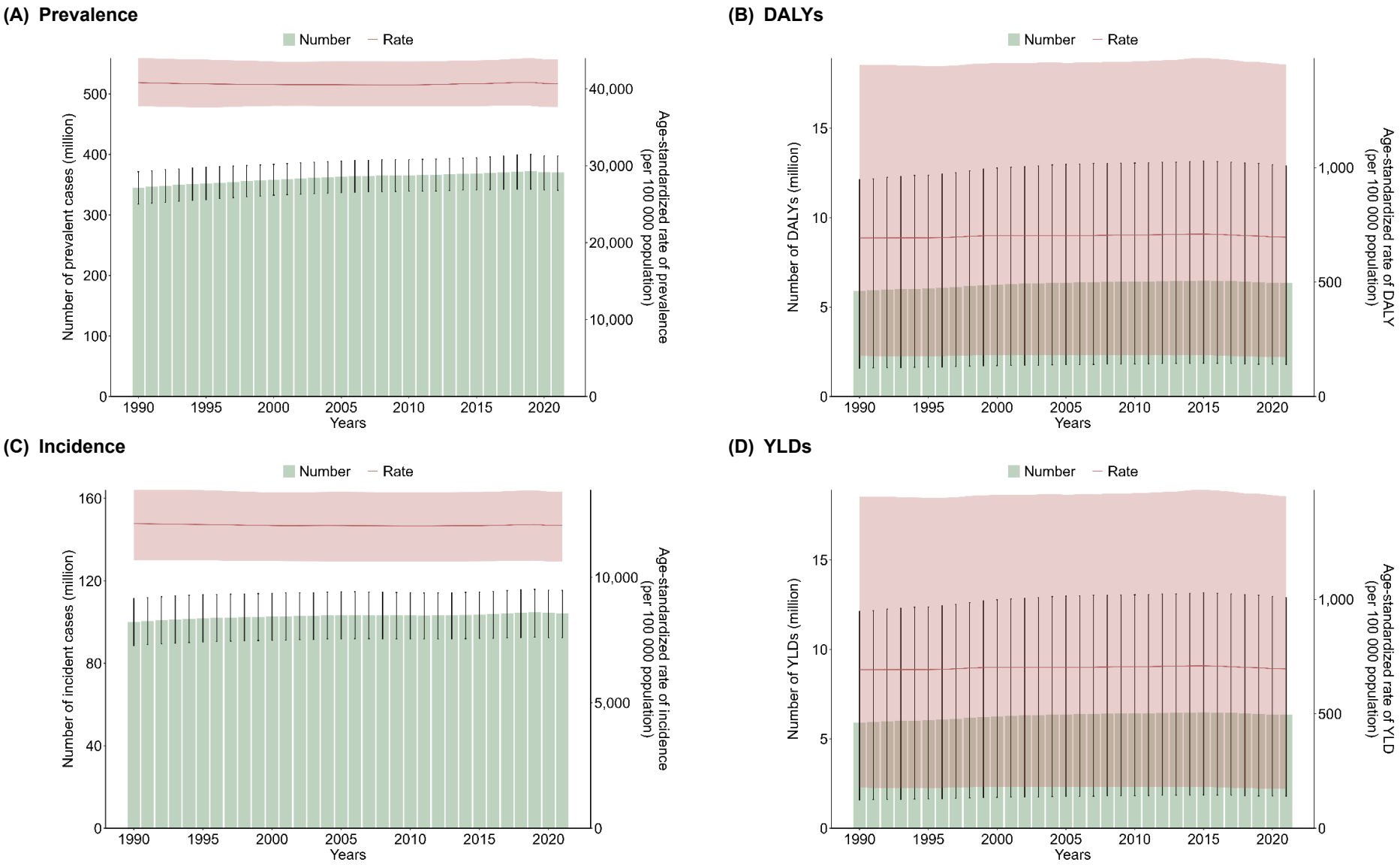


Figure S2a: Age-standardized (A) prevalence, (B) DALY, (C) incidence, and (D) YLD rates and counts of headache disorders by year, 1990-2021

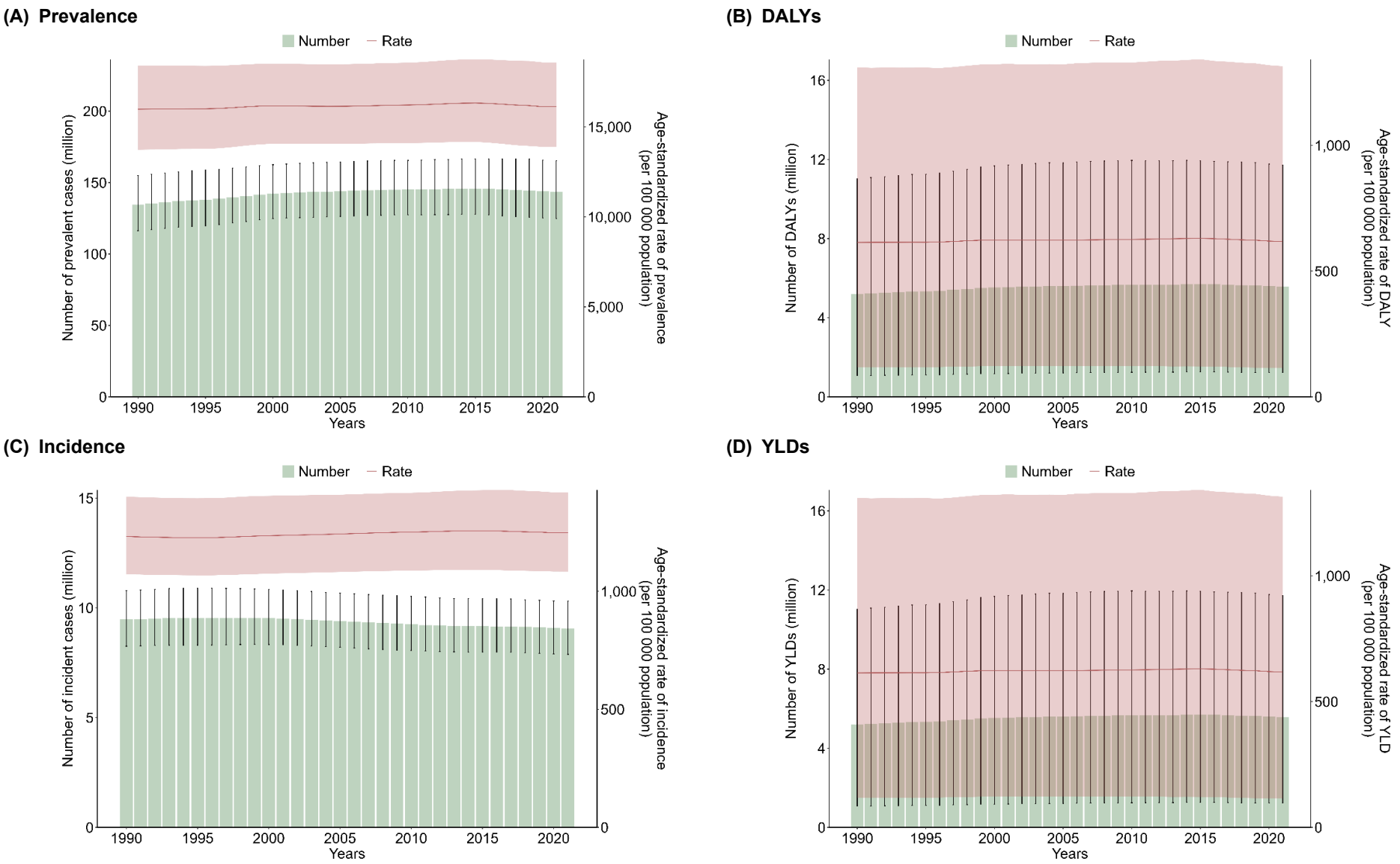


Figure S2b: Age-standardized (A) prevalence, (B) DALY, (C) incidence, and (D) YLD rates and counts of migraine by year, 1990-2021

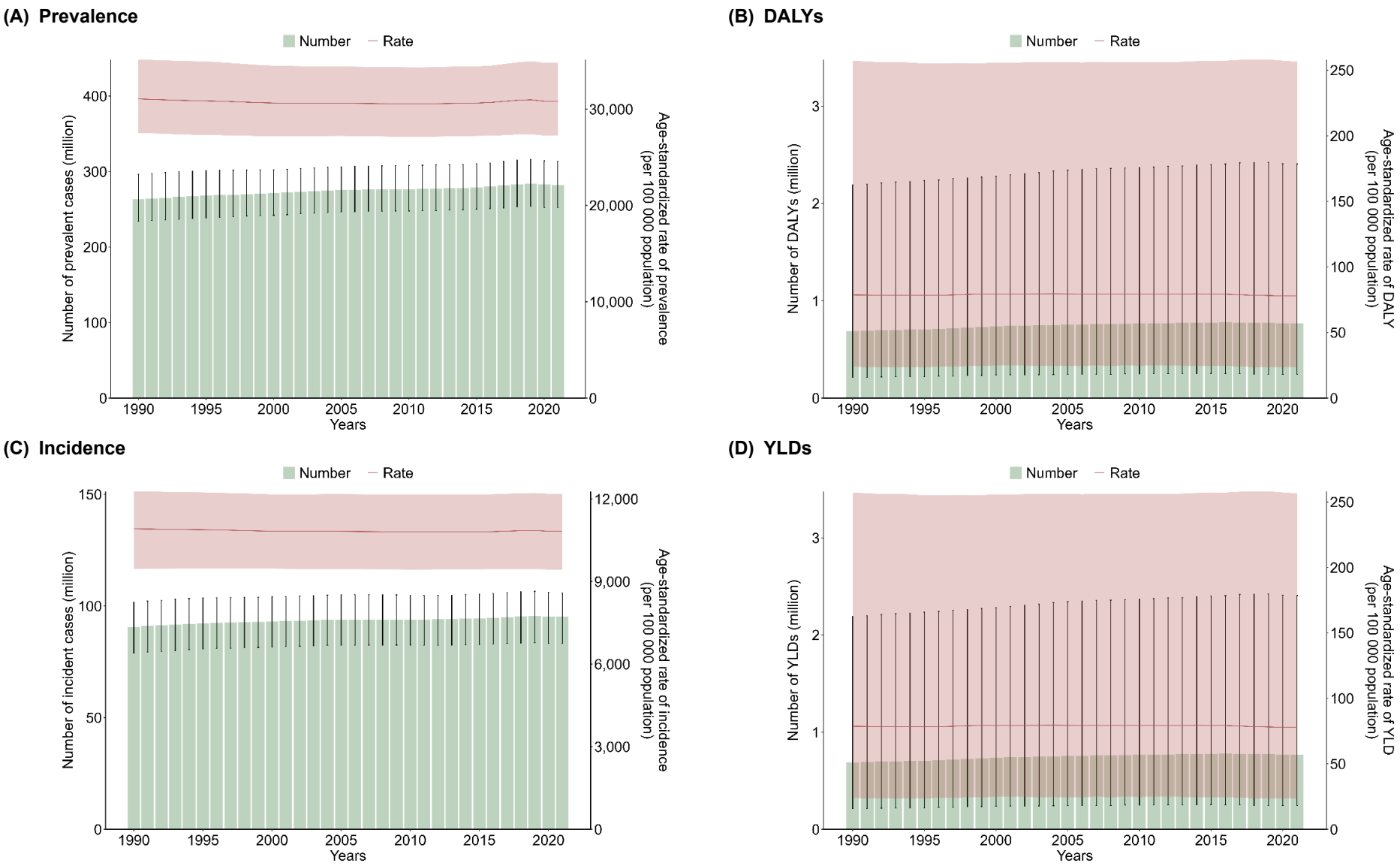


Figure S2c: Age-standardized (A) prevalence, (B) DALY, (C) incidence, and (D) YLD rates and counts of tension-type headache by year, 1990-2021

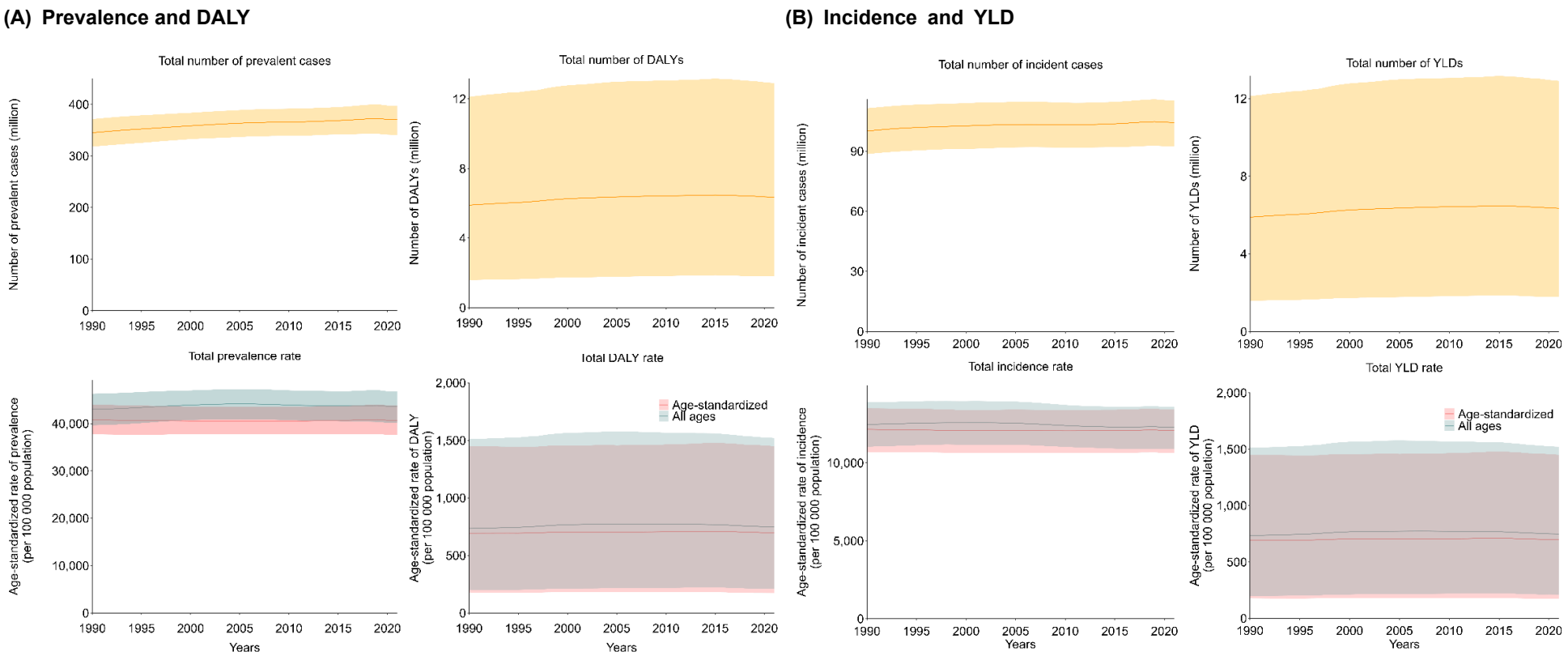


Figure S3a: Age-standardized (A) prevalence and DALY, and (B) incidence and YLD rates and counts of headache disorders by year, 1990-2021

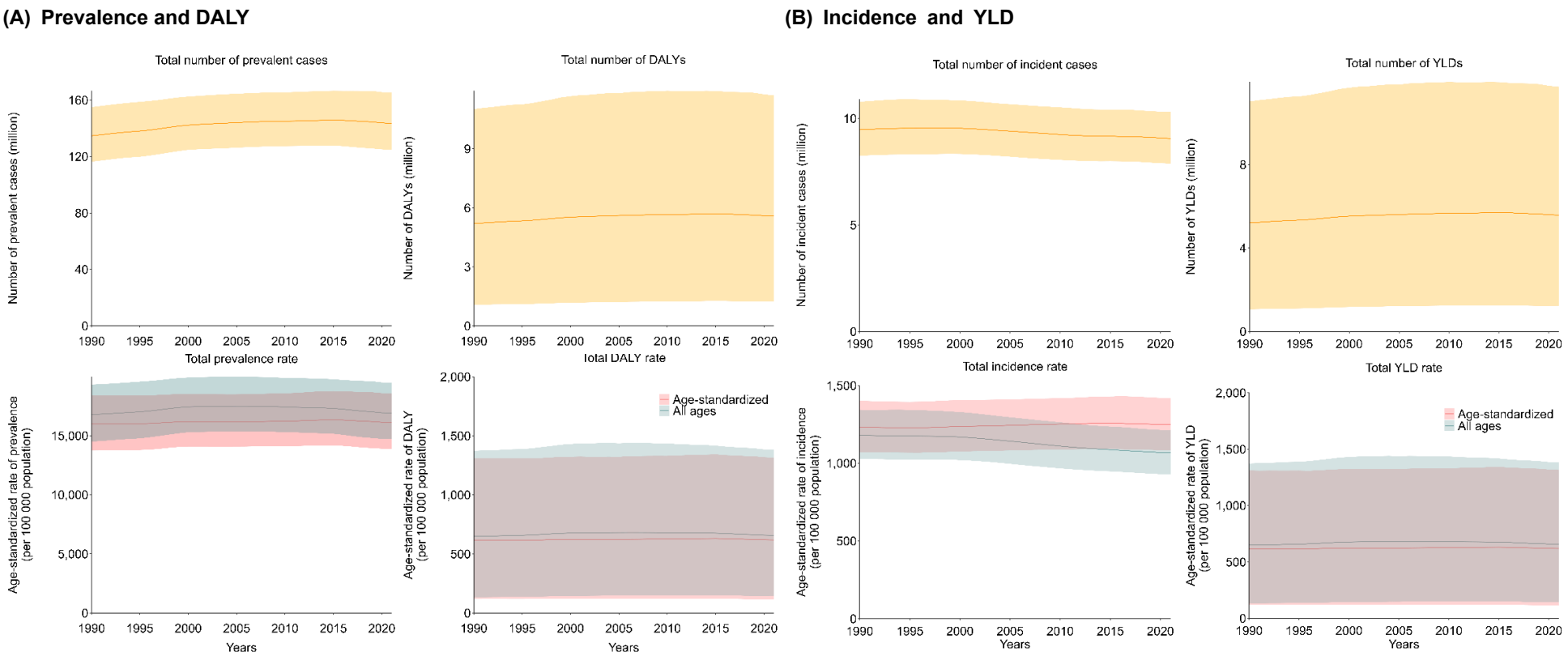


Figure S3b: Age-standardized (A) prevalence and DALY, and (B) incidence and YLD rates and counts of migraine by year, 1990-2021

(A) Prevalence and DALY

(B) Incidence and YLD

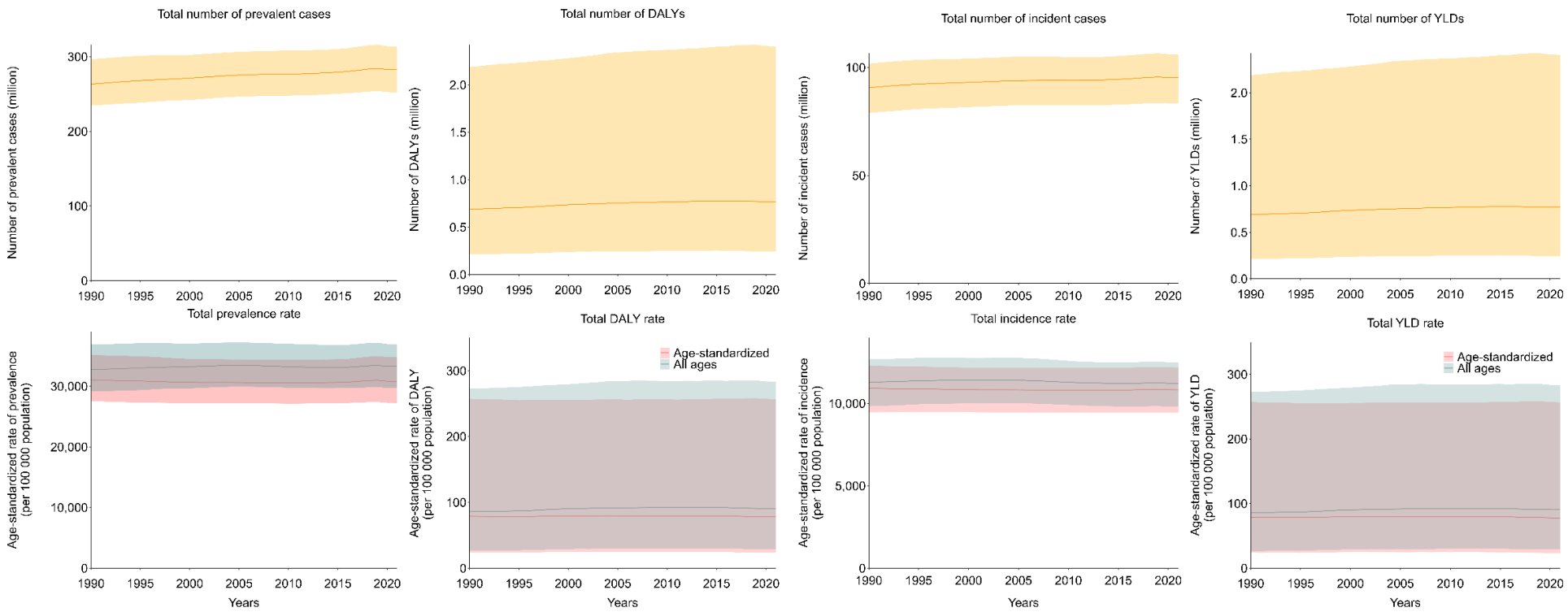
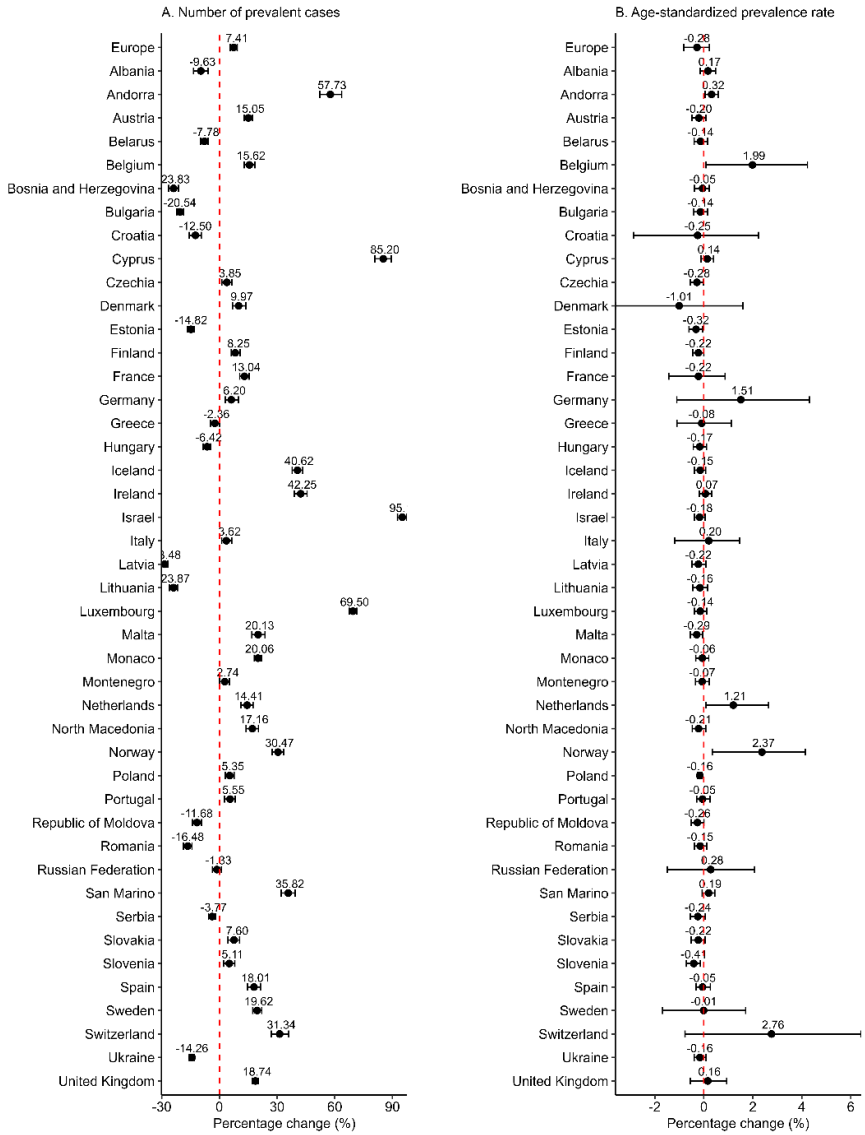
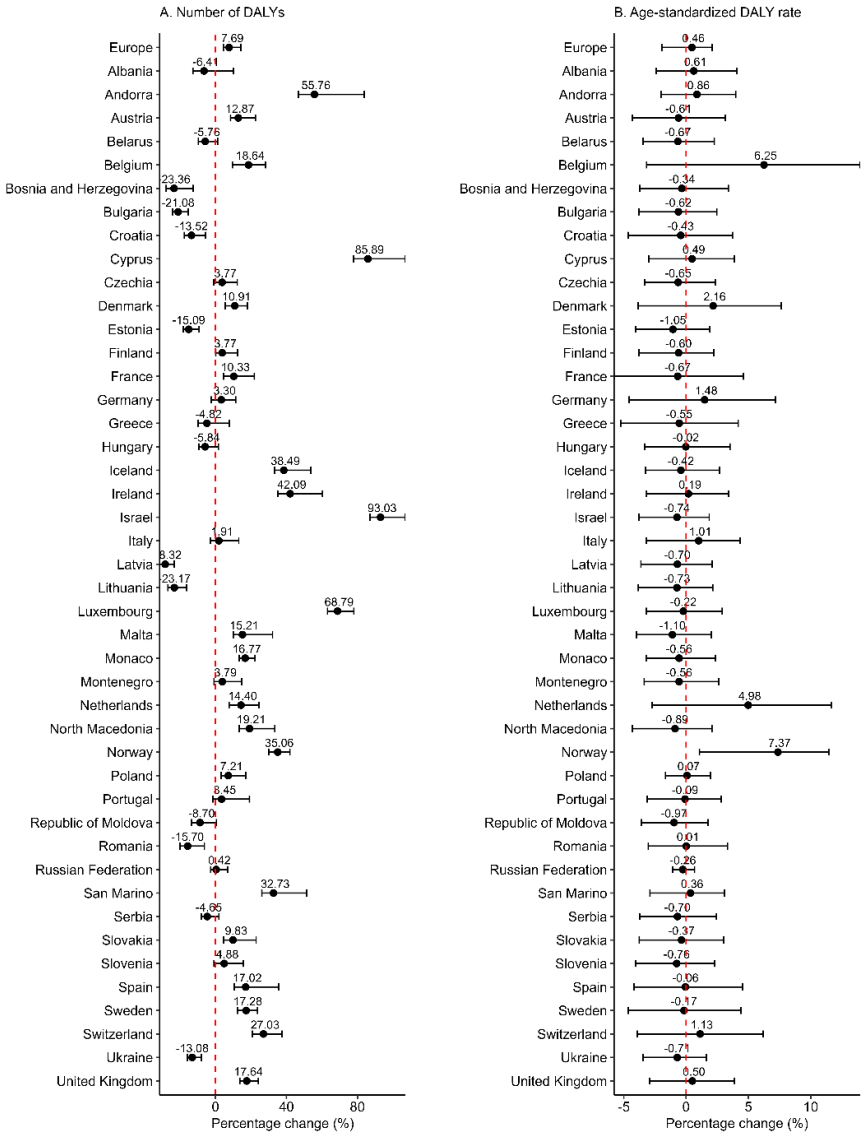


Figure S3c: Age-standardized (A) prevalence and DALY, and (B) incidence and YLD rates and counts of tension-type headache by year, 1990-2021

(A) Prevalence



(B) DALYs



(C) Incidence

(D) YLDs

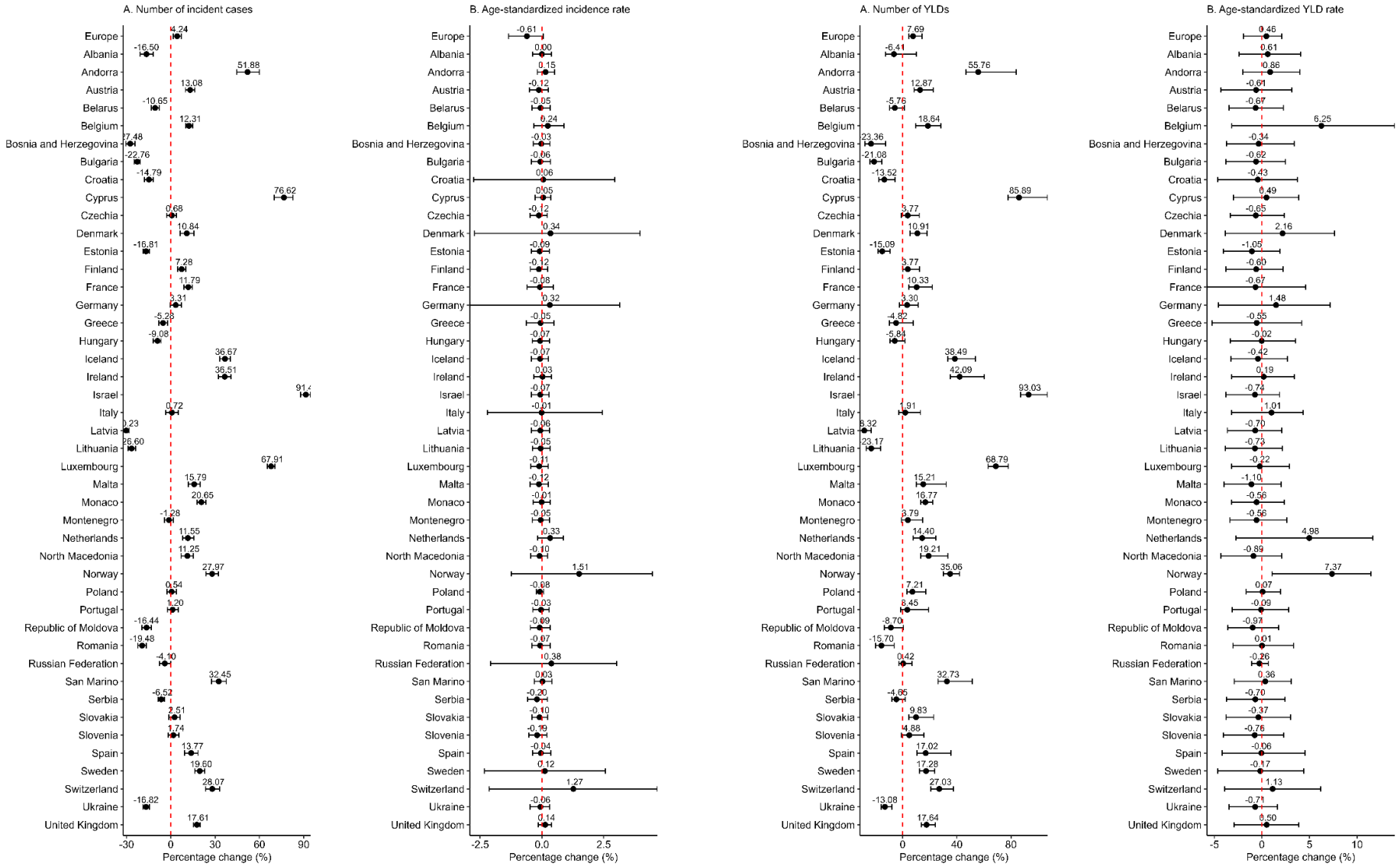
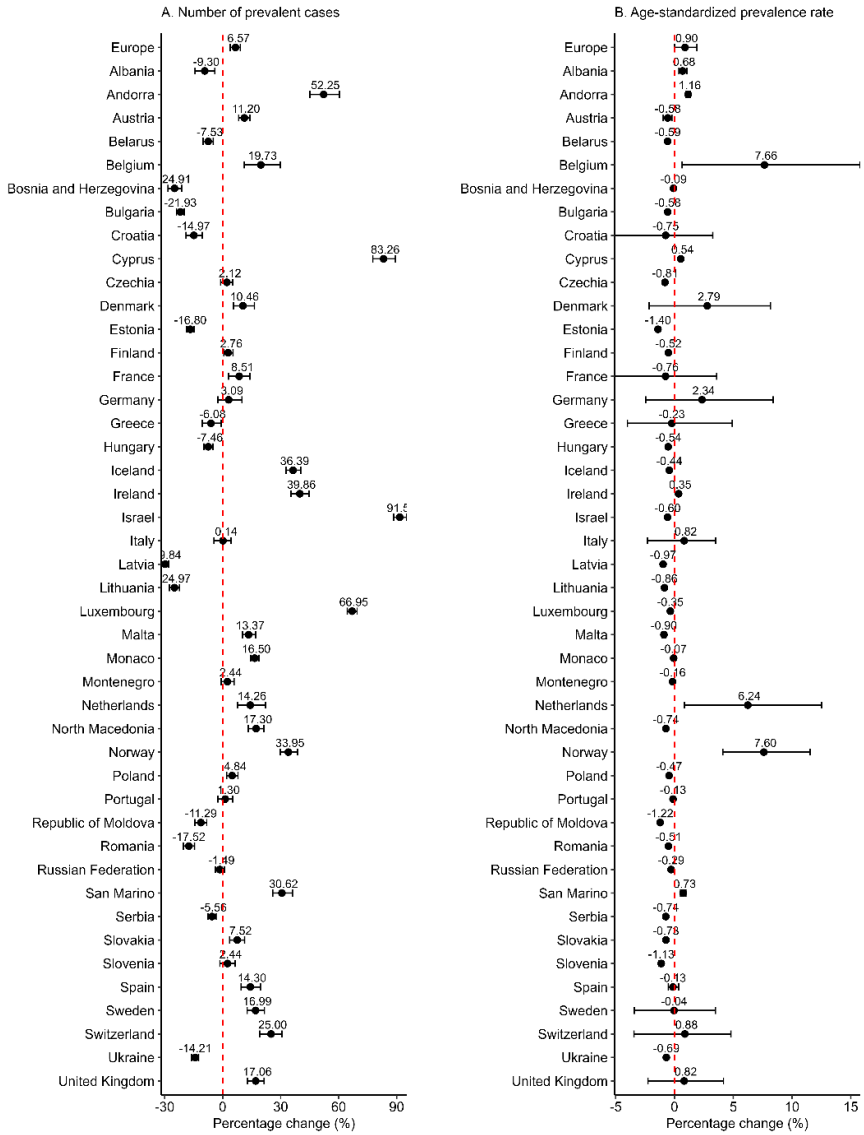
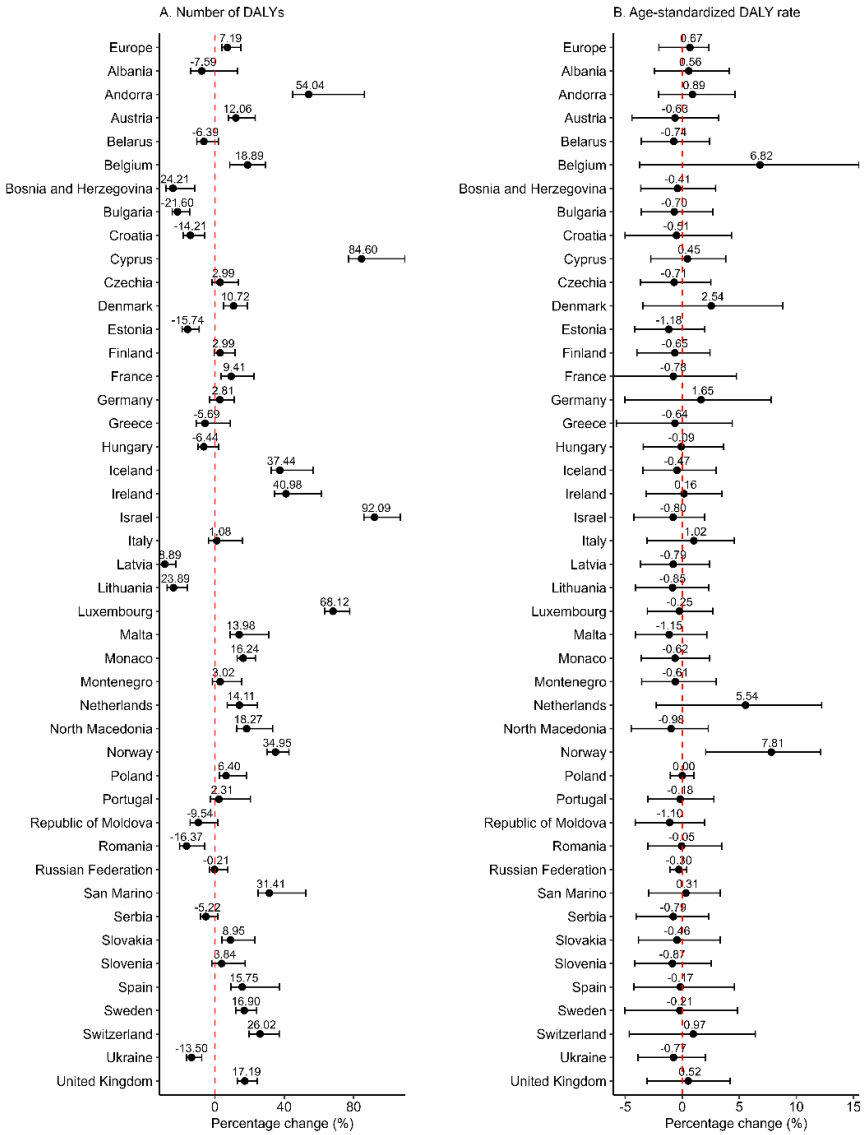


Figure S4a: Region-wise percentage changes in (A) prevalence, (B) DALY, (C) incidence, and (D) YLD in headache disorders burden, 1990–2021

(A) Prevalence



(B) DALYs



(C) Incidence

(D) YLDs

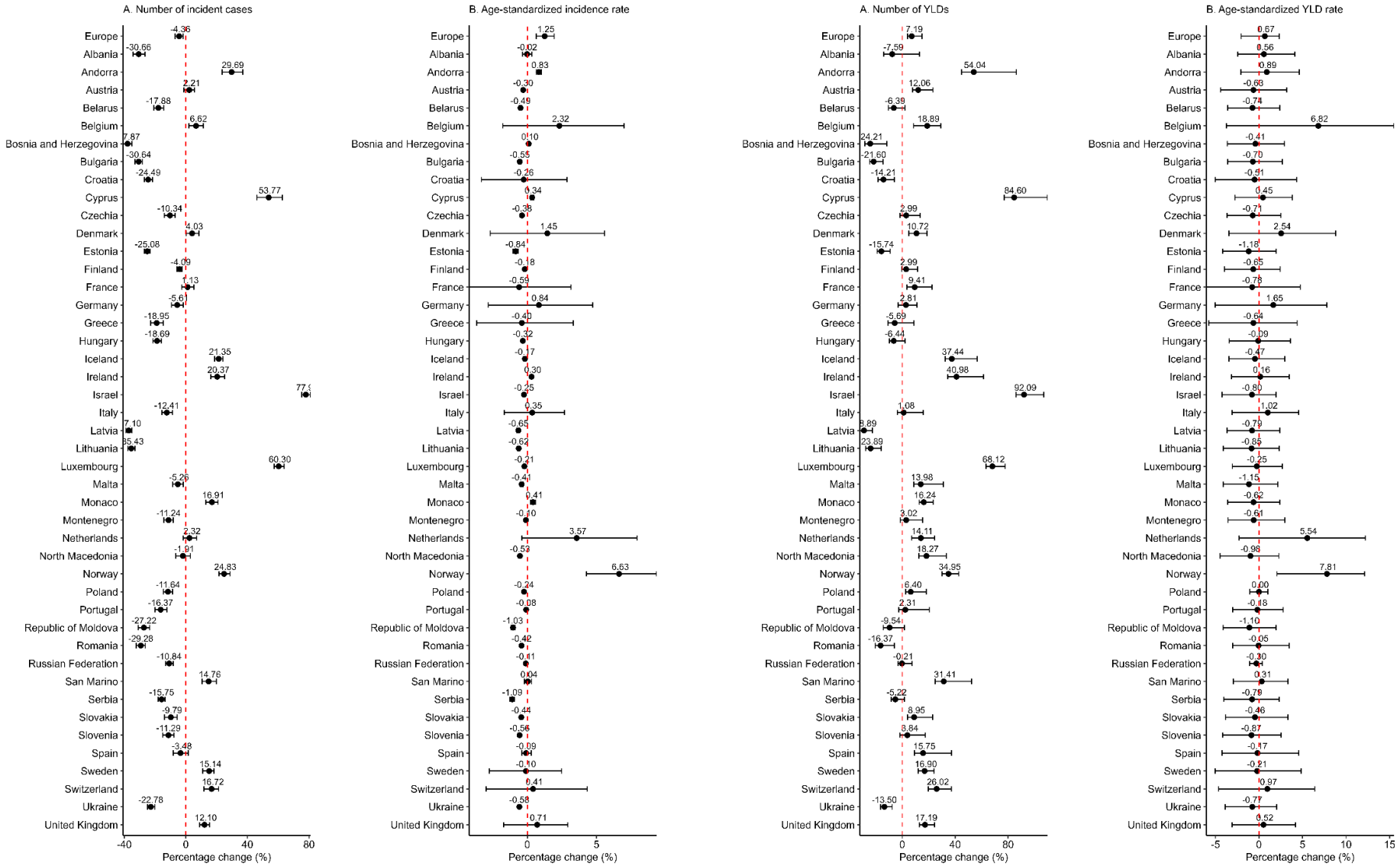
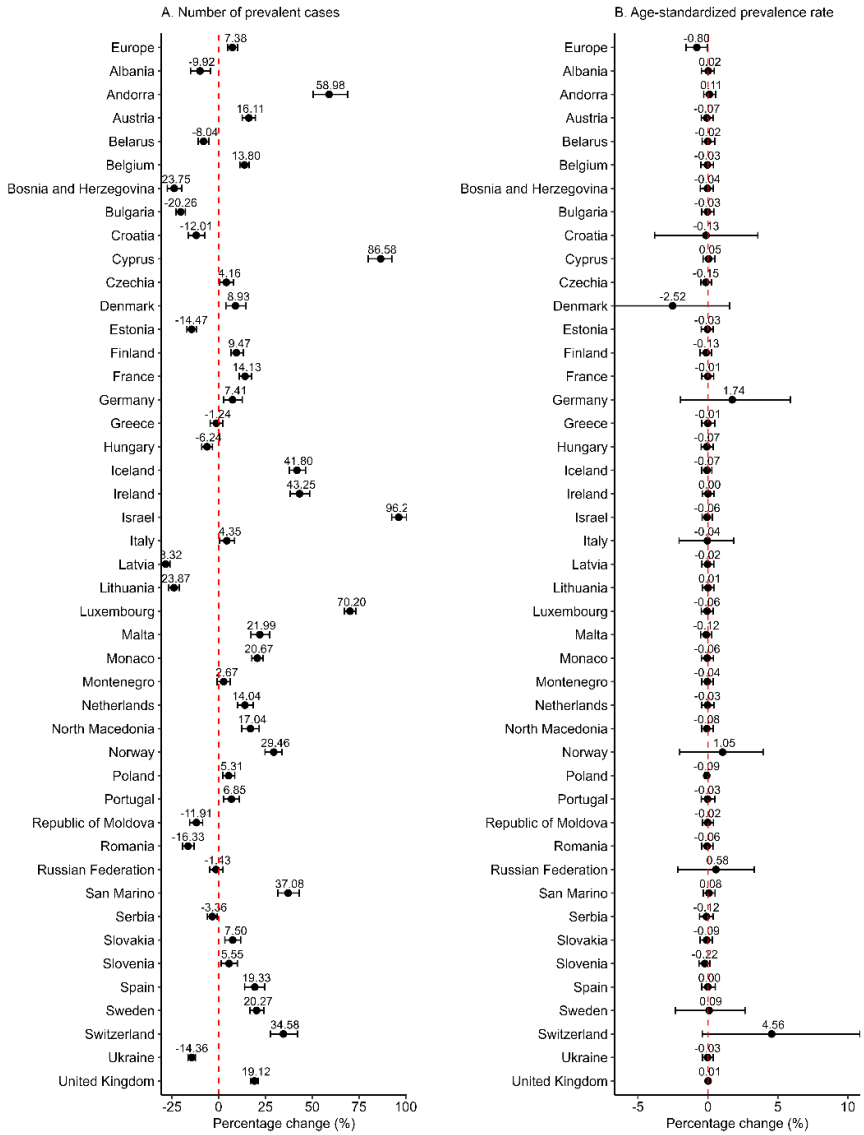
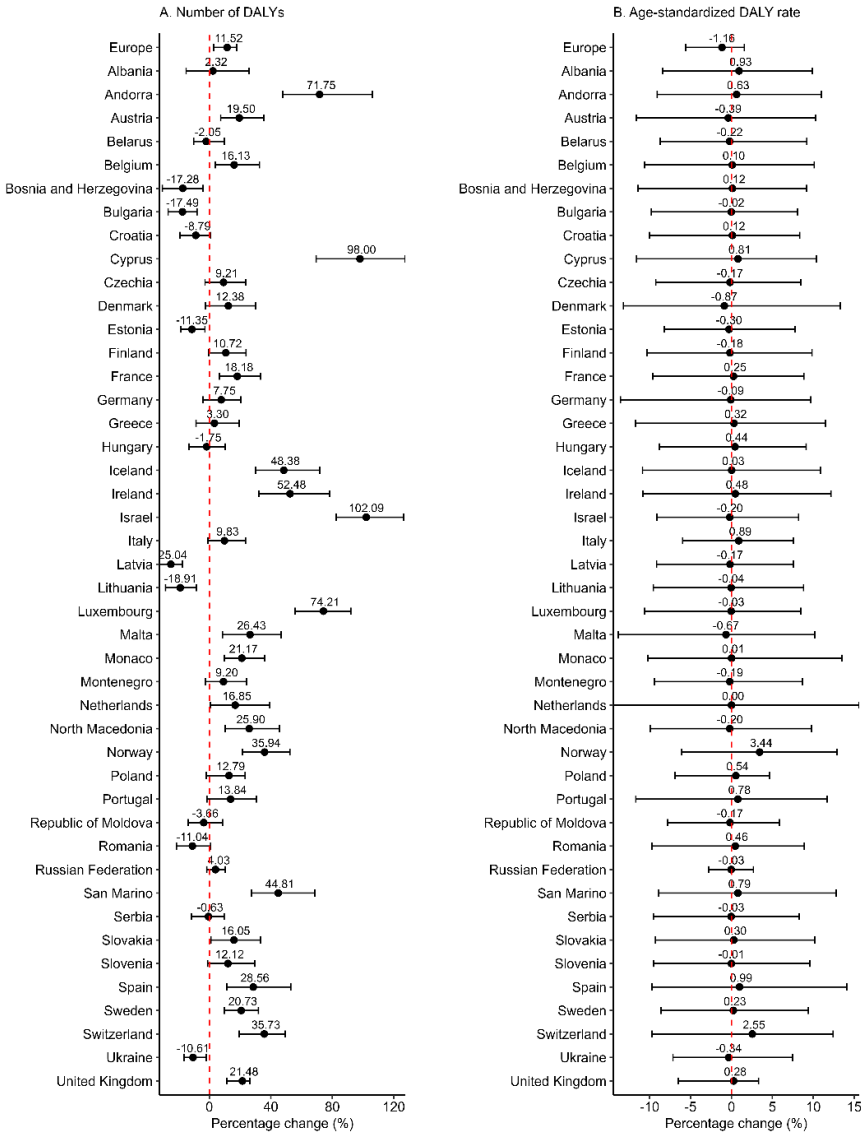


Figure S4b: Region-wise percentage changes in (A) prevalence, (B) DALY, (C) incidence, and (D) YLD in migraine burden, 1990–2021

(A) Prevalence



(B) DALYs



(C) Incidence

(D) YLDs

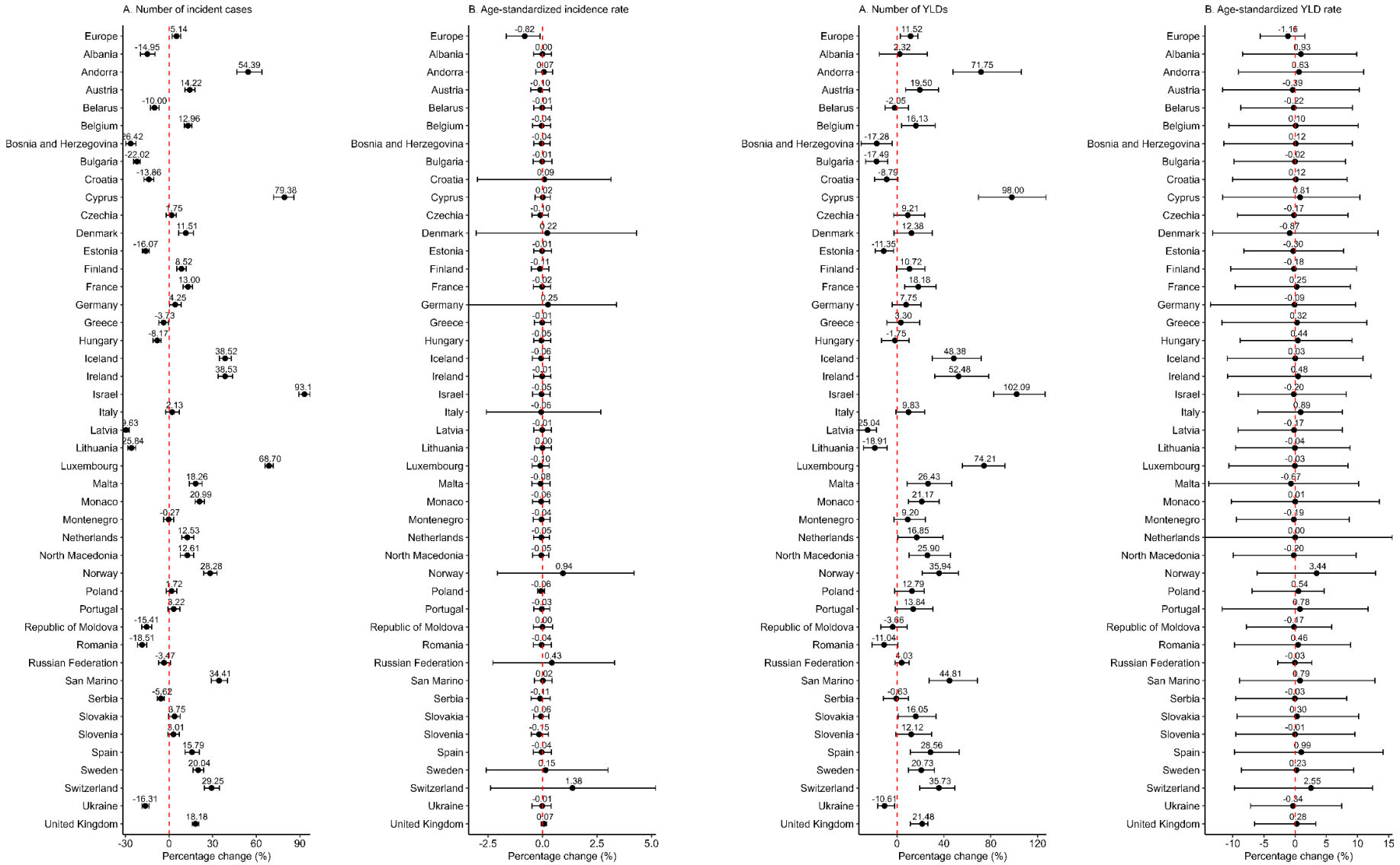
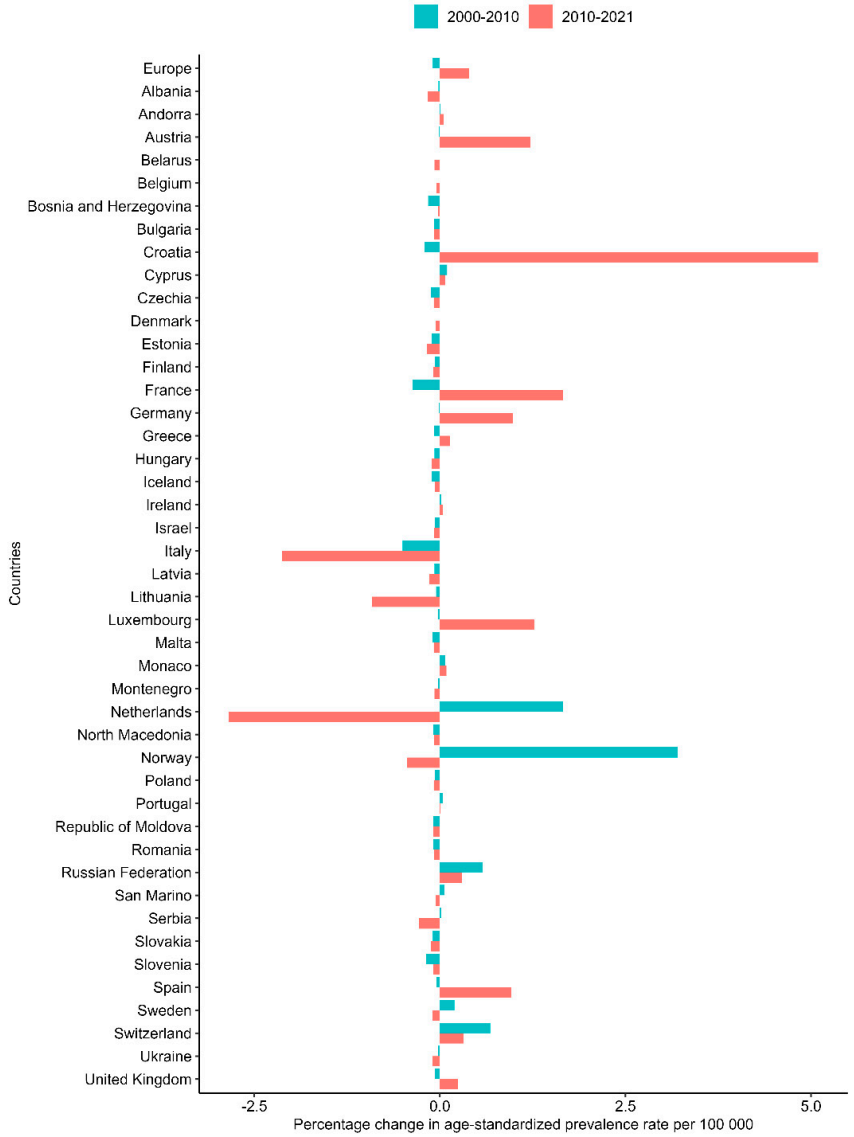
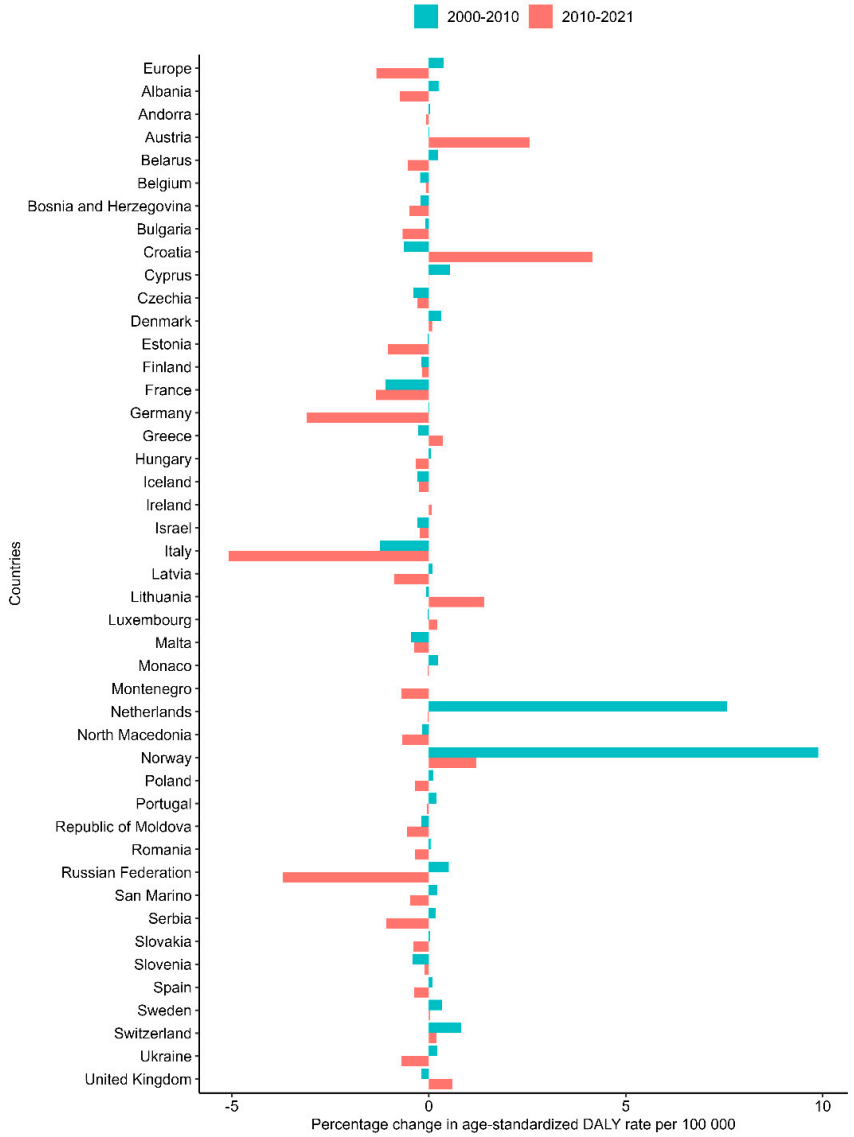


Figure S4c: Region-wise percentage changes in (A) prevalence, (B) DALY, (C) incidence, and (D) YLD in tension-type headache burden, 1990–2021

(A) Prevalence



(B) DALYs



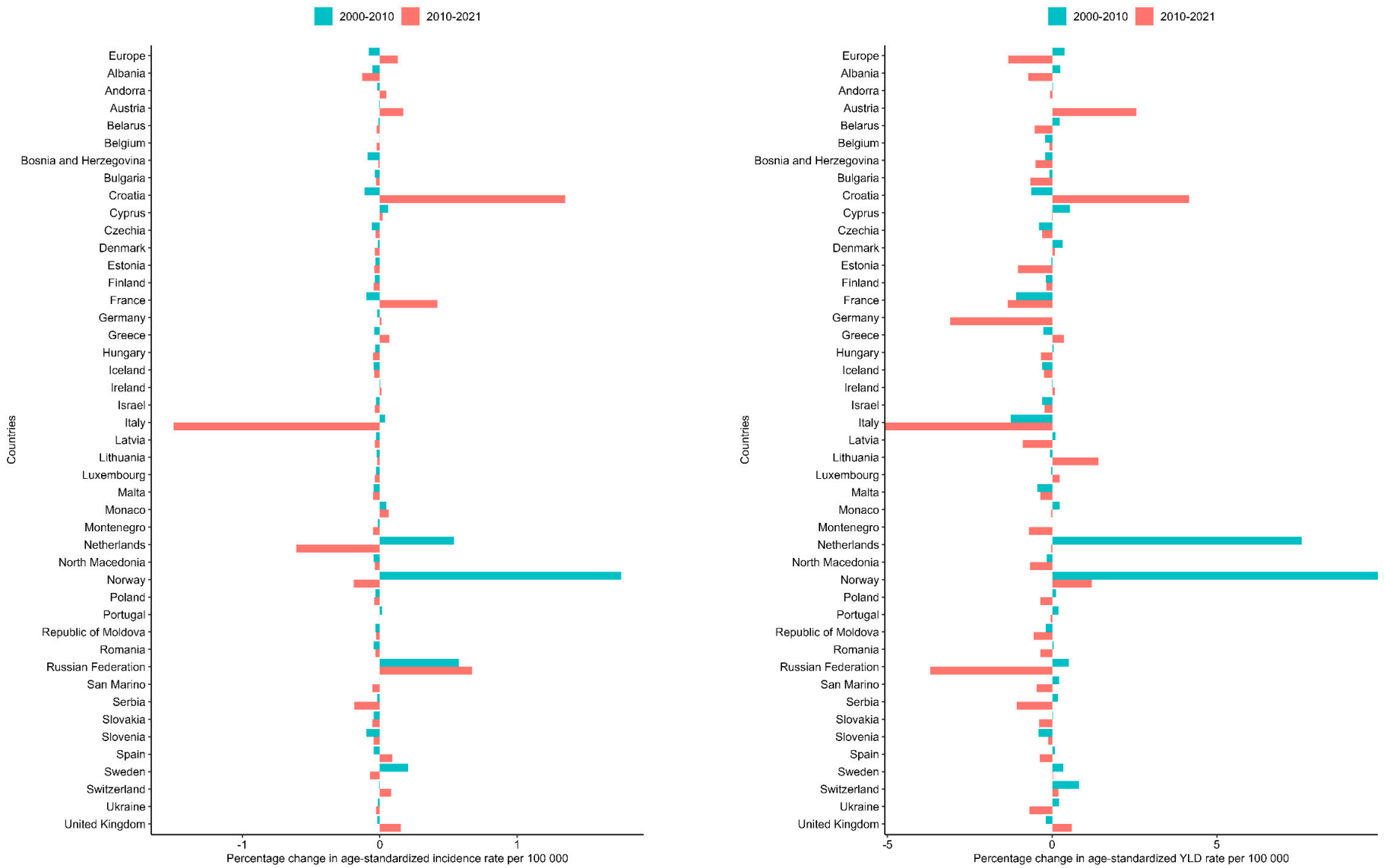
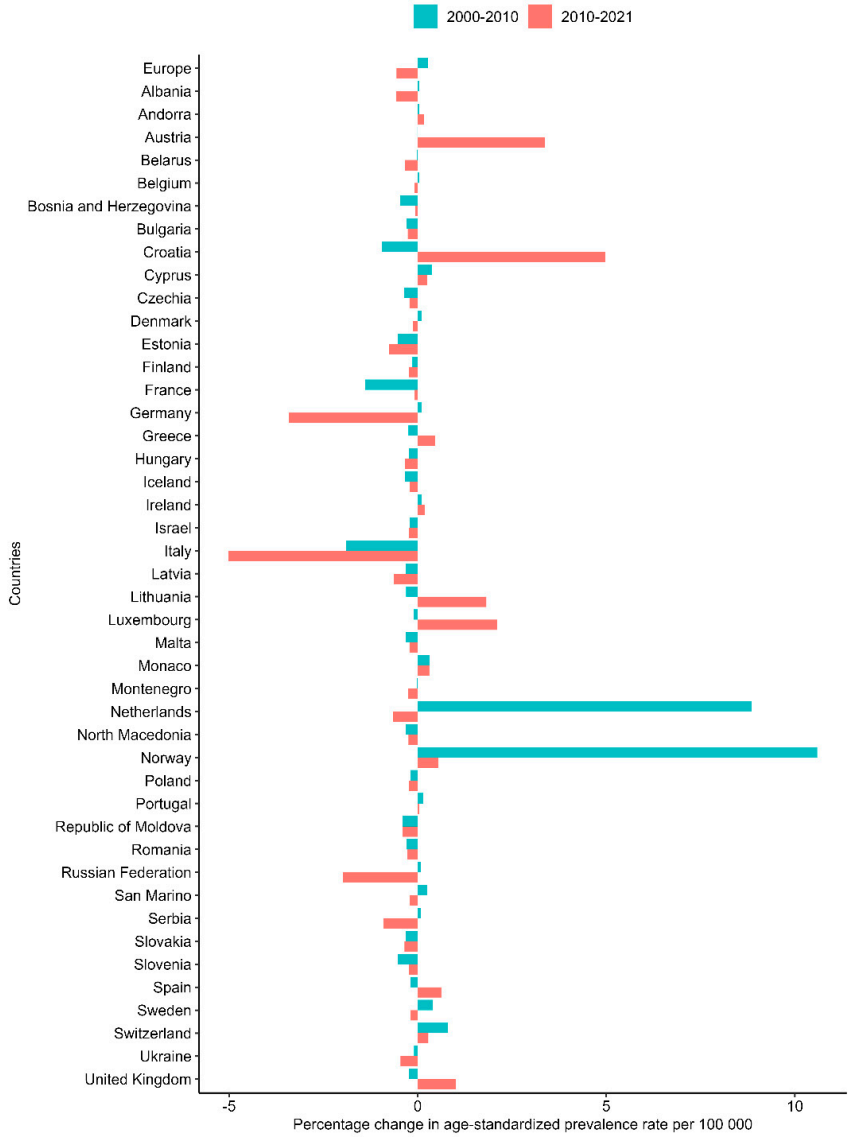
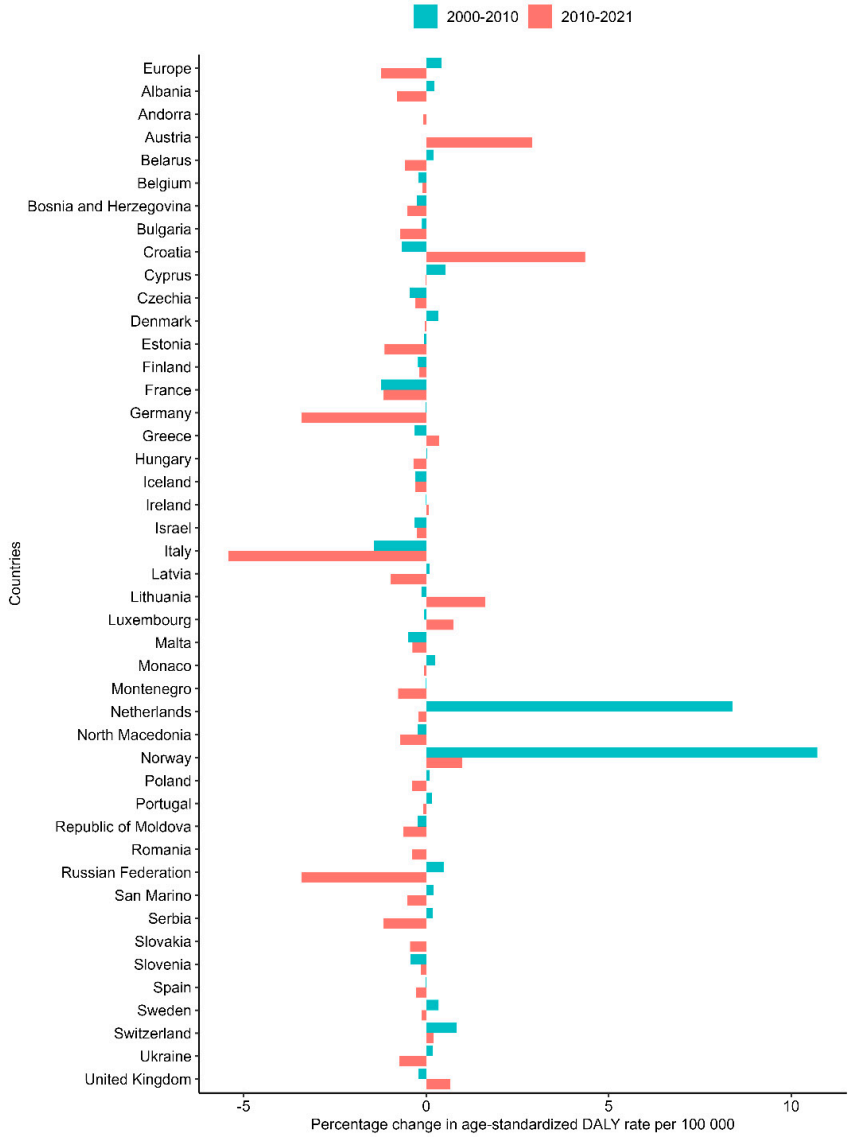


Figure S5a: Changes in age-standardized (A) prevalence, (B) DALY, (C) incidence, and (D) YLD rate for headache disorders, by country, 2000-2010 and 2010-2021

(A) Prevalence



(B) DALYs



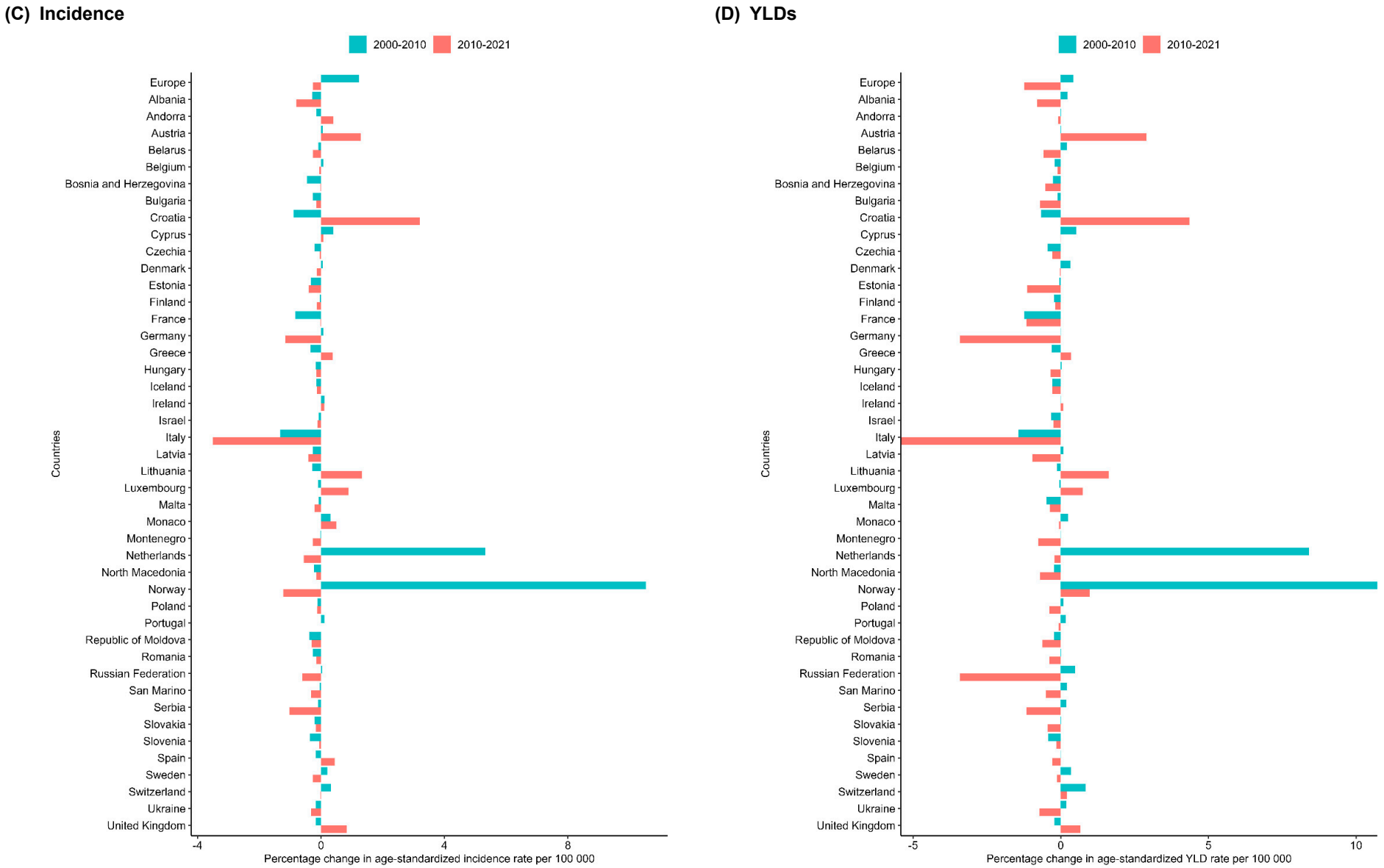
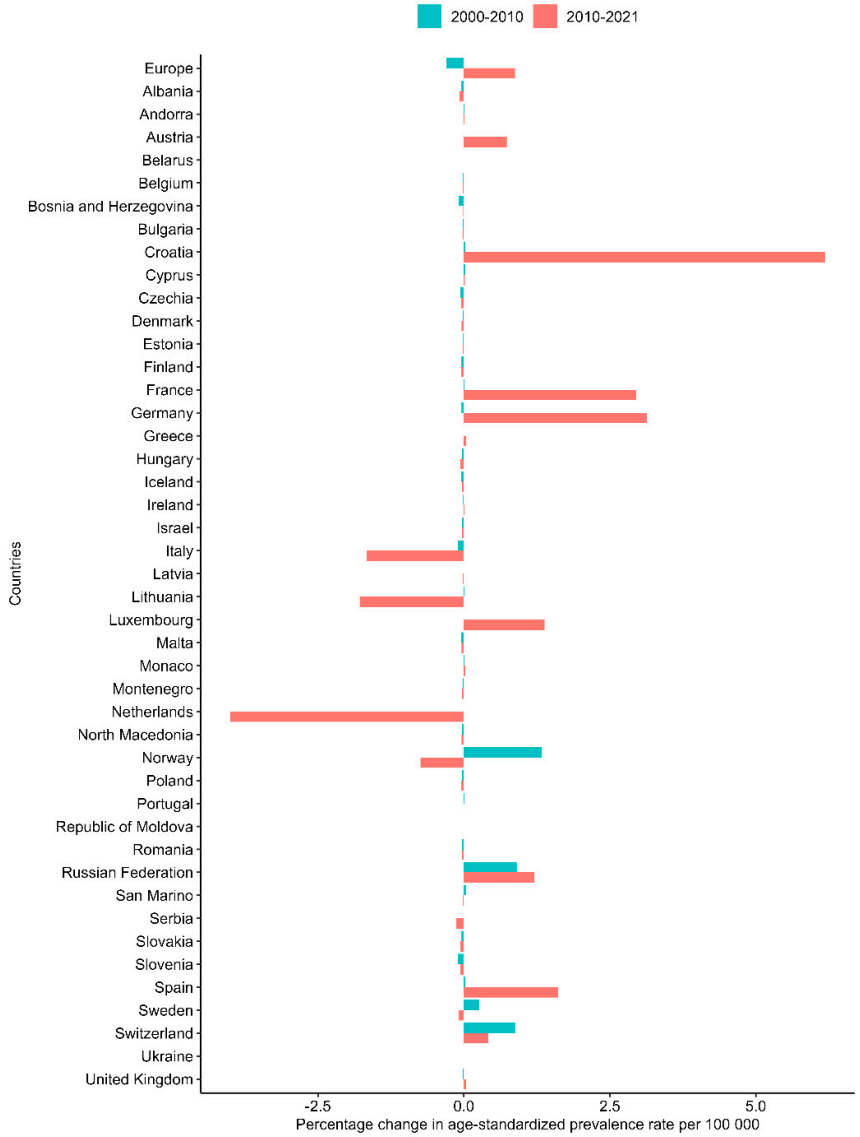
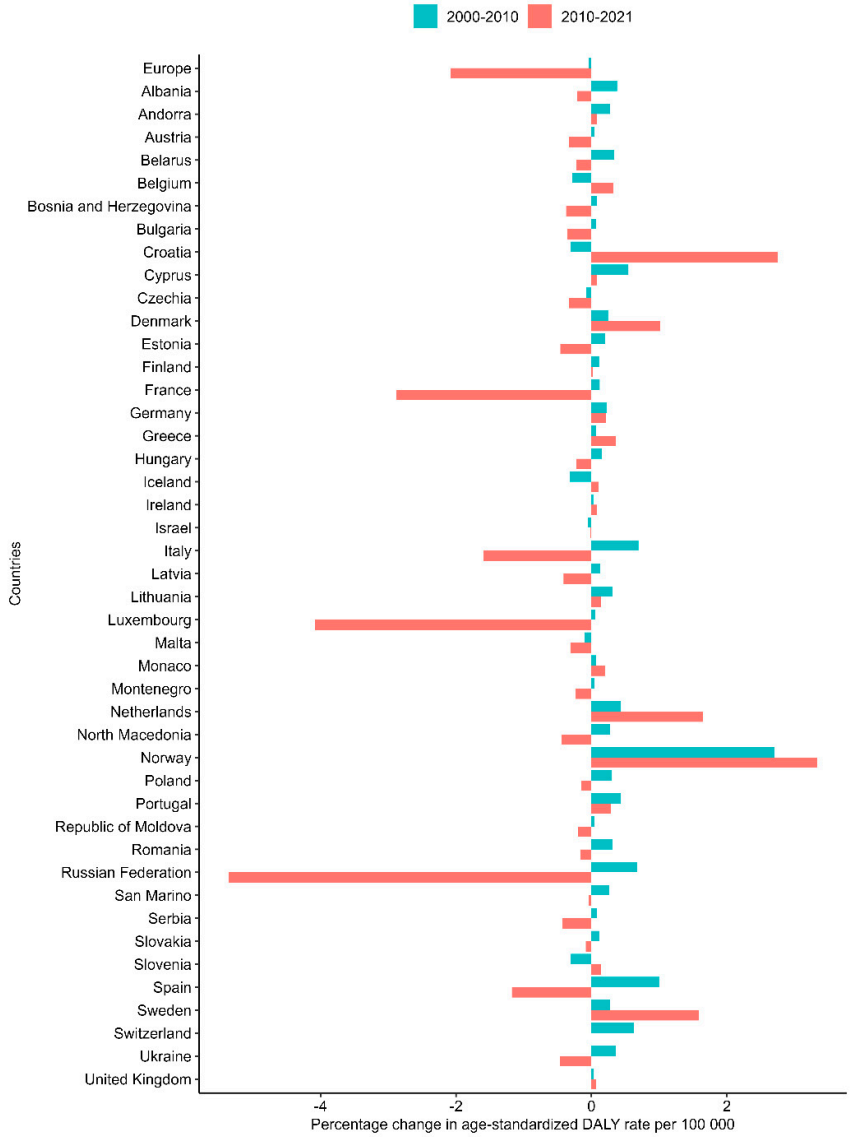


Figure S5b: Changes in age-standardized (A) prevalence, (B) DALY, (C) incidence, and (D) YLD rate for migraine, by country, 2000-2010 and 2010-2021

(A) Prevalence



(B) DALYs



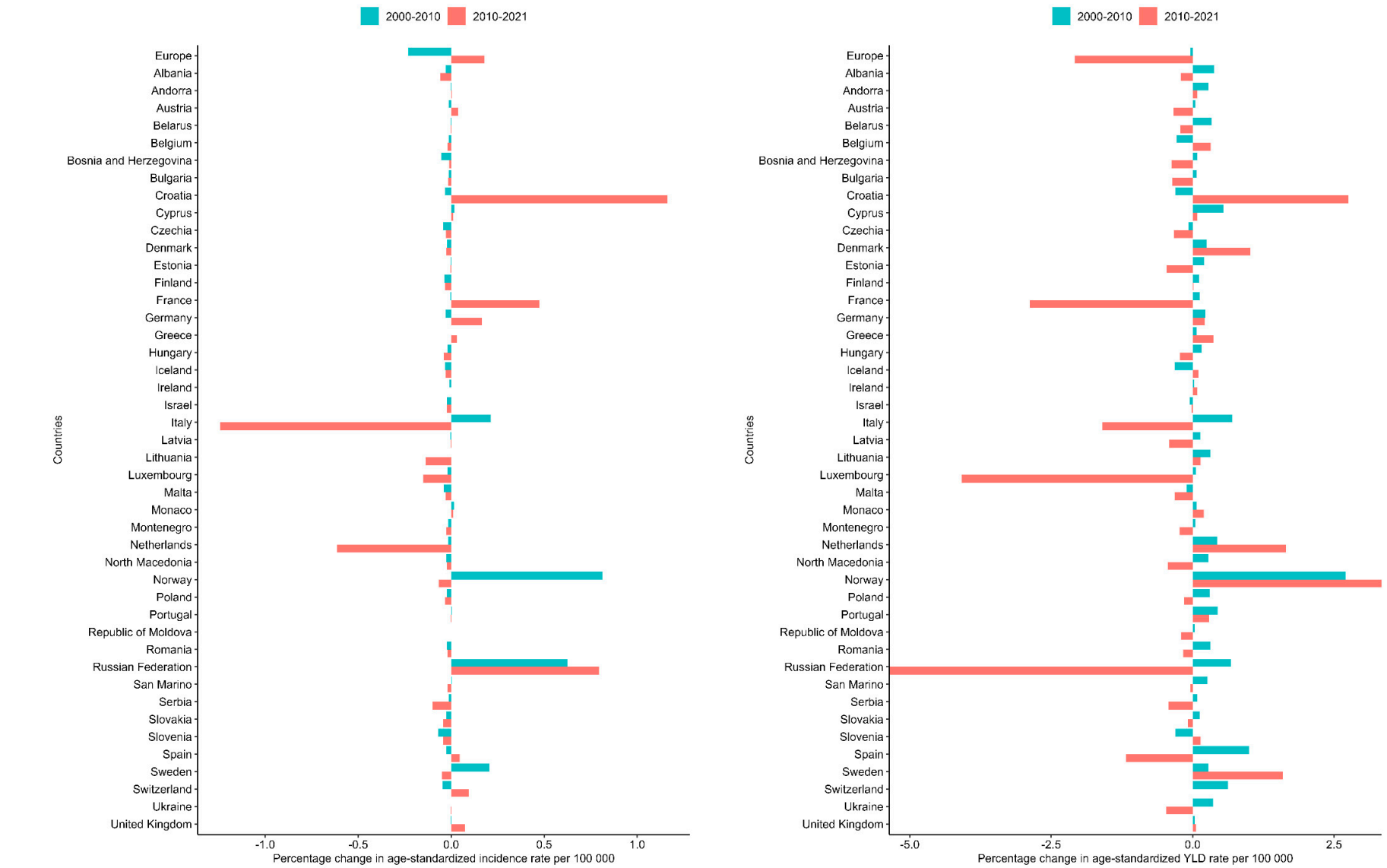
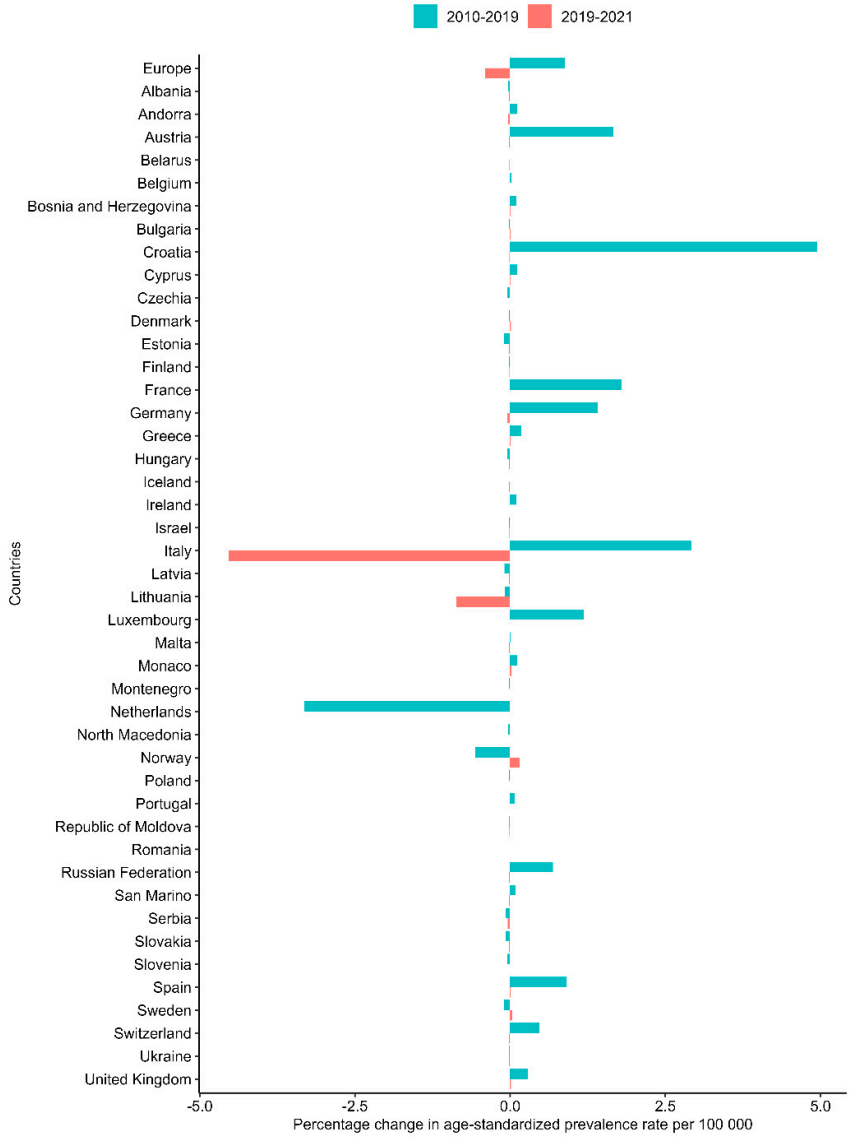
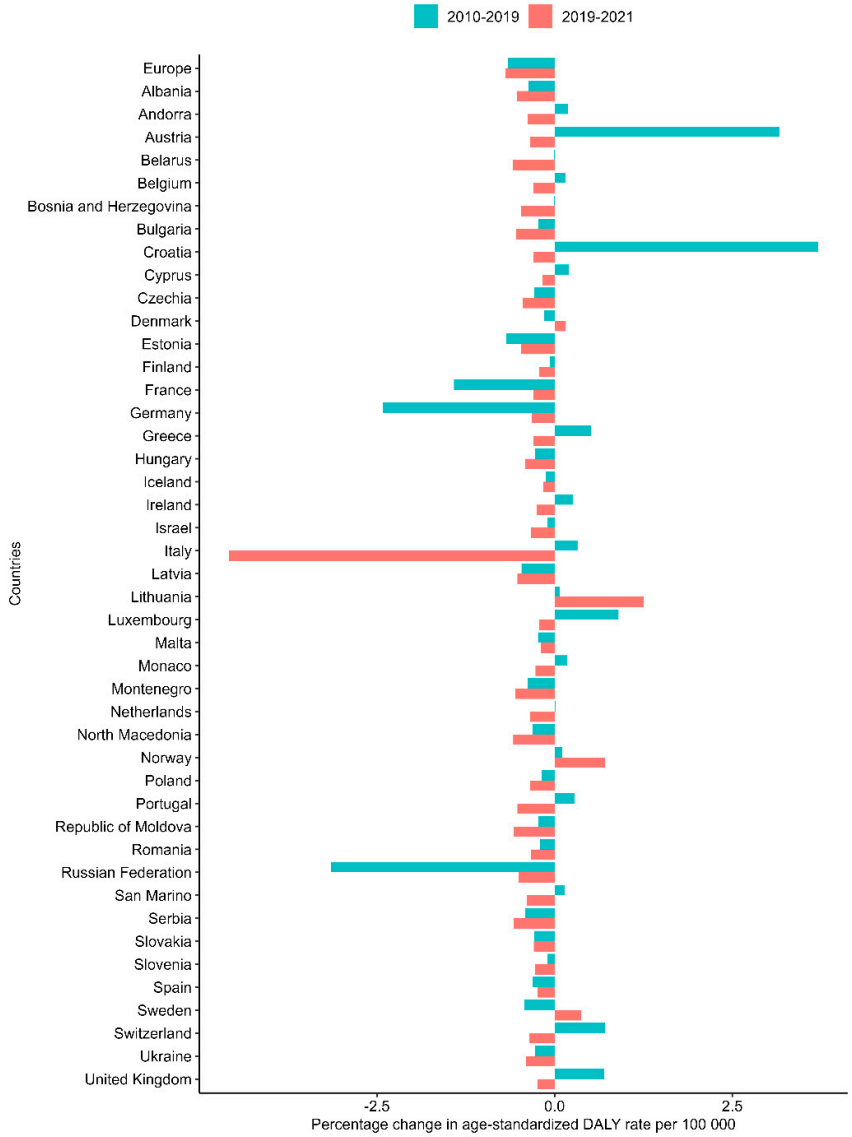


Figure S5c: Changes in age-standardized (A) prevalence, (B) DALY, (C) incidence, and (D) YLD rate for tension-type headache, by country, 2000-2010 and 2010-2021

(A) Prevalence



(B) DALYs



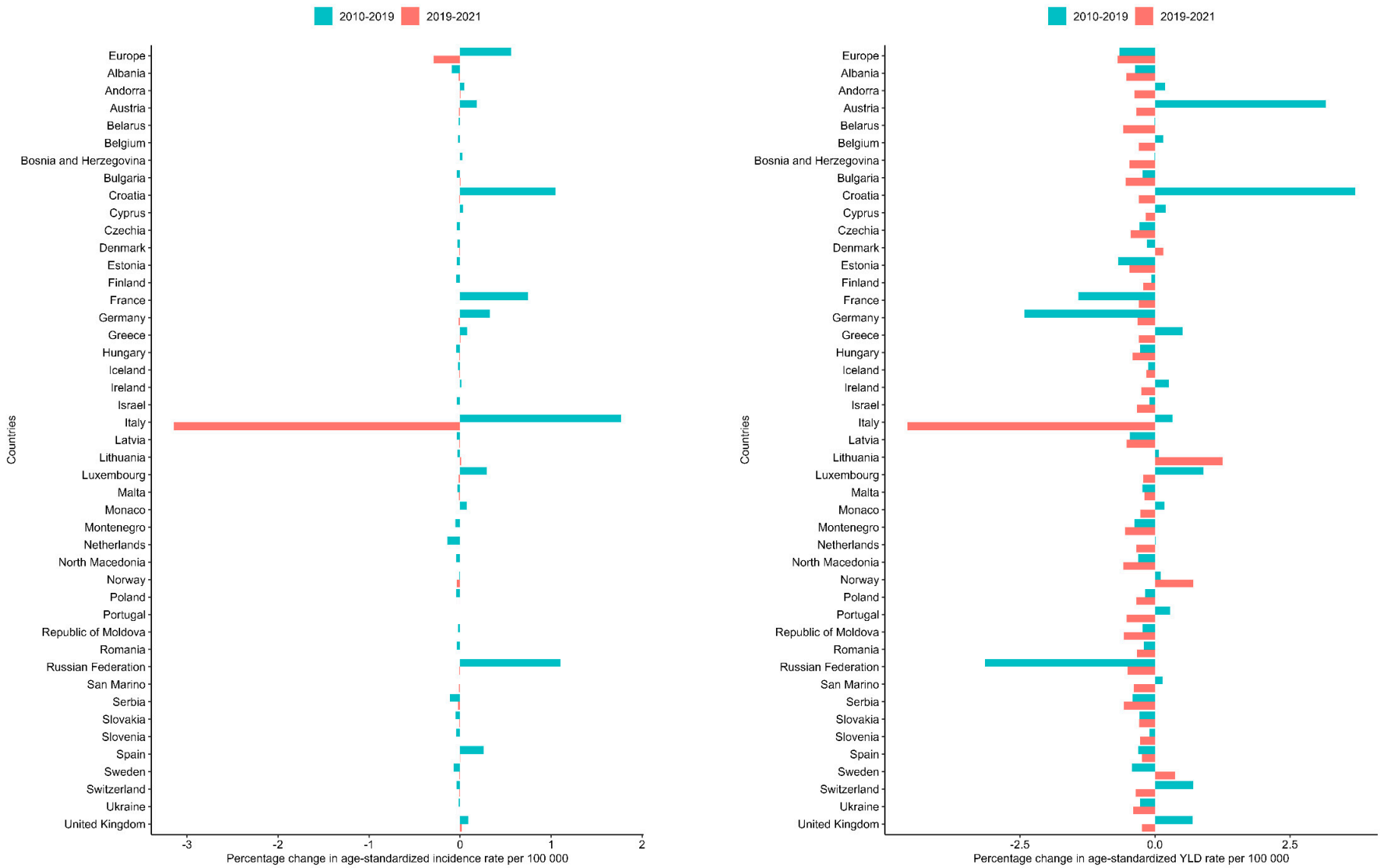
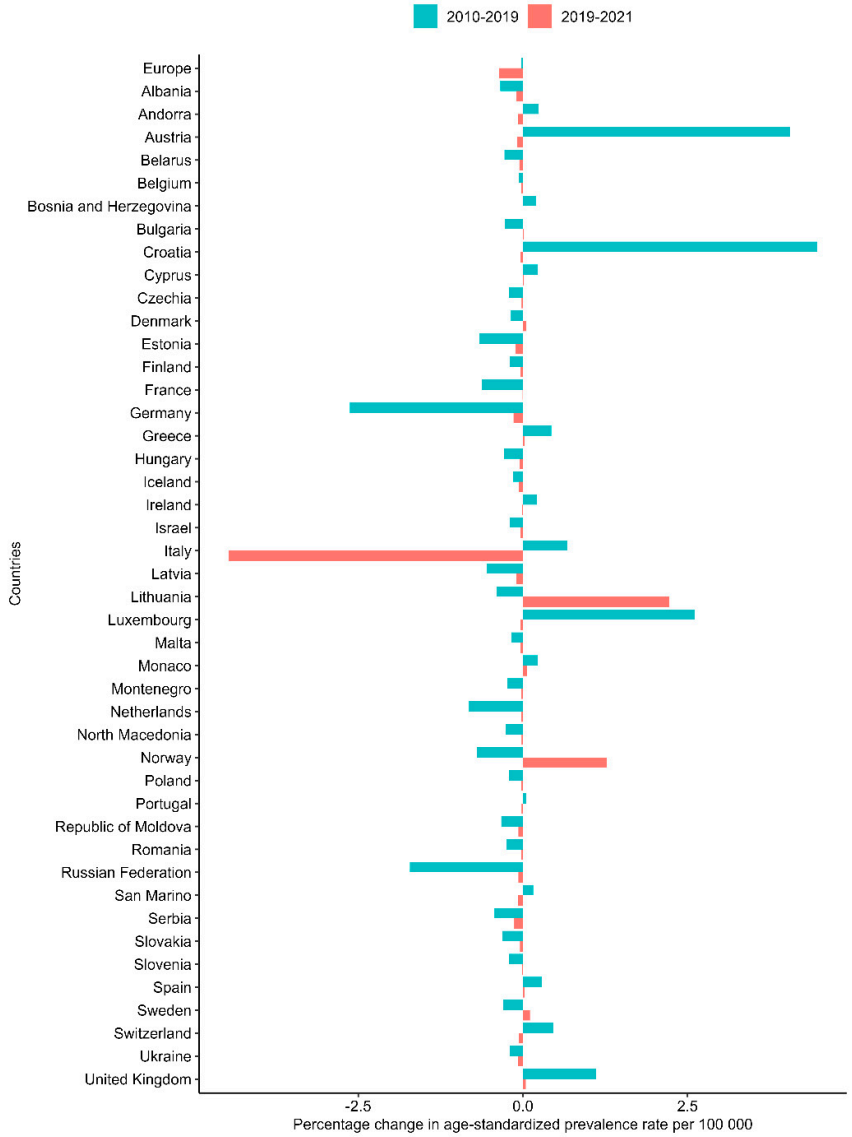
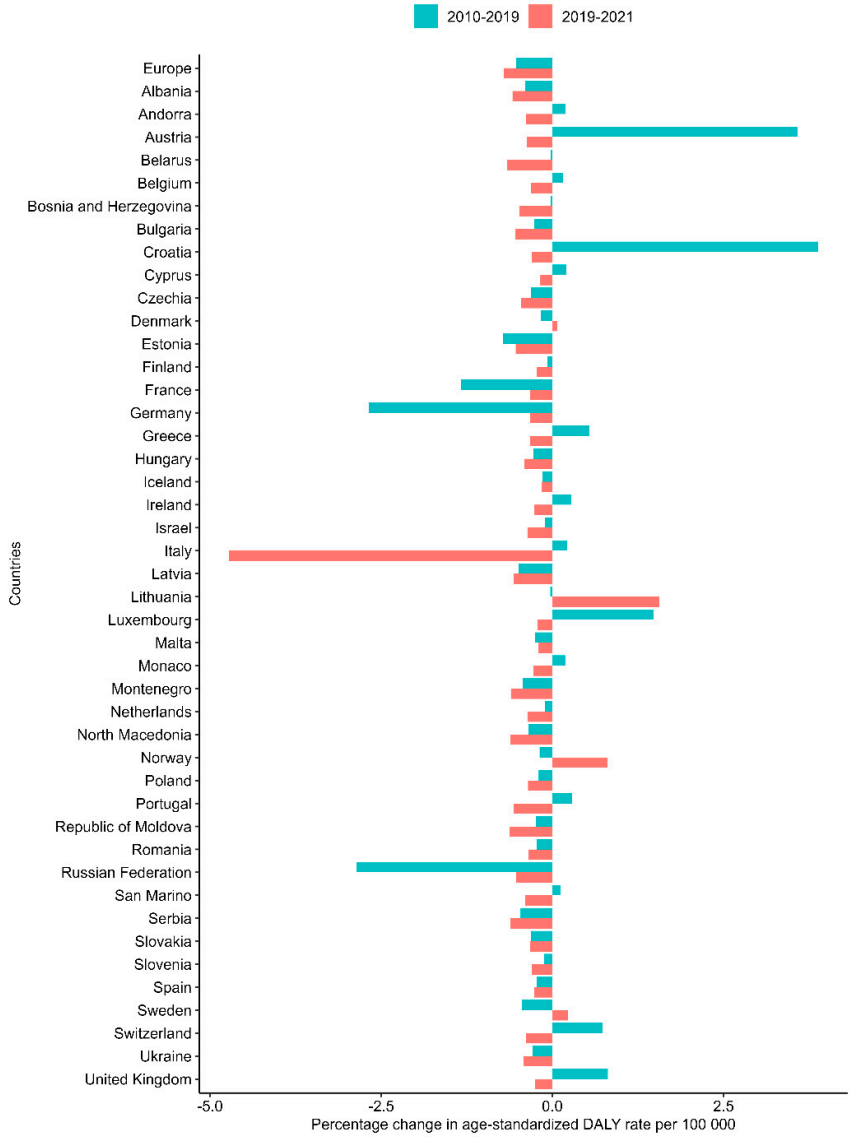


Figure S6a: Changes in age-standardized (A) prevalence, (B) DALY, (C) incidence, and (D) YLD rate for headache disorders, by country, 2010-2019 and 2019-2021

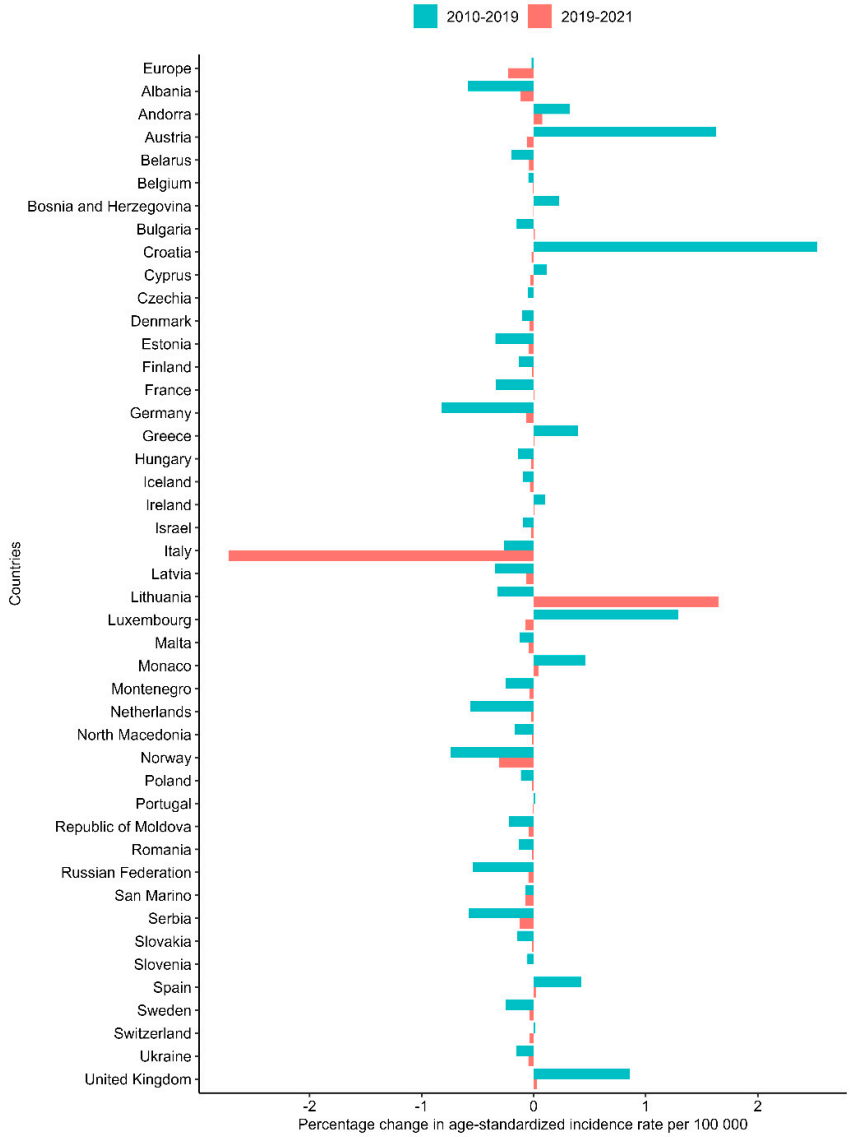
(A) Prevalence



(B) DALYs



(C) Incidence



(D) YLDs

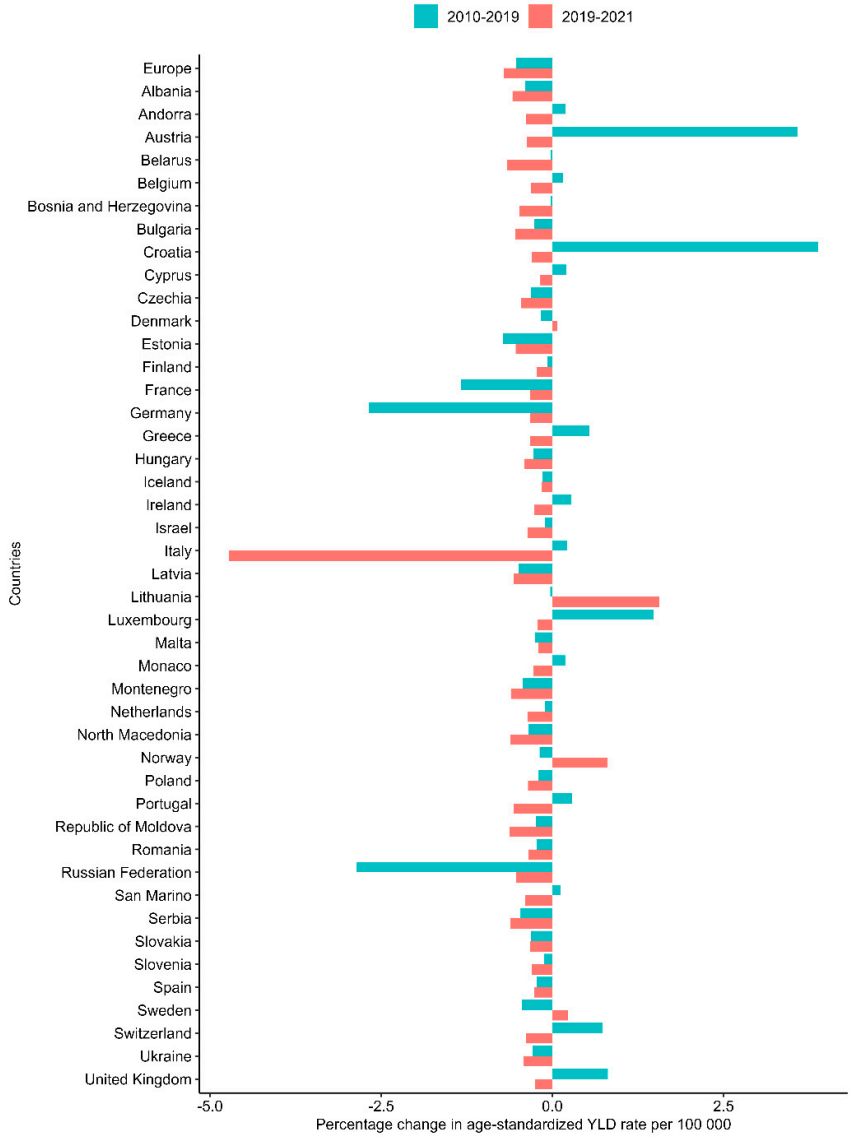
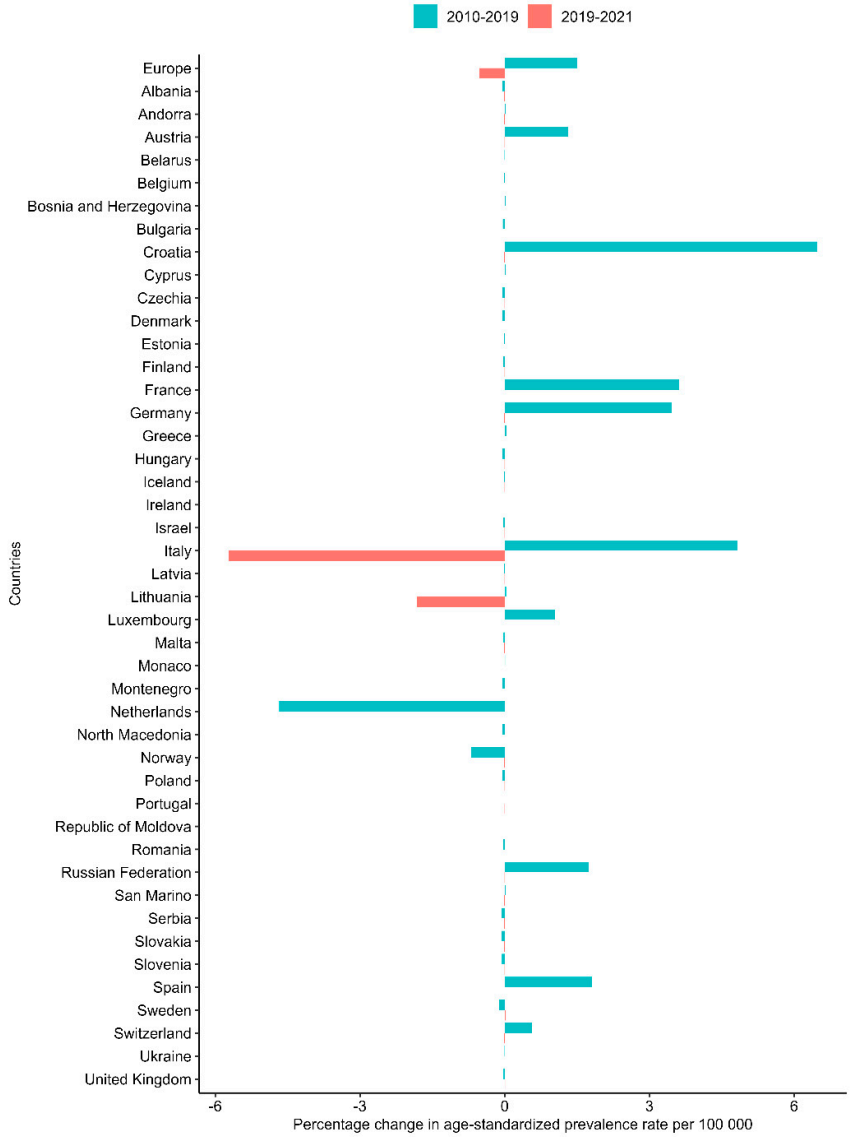
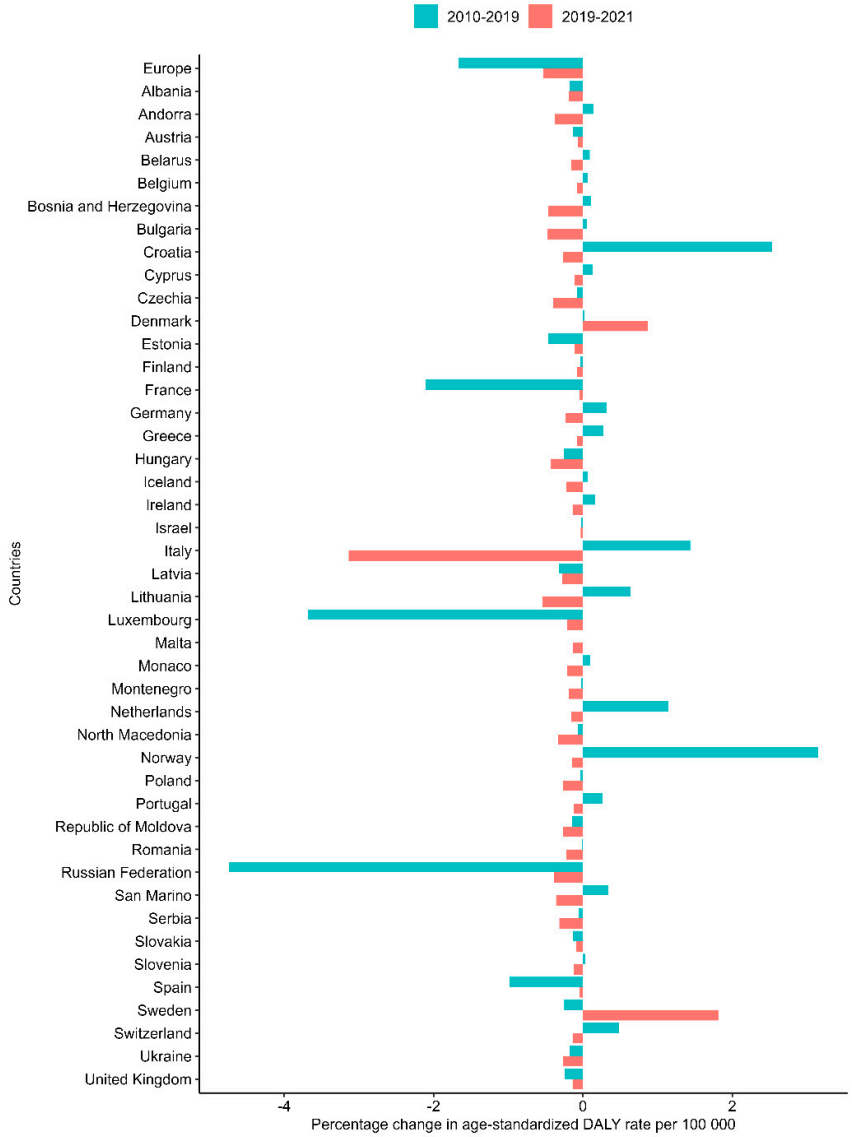


Figure S6b: Changes in age-standardized (A) prevalence, (B) DALY, (C) incidence, and (D) YLD rate for migraine, by country, 2010-2019 and 2019-2021

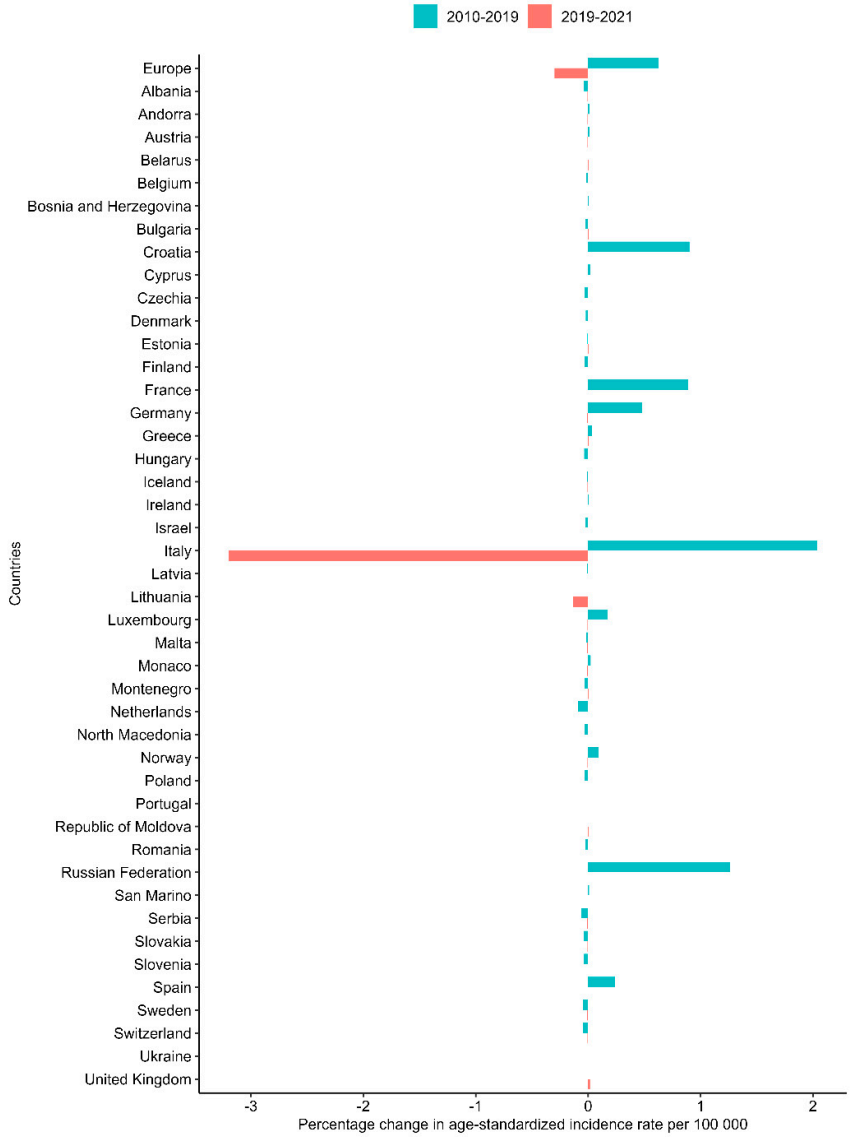
(A) Prevalence



(B) DALYs



(C) Incidence



(D) YLDs

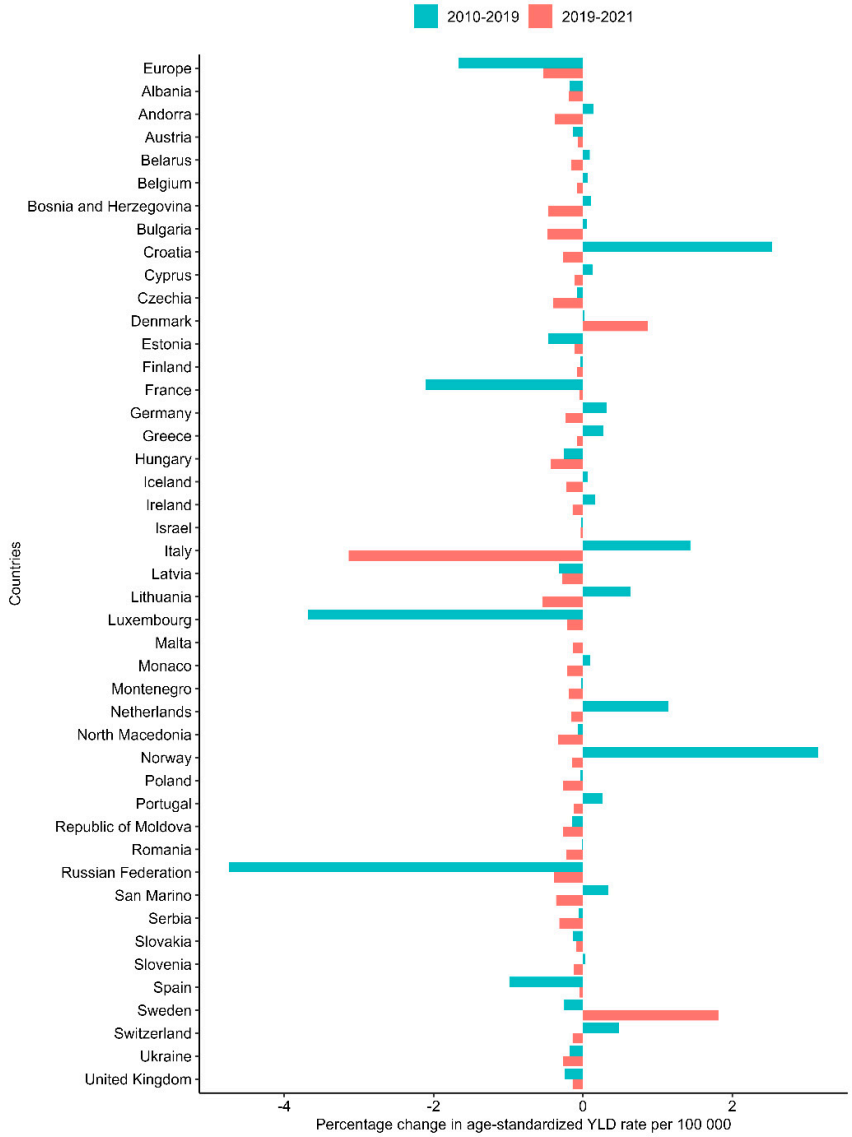


Figure S6c: Changes in age-standardized (A) prevalence, (B) DALY, (C) incidence, and (D) YLD rate for tension-type headache, by country, 2010-2019 and 2019-2021

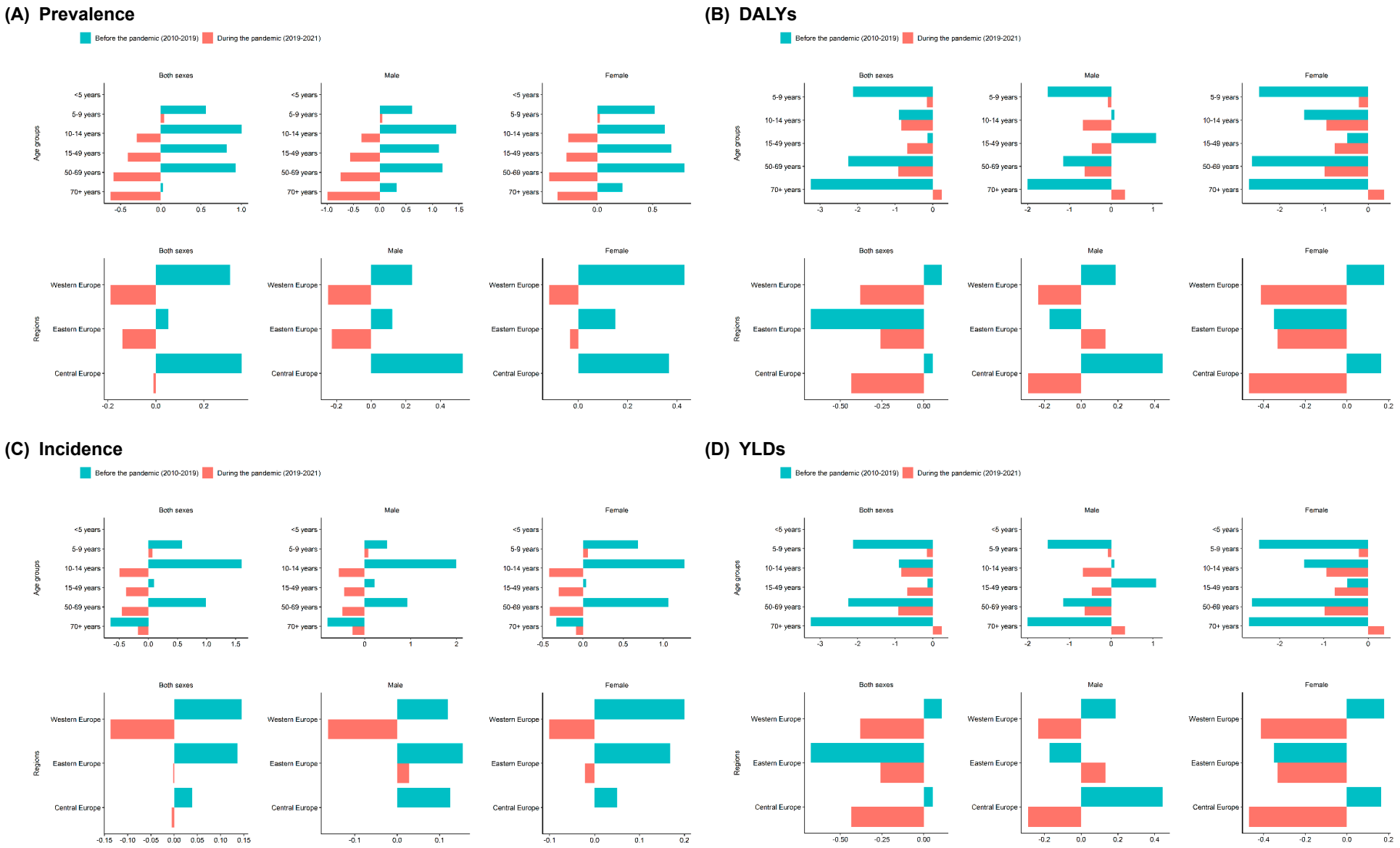


Figure S7a: Annual changes in (A) prevalence, (B) DALY, (C) incidence, and (D) YLD rates of headache disorders comparing pre-pandemic (2010-2019) to pandemic periods (2019-2021), stratified by age group and by region

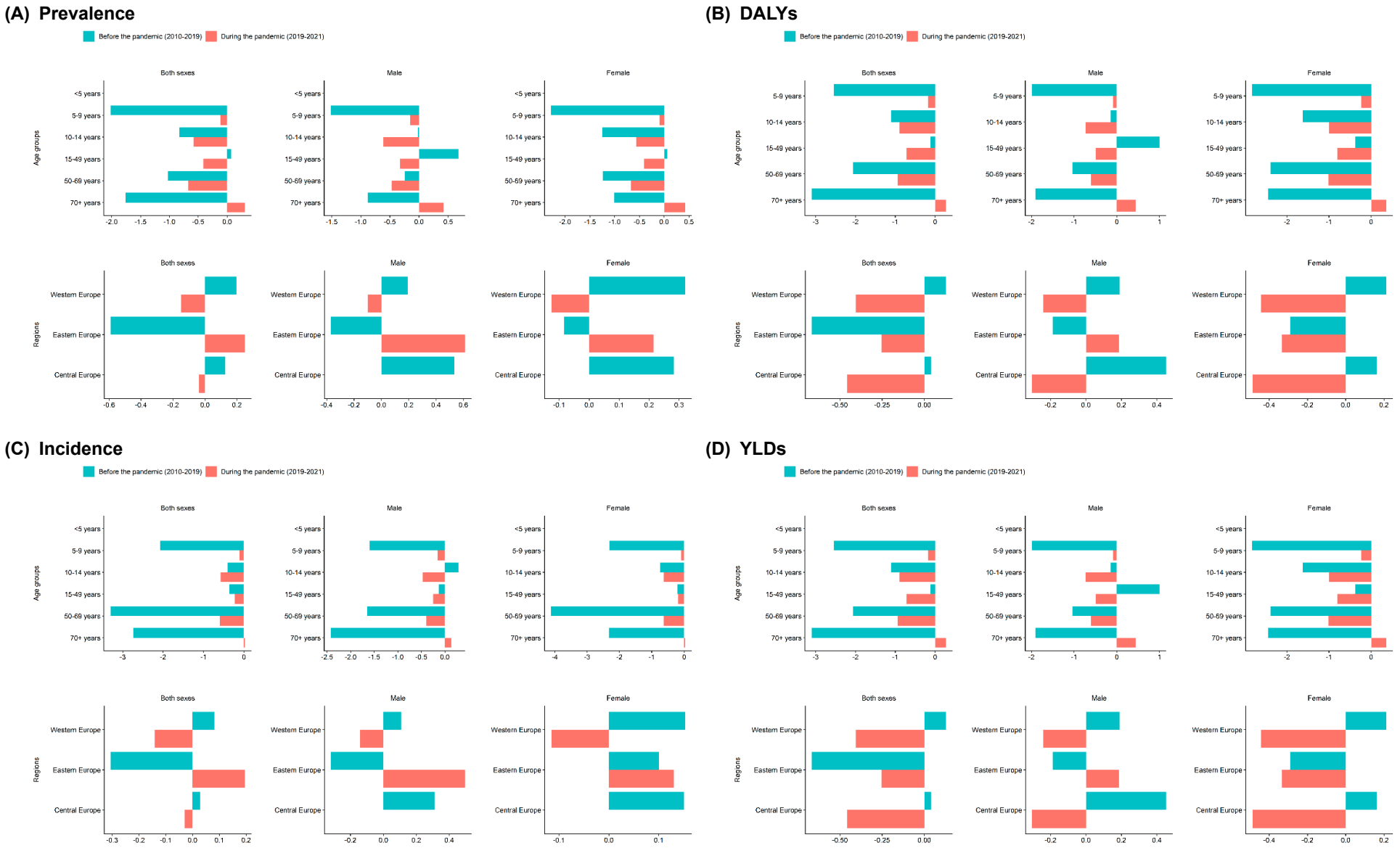


Figure S7b: Annual changes in (A) prevalence, (B) DALY, (C) incidence, and (D) YLD rates of migraine comparing pre-pandemic (2010-2019) to pandemic periods (2019-2021), stratified by age group and by region

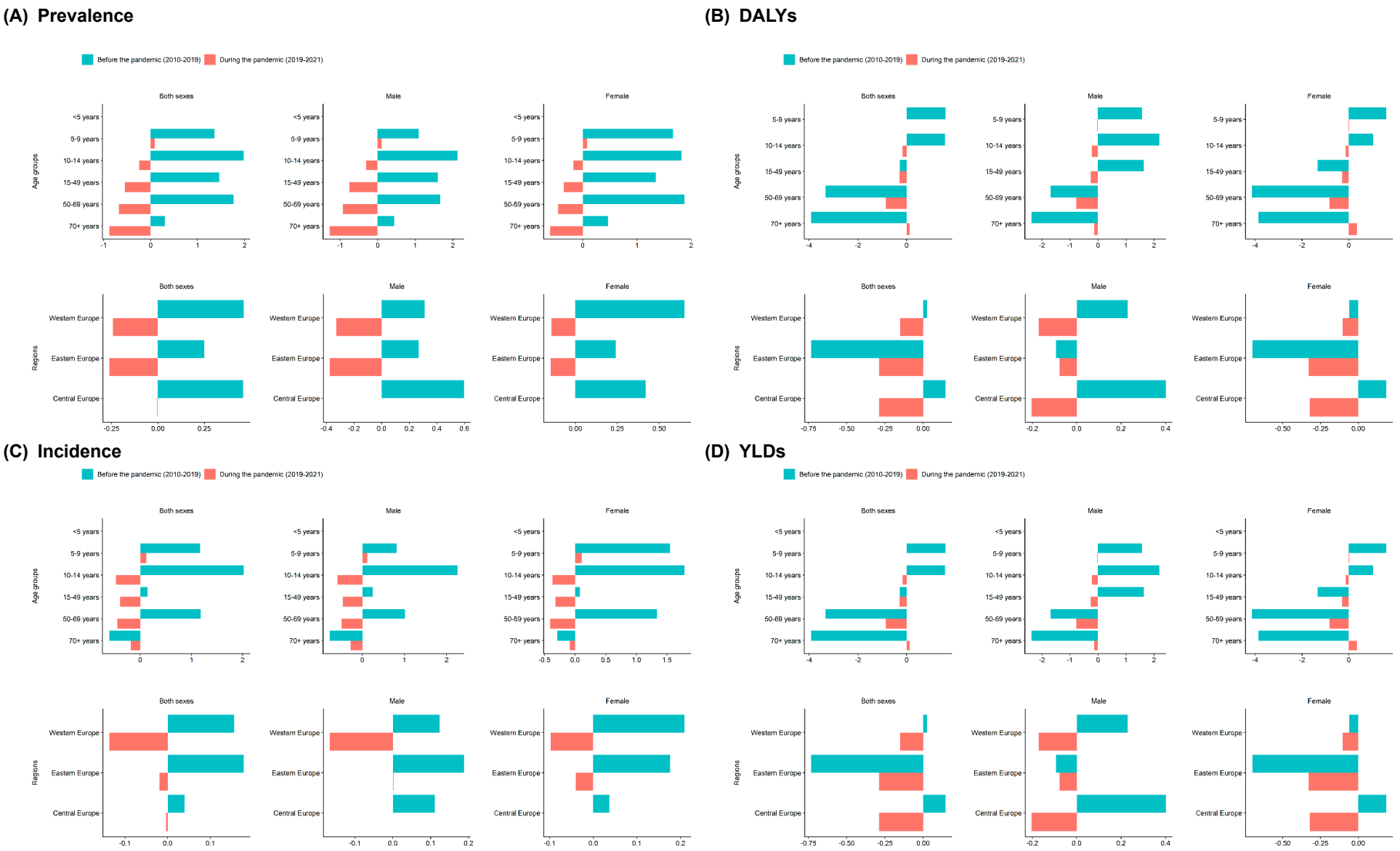


Figure S7c: Annual changes in (A) prevalence, (B) DALY, (C) incidence, and (D) YLD rates of tension-type headache comparing pre-pandemic (2010-2019) to pandemic periods (2019-2021), stratified by age group and by region

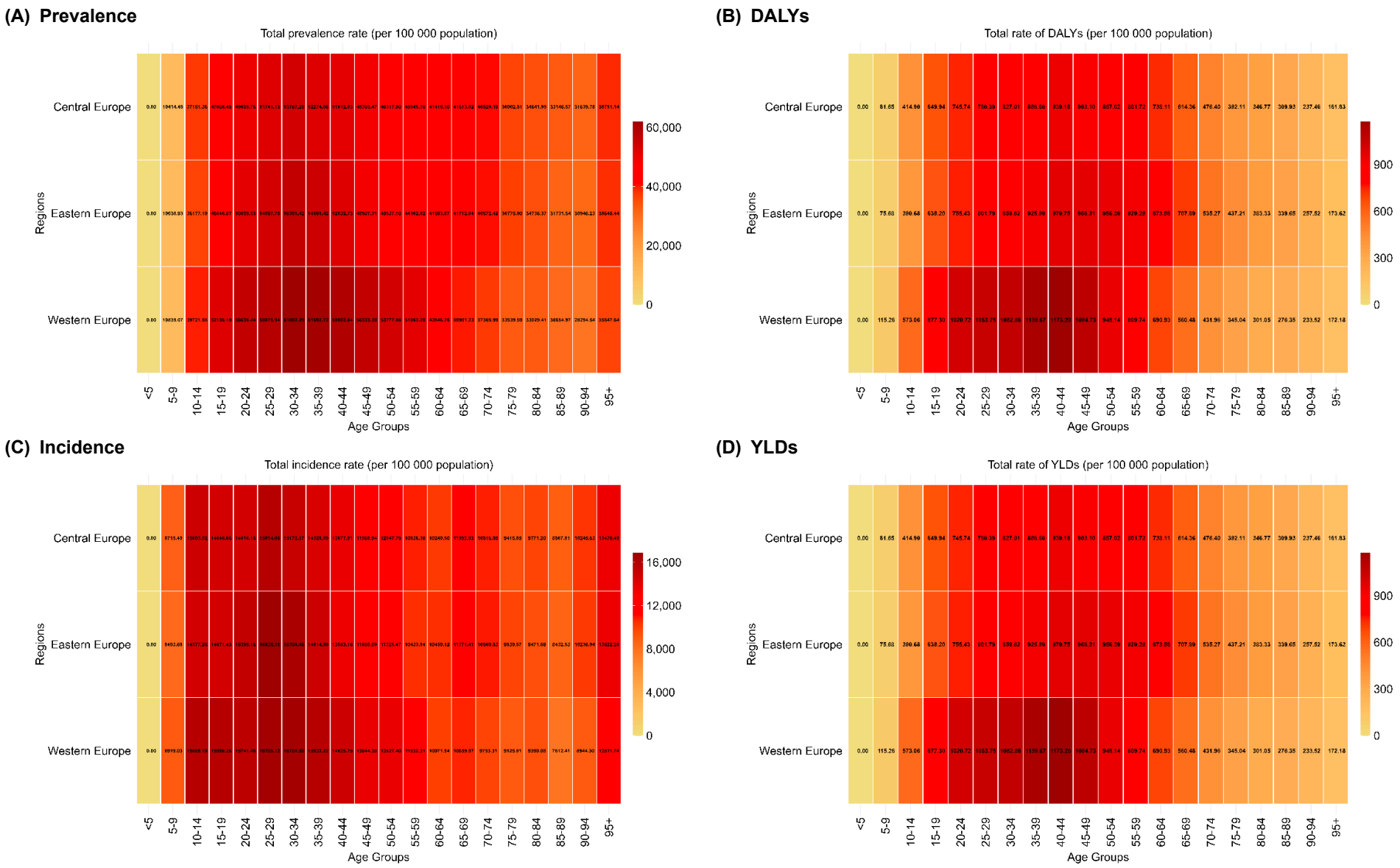


Figure S8a: Total (A) prevalence, (B) DALY, (C) incidence, and (D) YLD rates of headache disorders for both sexes, by age group and region, 2021

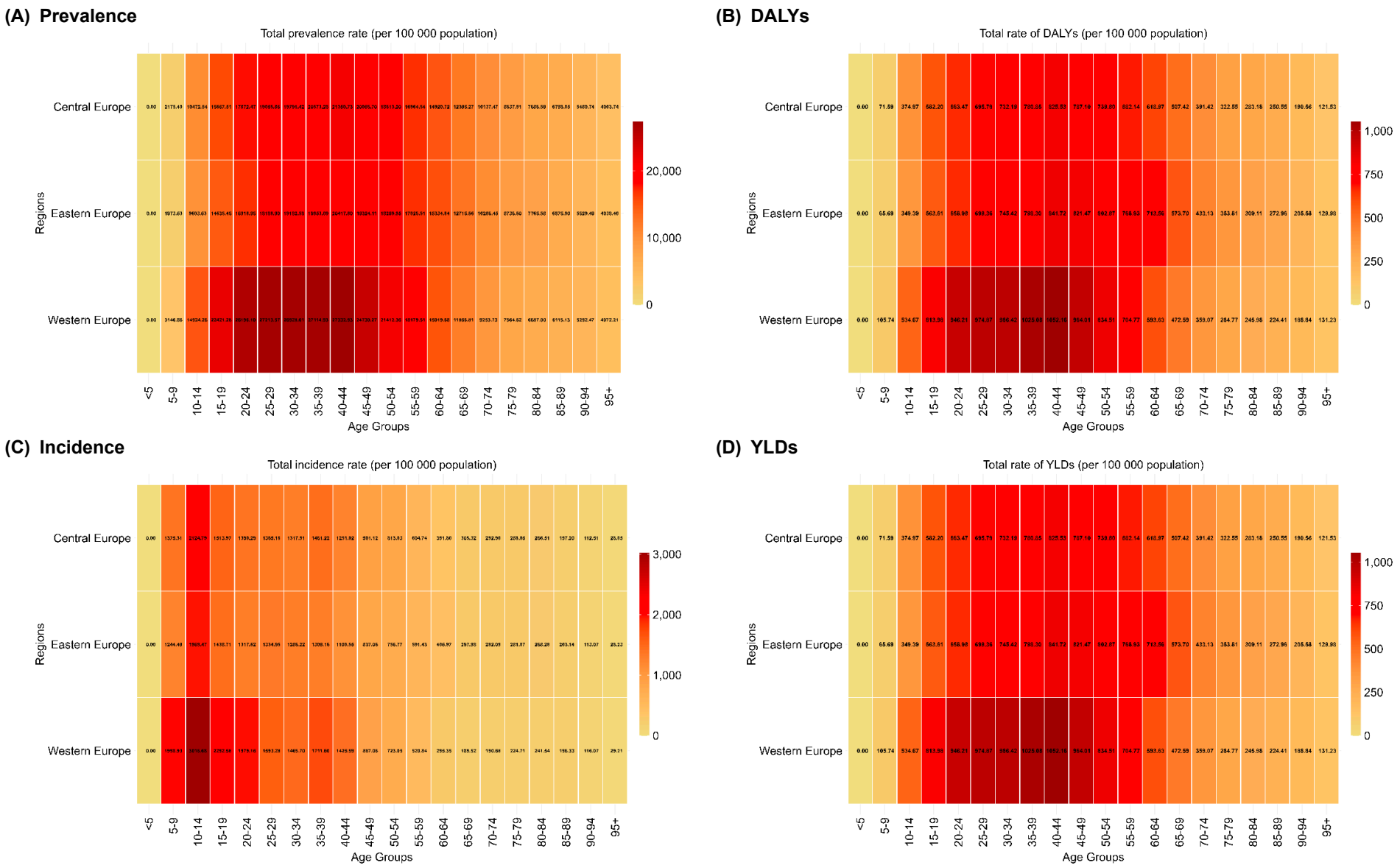


Figure S8b: Total (A) prevalence, (B) DALY, (C) incidence, and (D) YLD rates of migraine for both sexes, by age group and region, 2021

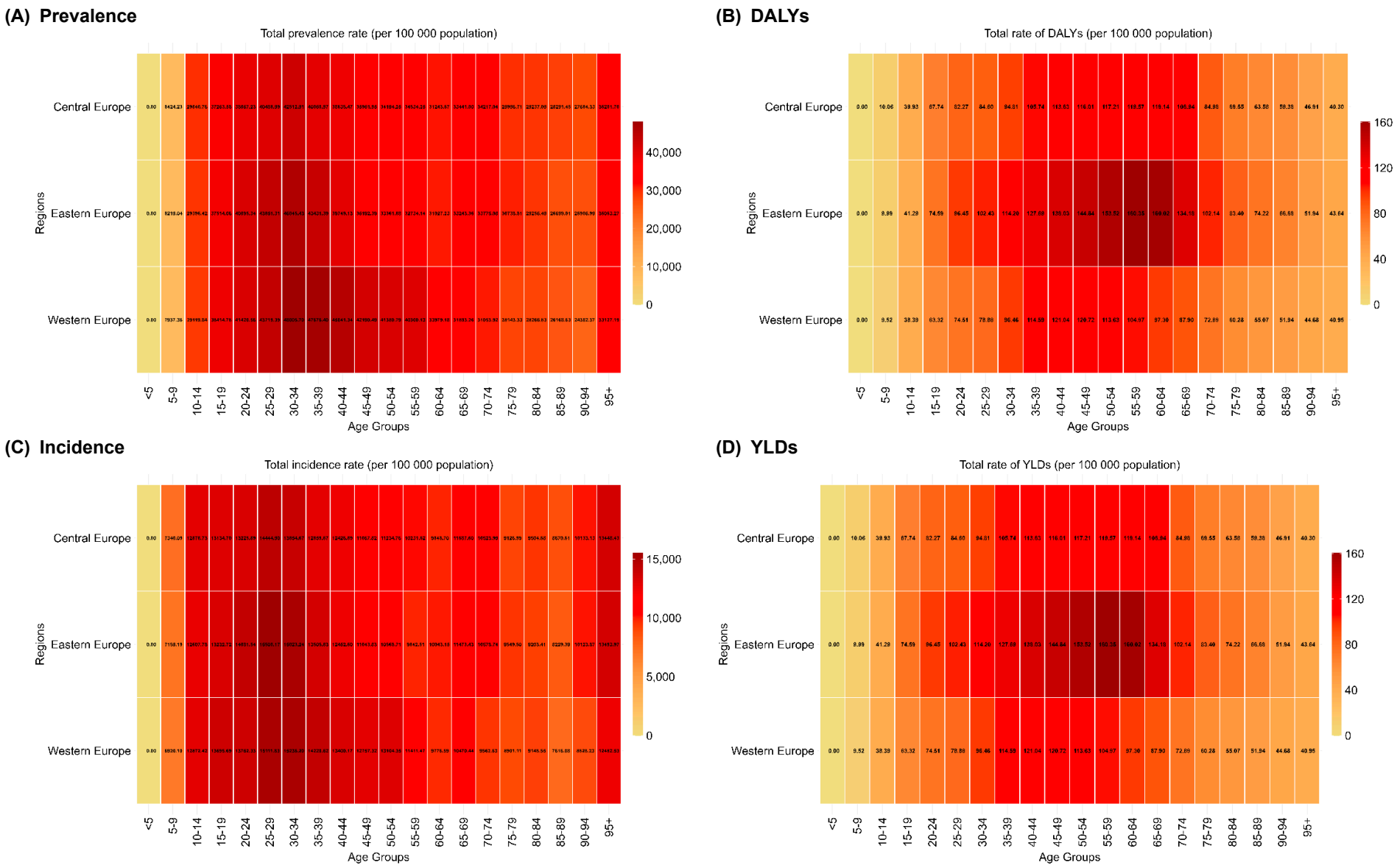
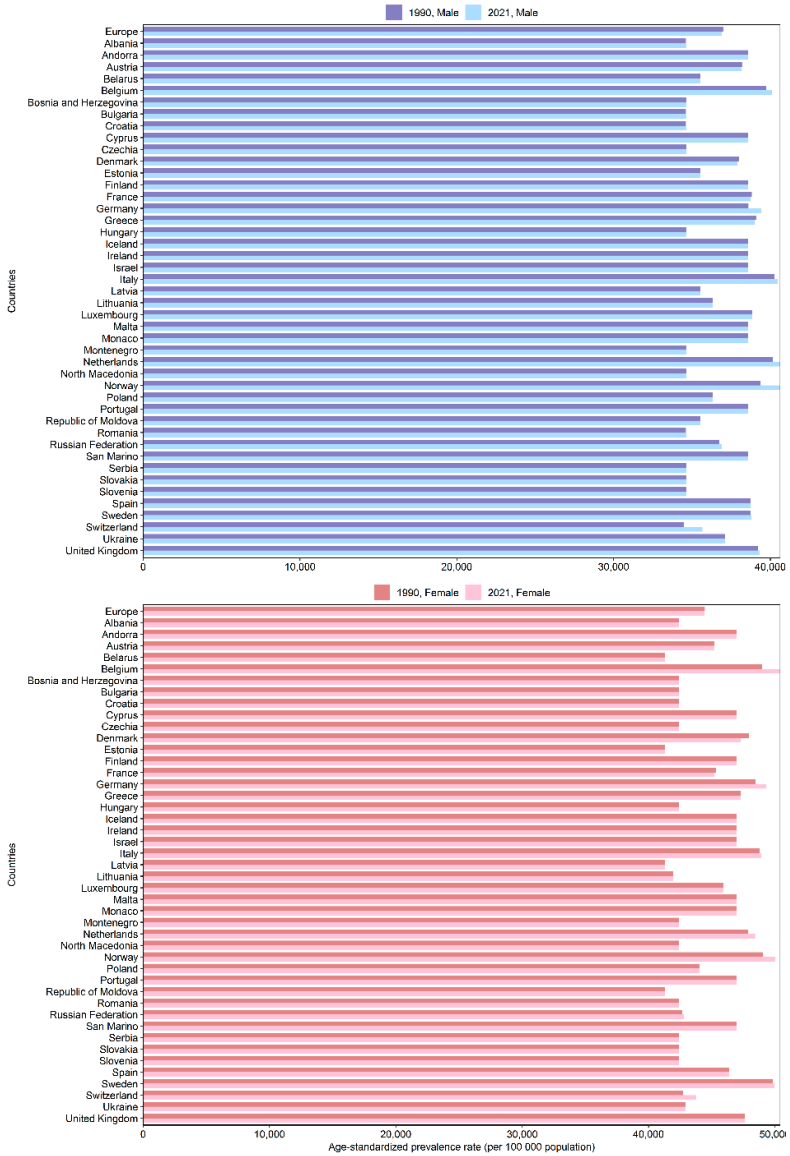
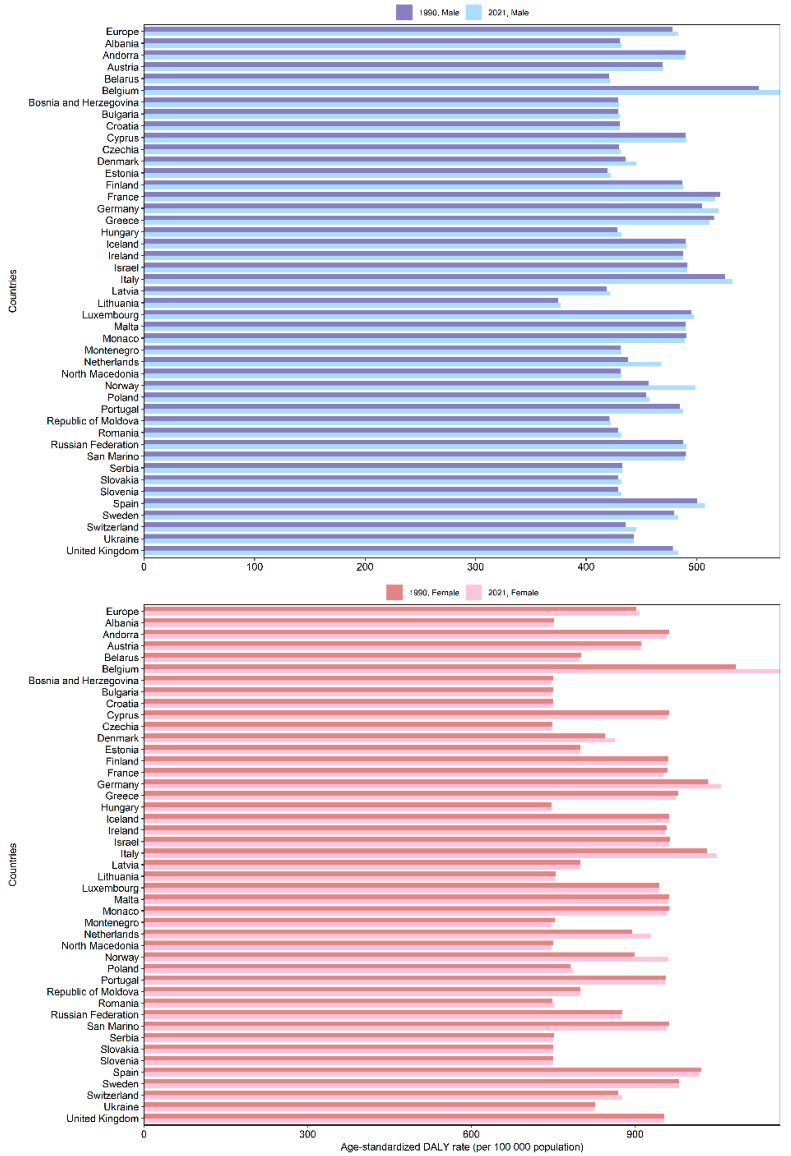


Figure S8c: Total (A) prevalence, (B) DALY, (C) incidence, and (D) YLD rates of tension-type headache for both sexes, by age group and region, 2021

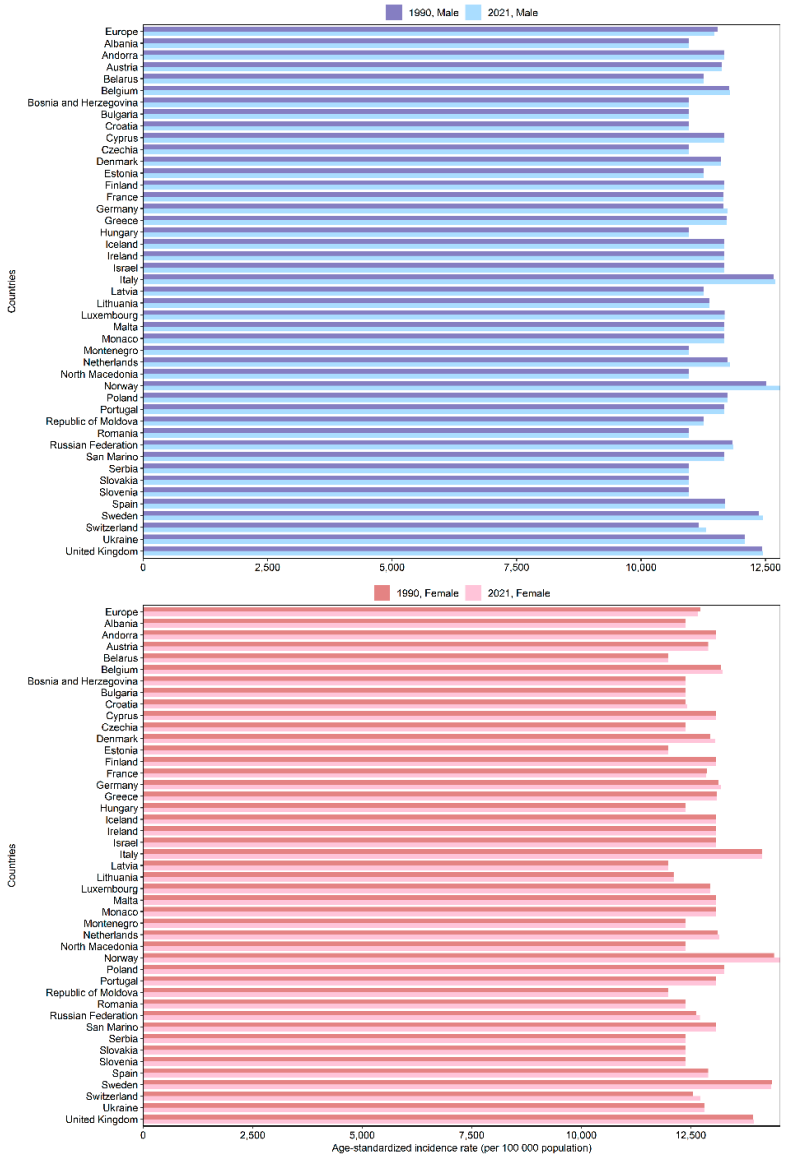
(A) Prevalence



(B) DALYs



(C) Incidence



(D) YLDs

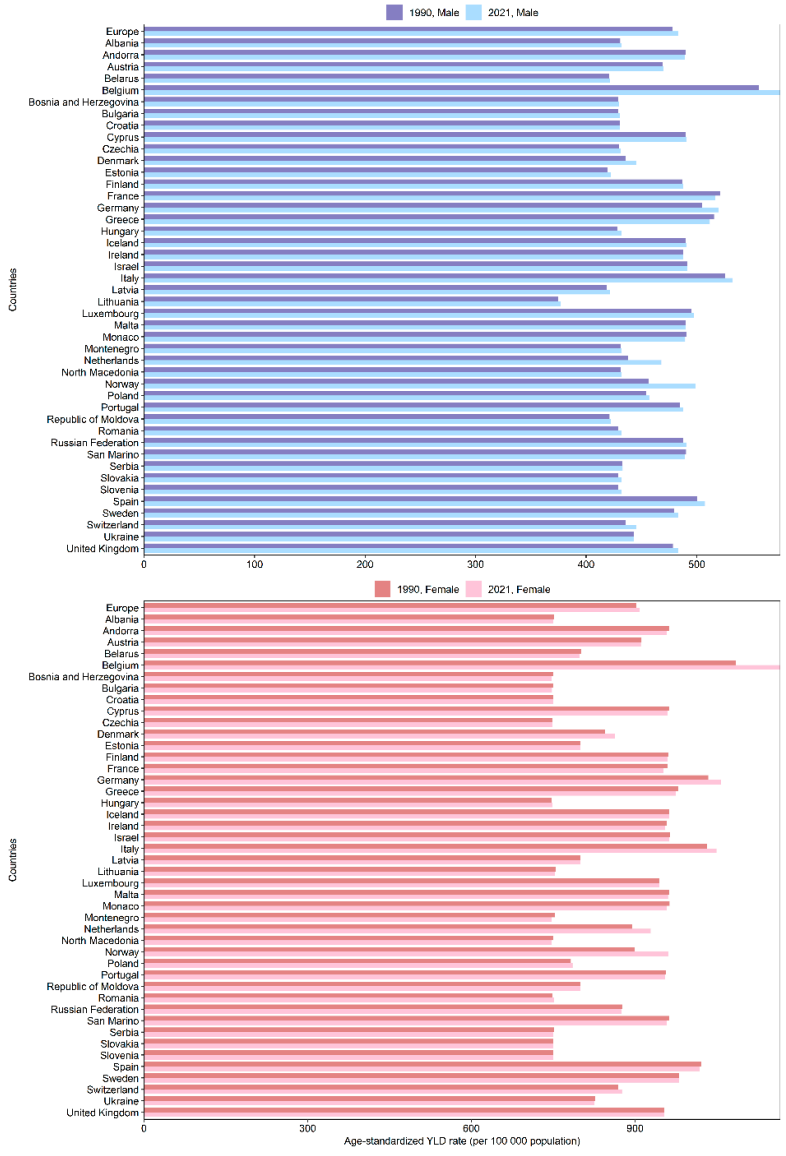
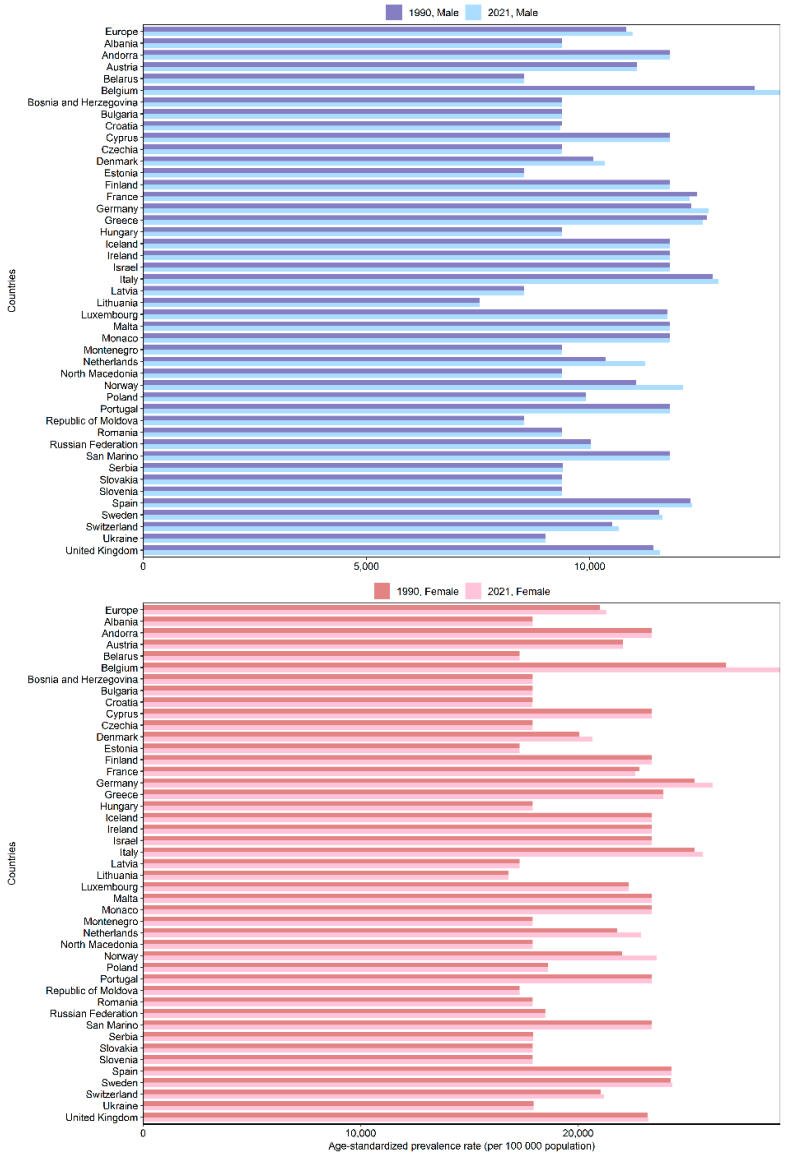
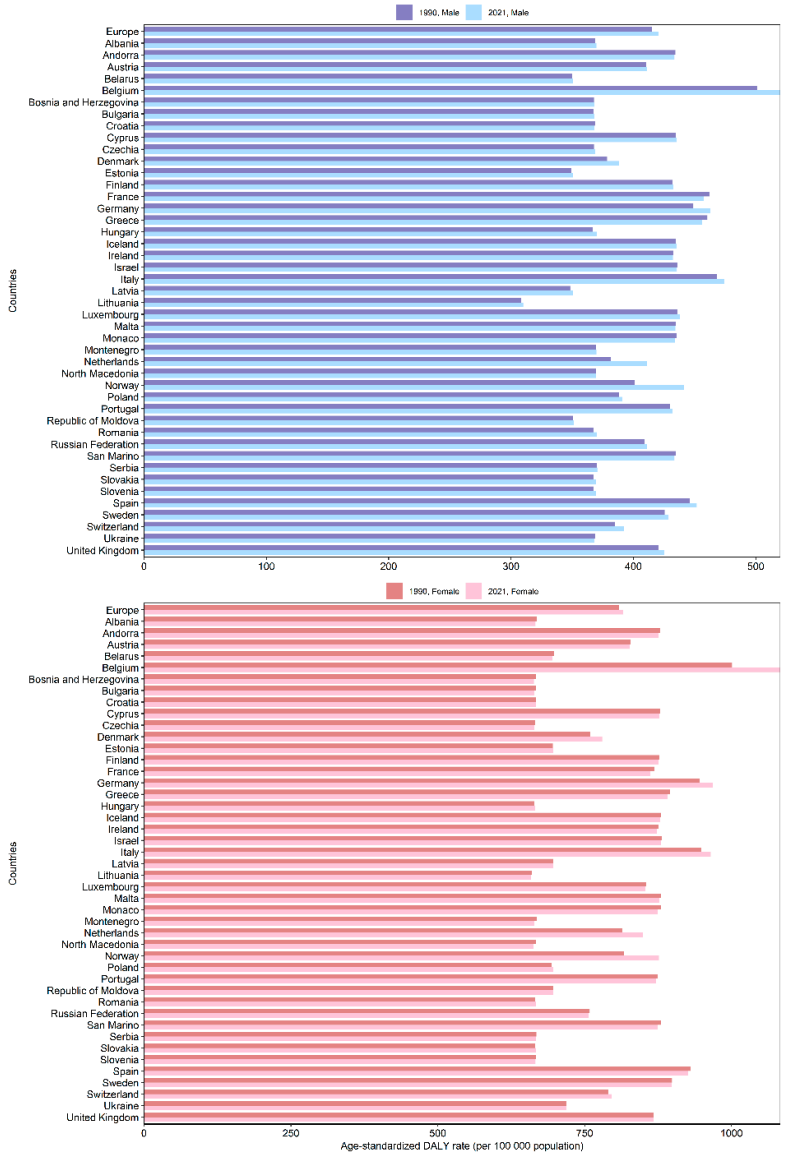


Figure S9a: Age-standardized rates of (A) prevalence, (B) DALY, (C) incidence, and (D) YLD of headache disorders, by country and sex, 1990–2021

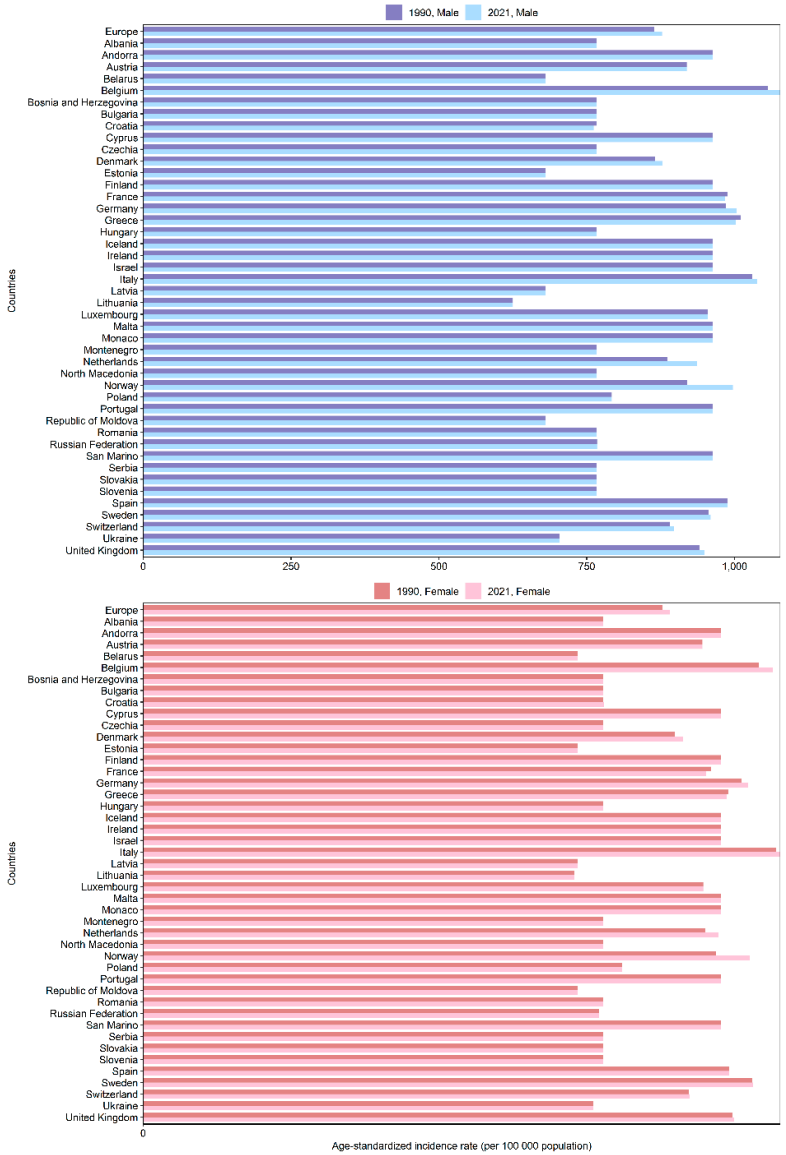
(A) Prevalence



(B) DALYs



(C) Incidence



(D) YLDs

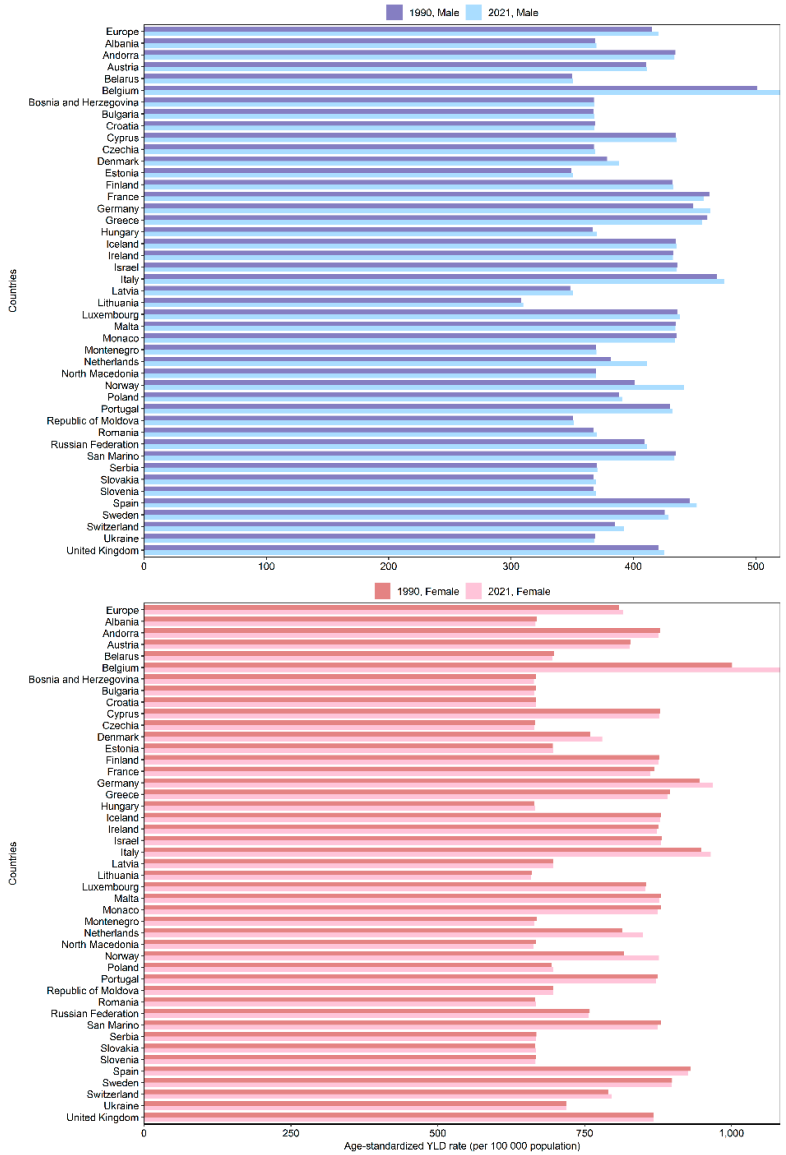
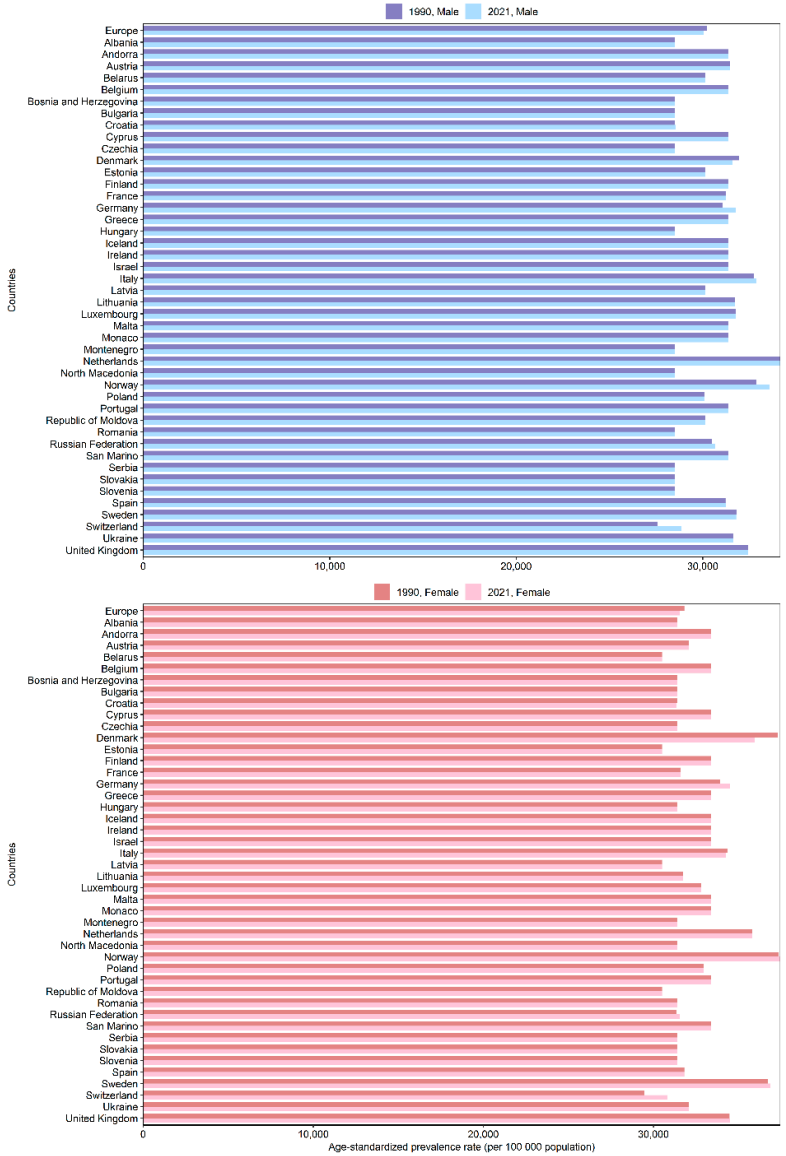
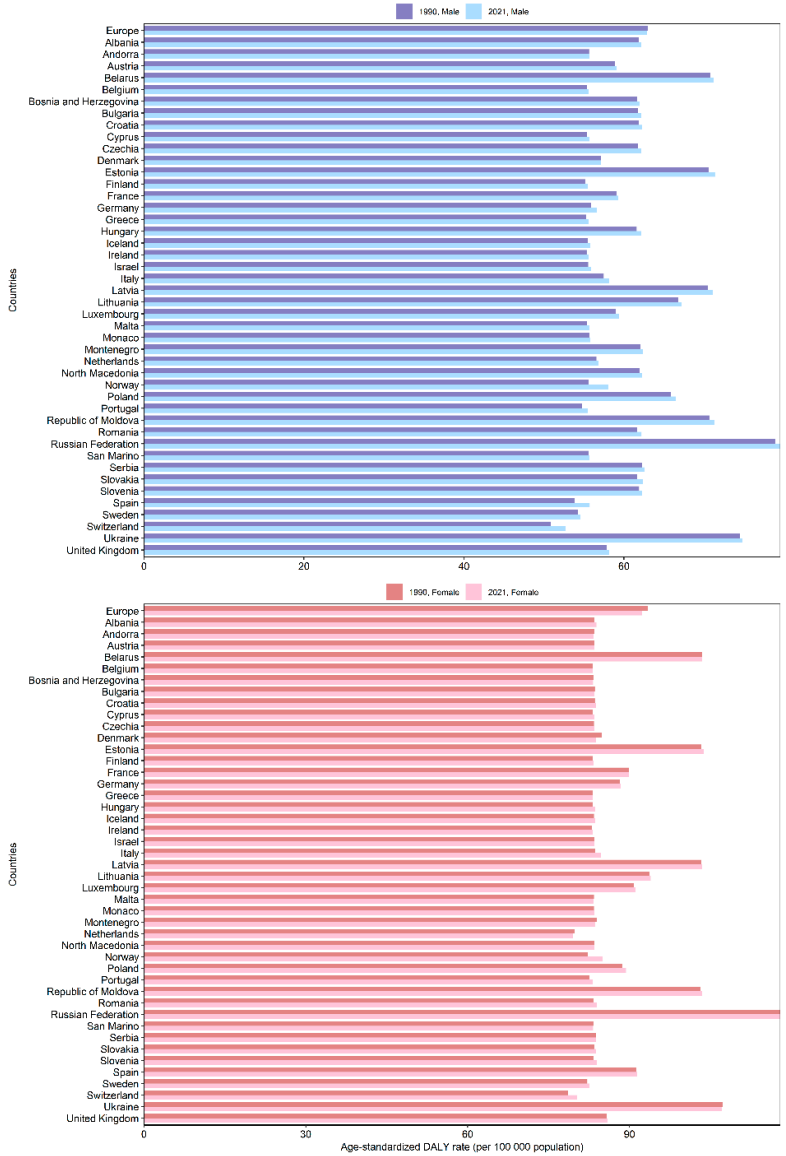


Figure S9b: Age-standardized rates of (A) prevalence, (B) DALY, (C) incidence, and (D) YLD of migraine, by country and sex, 1990–2021

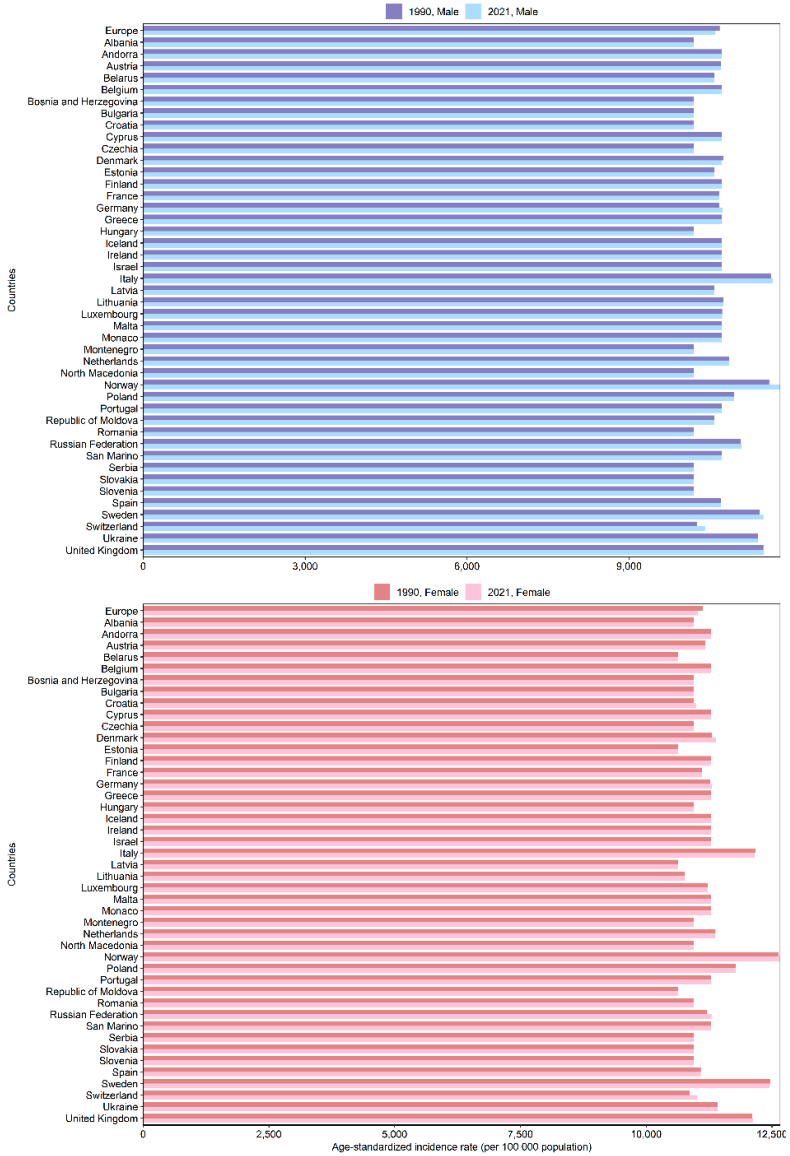
(A) Prevalence



(B) DALYs



(C) Incidence



(D) YLDs

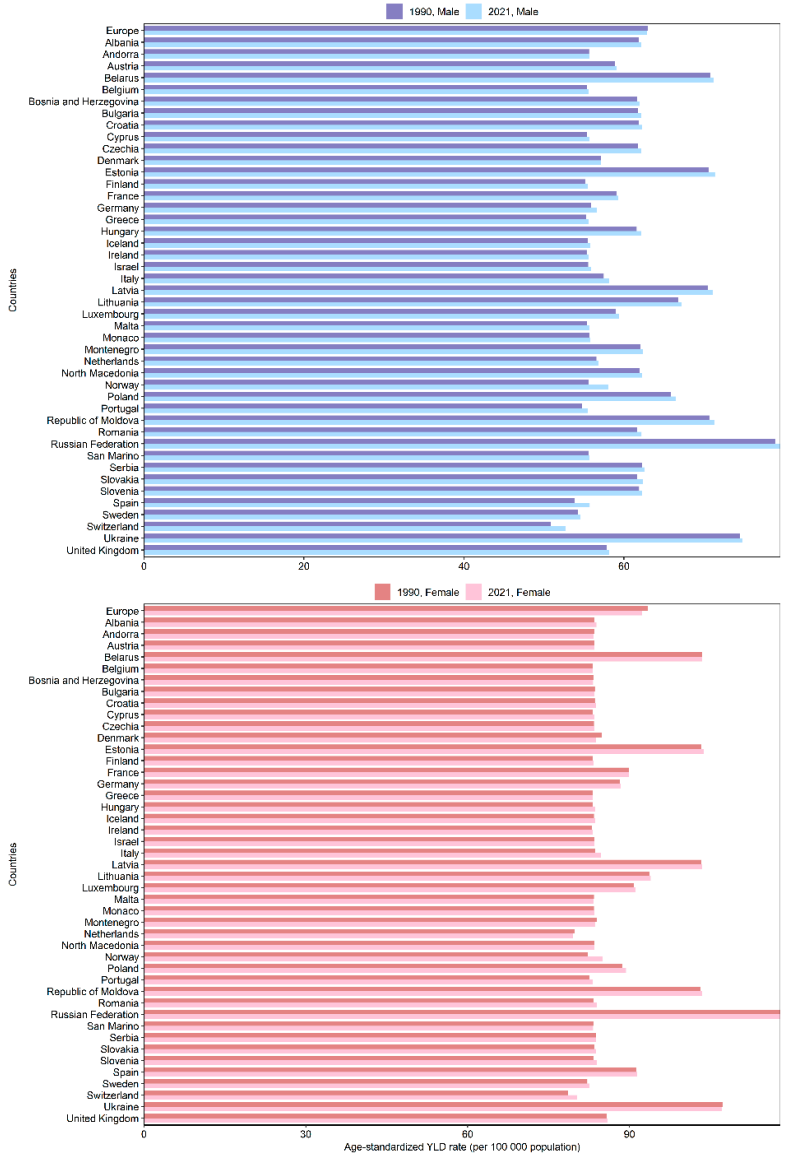


Figure S9c: Age-standardized rates of (A) prevalence, (B) DALY, (C) incidence, and (D) YLD of tension-type headache, by country and sex, 1990–2021

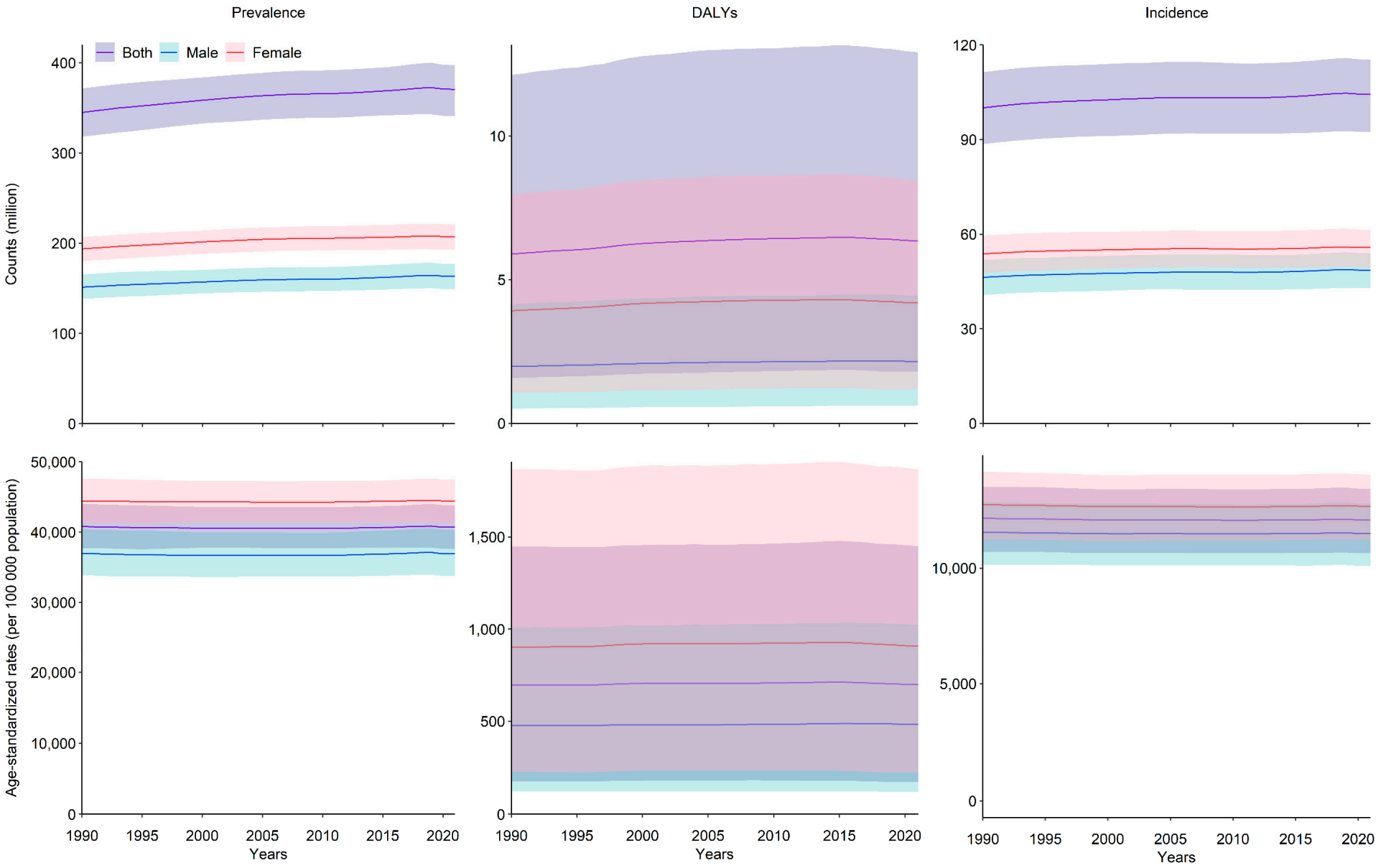


Figure S10a: Age-standardized prevalence, DALY, and incidence rates and counts of headache disorders, by sex, 1990-2021

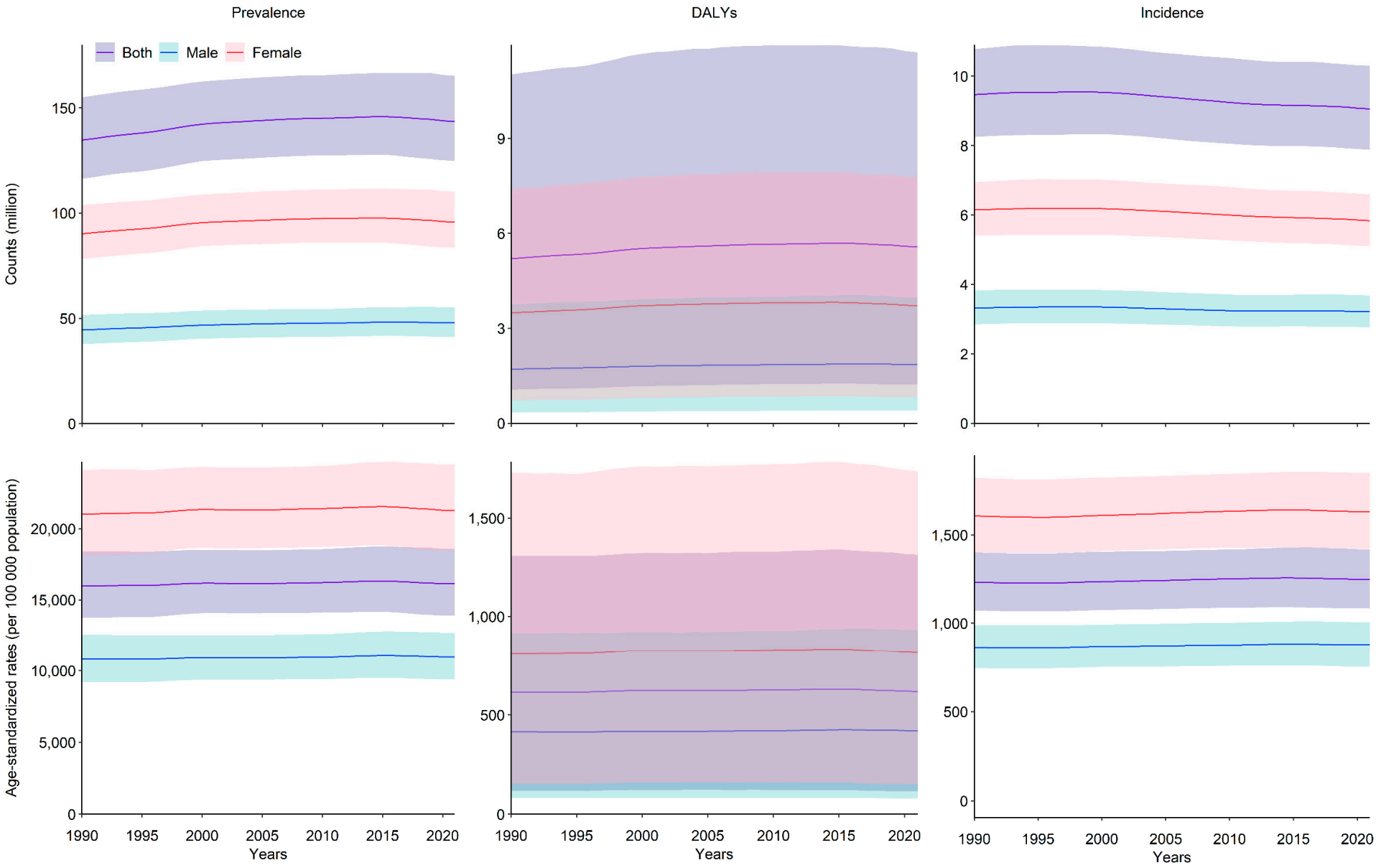


Figure S10b: Age-standardized prevalence, DALY, and incidence rates and counts of migraine, by sex, 1990-2021

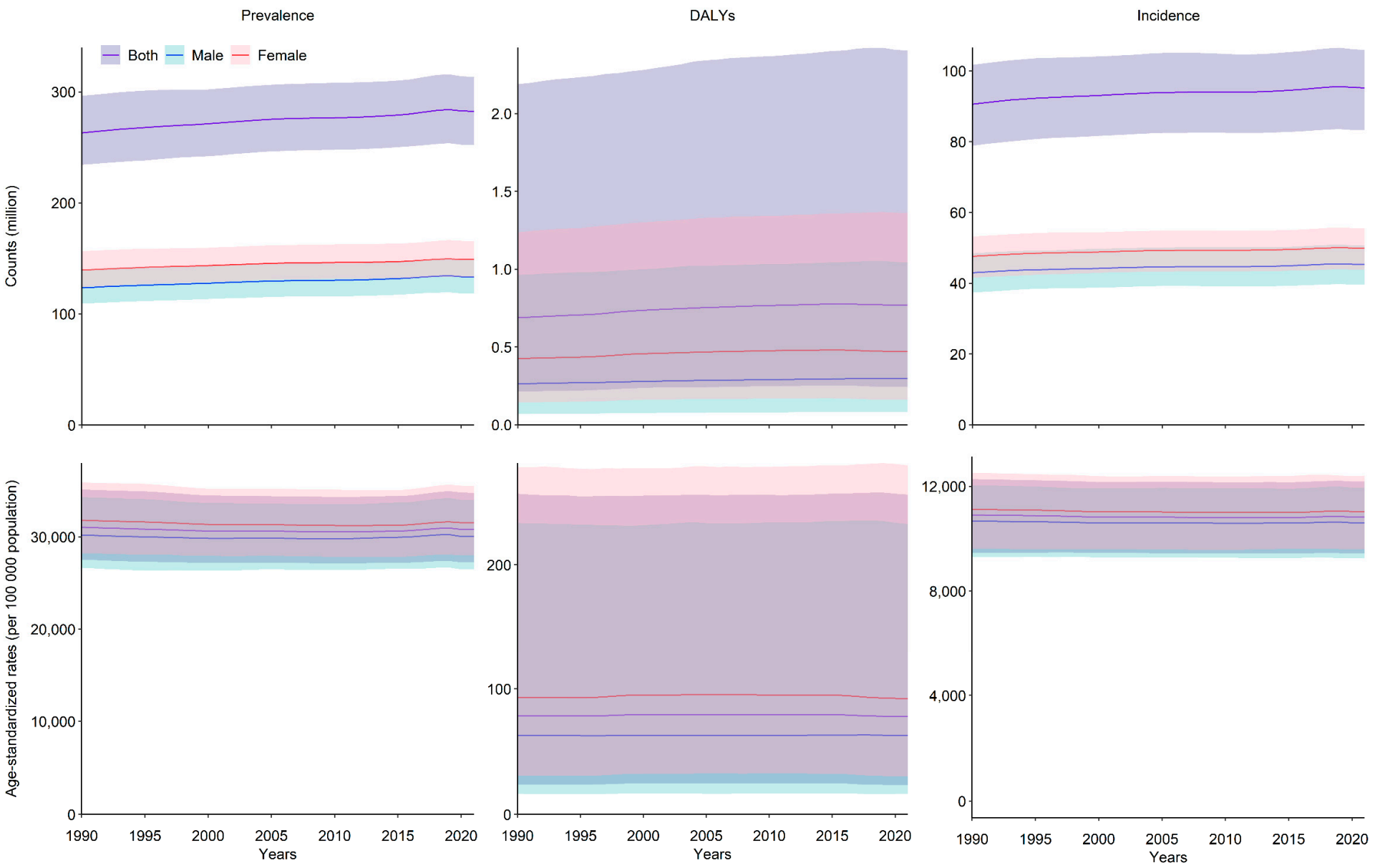
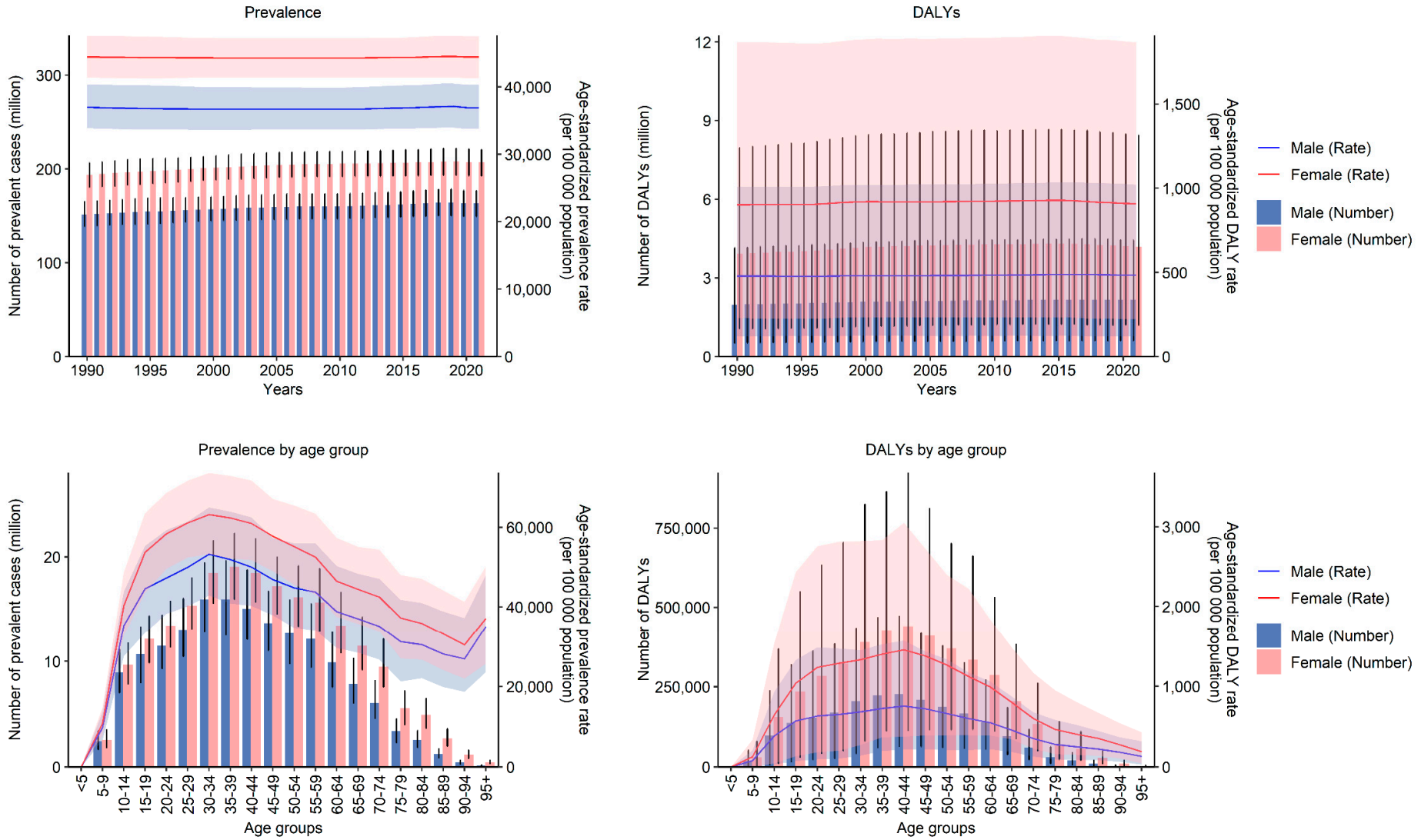


Figure S10c: Age-standardized prevalence, DALY, and incidence rates and counts of tension-type headache, by sex, 1990-2021

(A) Prevalence and DALYs



(B) Incidence and YLDs

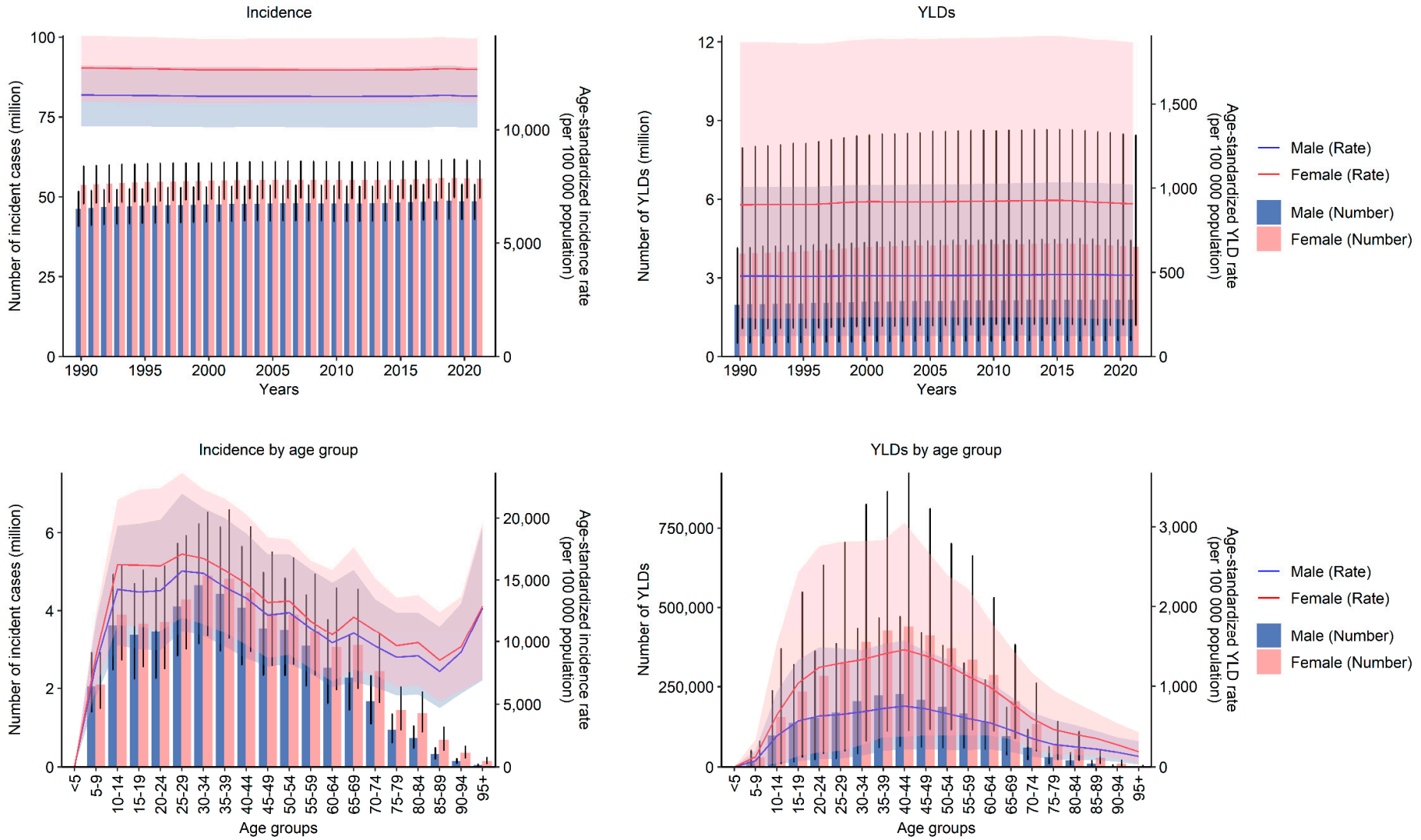
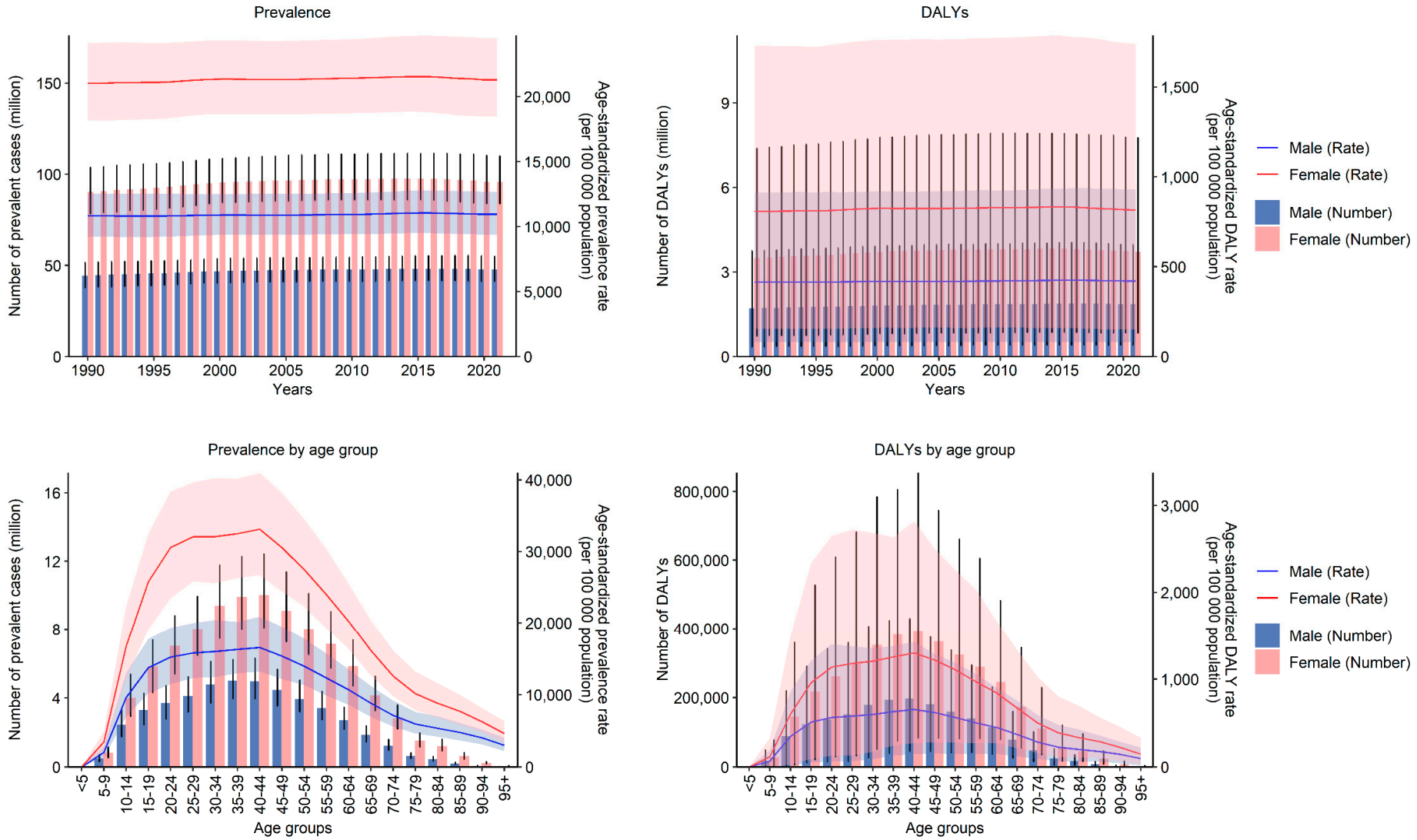


Figure S11a: Counts and rates of (A) prevalence and DALY, and (B) incidence and YLD of headache disorders, by year, age group, and sex

(A) Prevalence and DALYs



(B) Incidence and YLDs

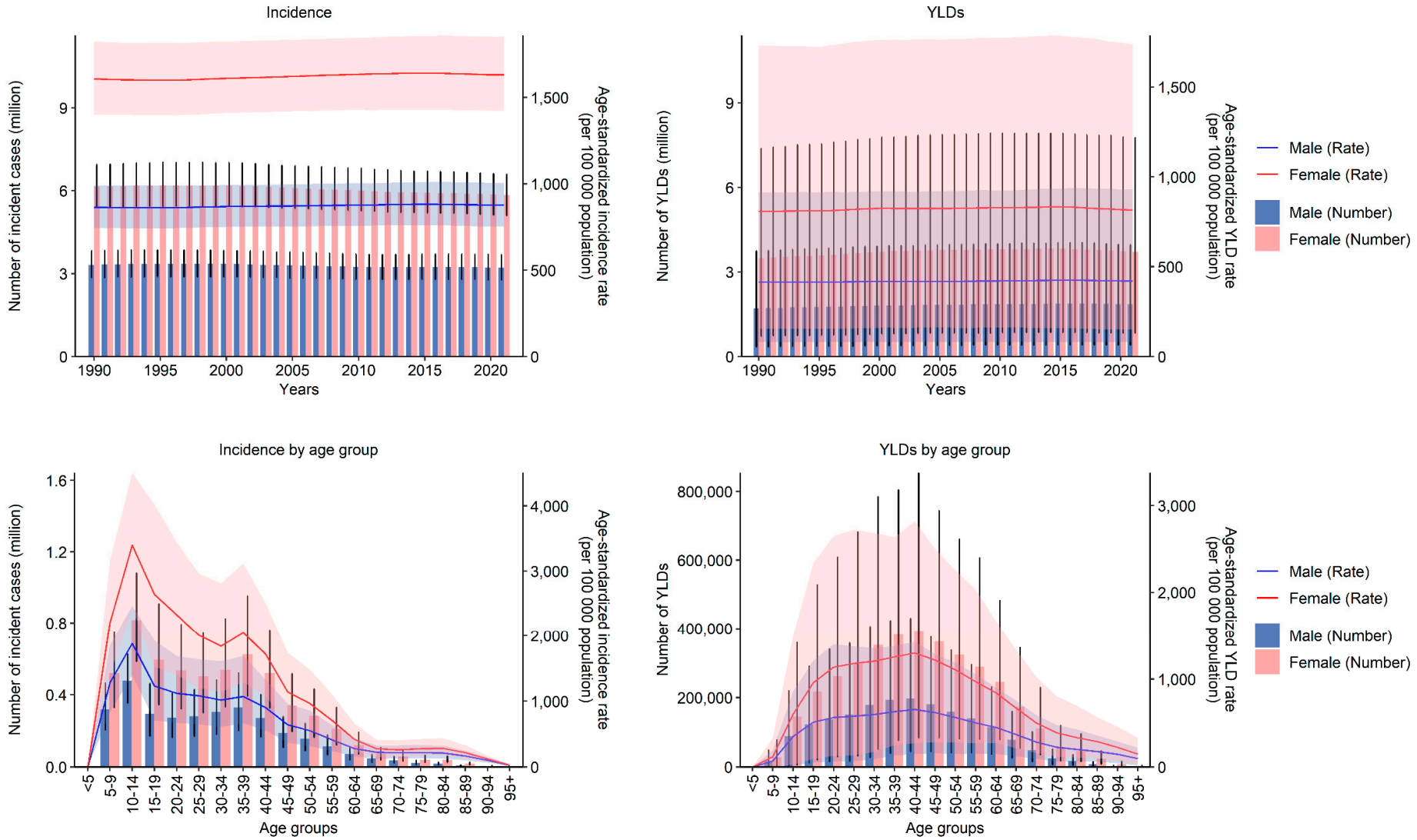
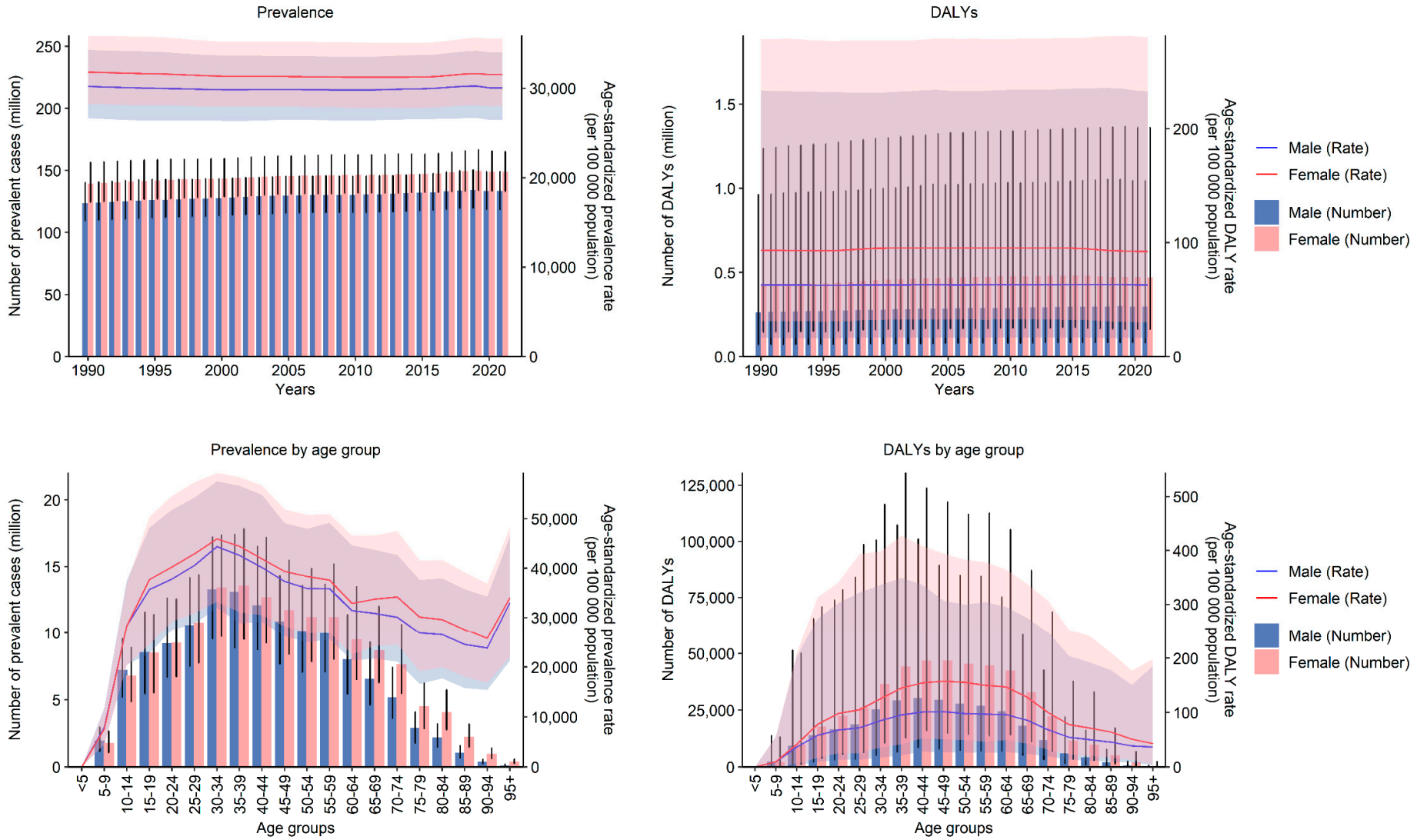


Figure S11b: Counts and rates of (A) prevalence and DALY, and (B) incidence and YLD of migraine, by year, age group, and sex

(A) Prevalence and DALYs



(B) Incidence and YLDs

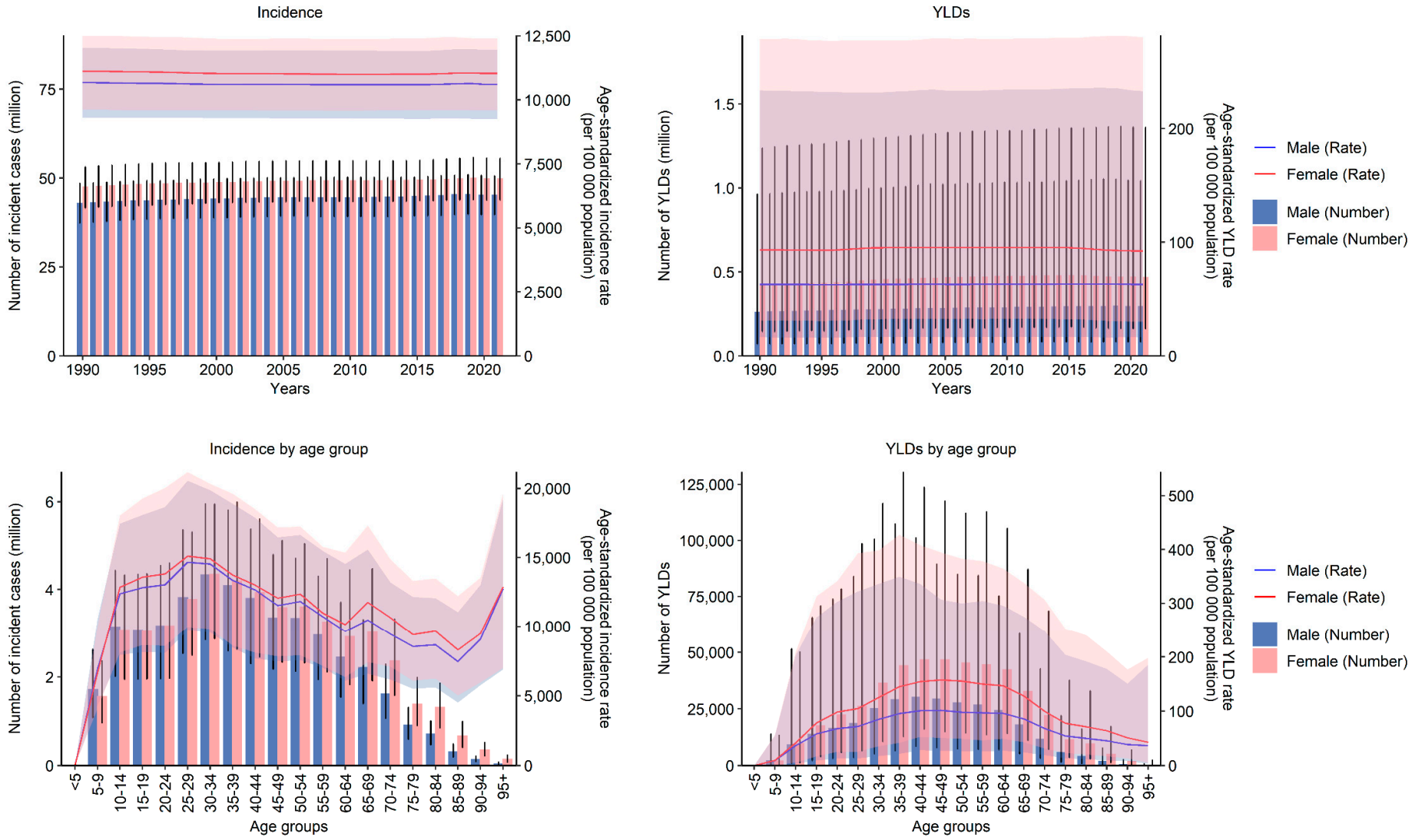


Figure S11c: Counts and rates of (A) prevalence and DALY, and (B) incidence and YLD of tension-type headache, by year, age group, and sex

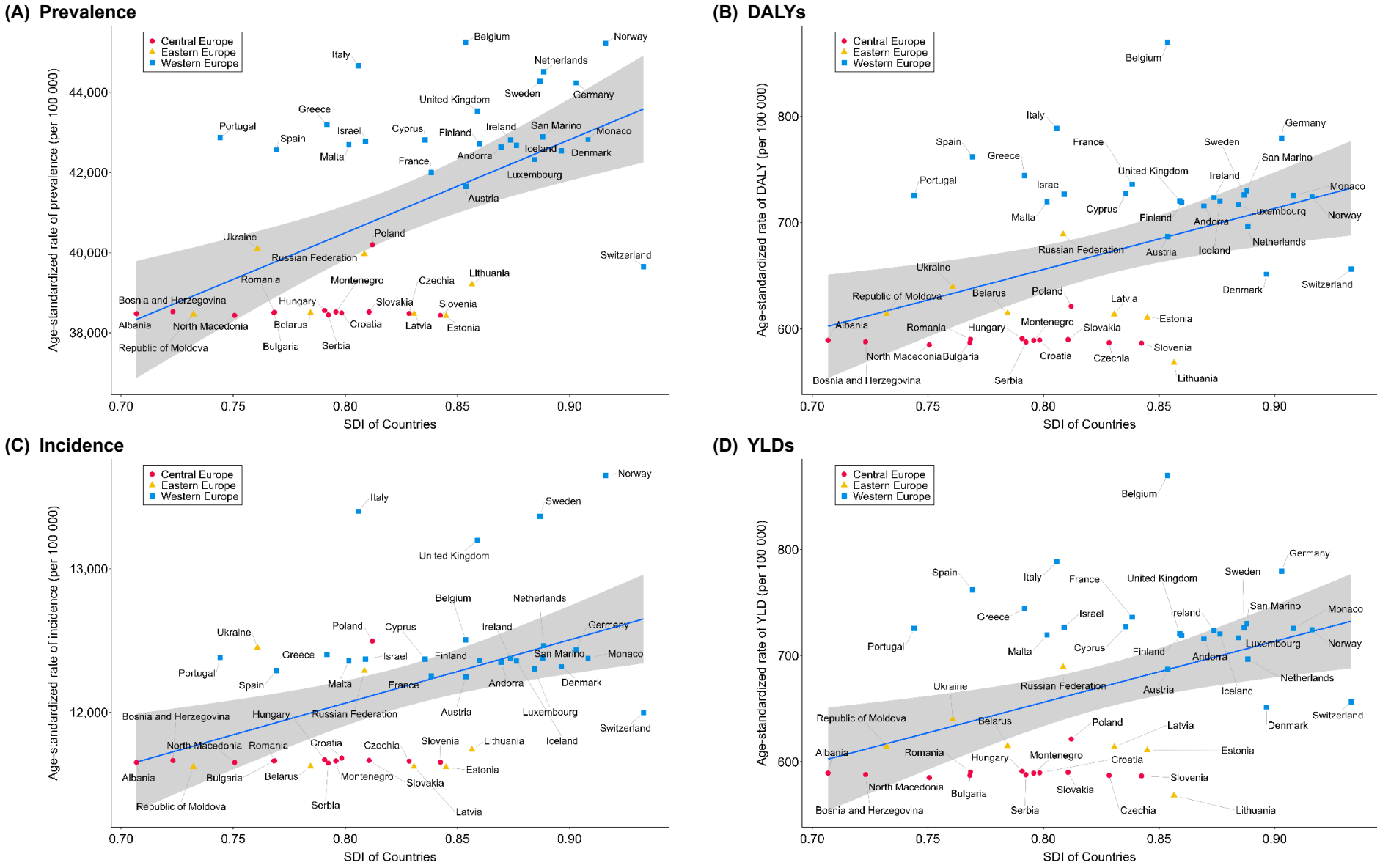


Figure S12a: Age-standardized (A) prevalence, (B) DALY, (C) incidence, and (D) YLD rates for headache disorders in Europe, by socio-demographic index (SDI), 2021

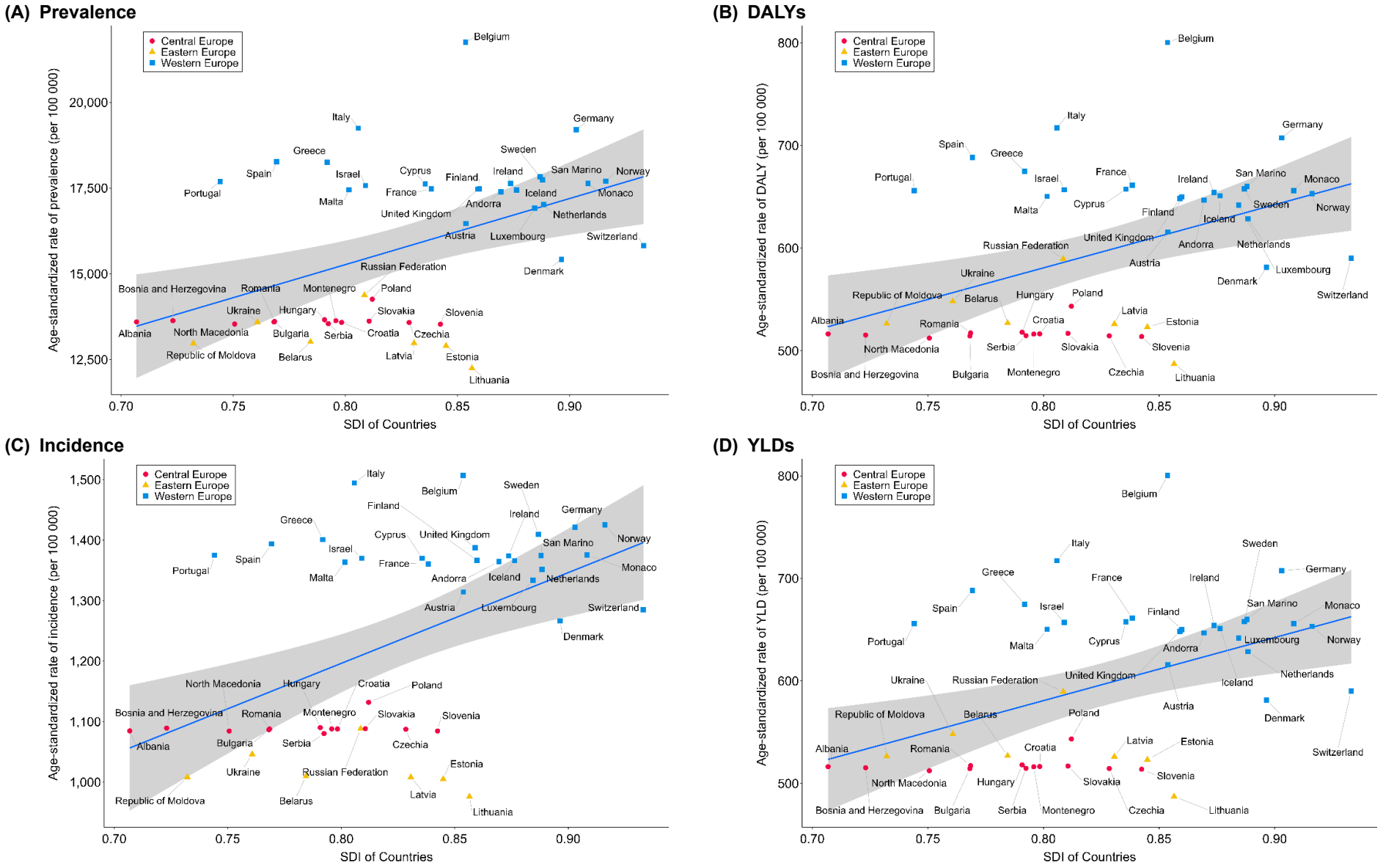


Figure S12b: Age-standardized (A) prevalence, (B) DALY, (C) incidence, and (D) YLD rates for migraine in Europe, by socio-demographic index (SDI), 2021

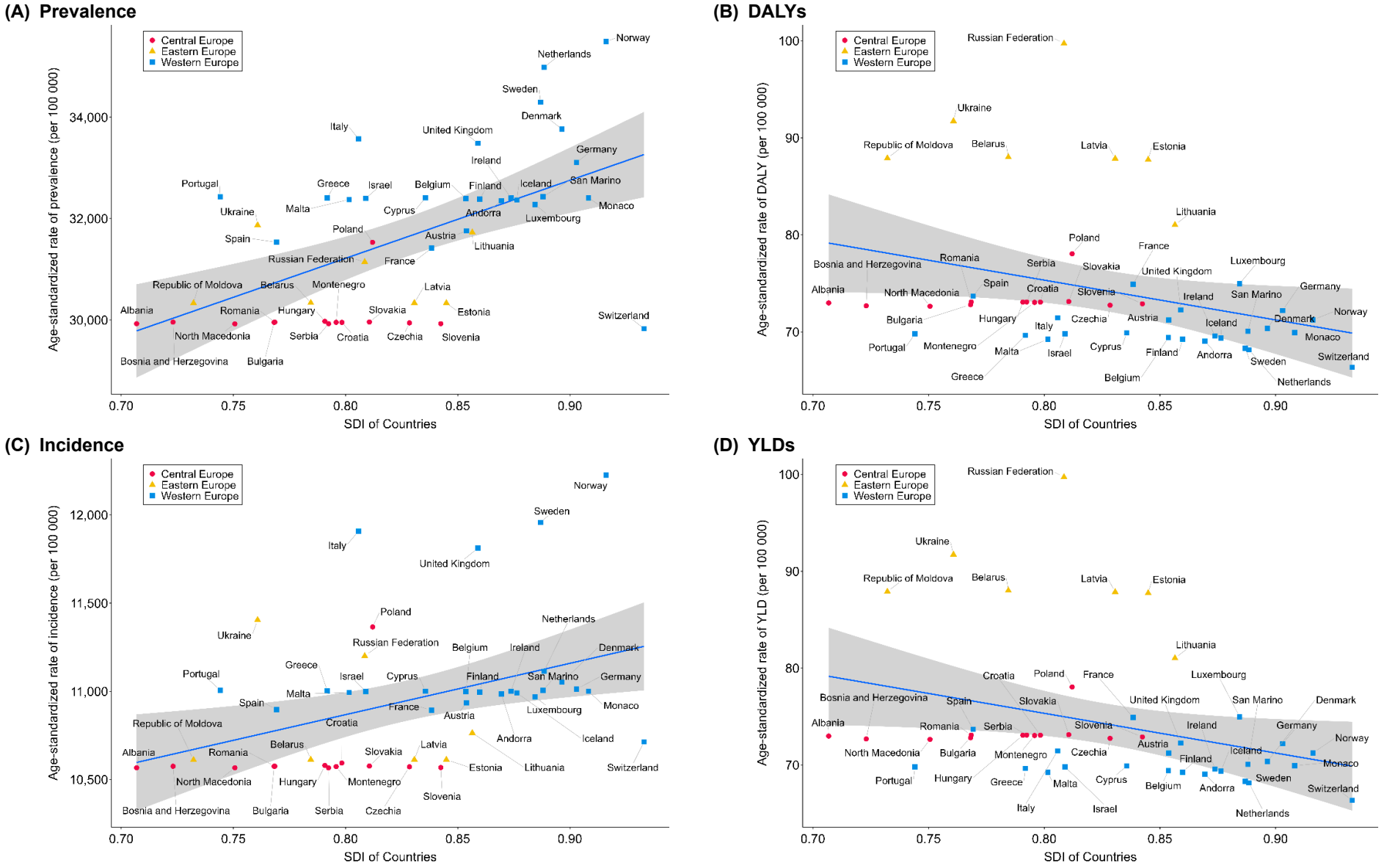


Figure S12c: Age-standardized (A) prevalence, (B) DALY, (C) incidence, and (D) YLD rates for tension-type headache in Europe, by socio-demographic index (SDI), 2021