

**Table S1: Prevalence of COPD in 1990 and 2021 for both sexes and the percentage change in age-standardised rates (ASRs) per 100,000 for adults 70 Years and Older in Iran by Province. Note: COPD: Chronic obstructive pulmonary disease
 (generated from data available from <http://ghdx.healthdata.org/gbd-results-tool>)**

	1990		2021		Percentage change in rate per 100,000
	No (95% UI)	Rate per 100,000 (95% UI)	No (95% UI)	Rate per 100,000 (95% UI)	
Iran	95274 (78635 , 112844)	9819 (8104.2 , 11629.7)	592442 (497588 , 695729)	16223.9 (13626.4 , 19052.4)	65.2 (55.2 , 75.9)
Alborz	2259 (1847 , 2712)	9503.5 (7772 , 11411)	16060 (13291 , 18940)	15335.9 (12691.9 , 18086)	61.4 (45.9 , 79.1)
Ardebil	1532 (1241 , 1822)	8986.5 (7280.2 , 10687.2)	9062 (7476 , 10724)	15471.2 (12763.5 , 18308.1)	72.2 (55.8 , 89.9)
Bushehr	827 (673 , 996)	9656.1 (7848.5 , 11624.1)	6032 (5010 , 7138)	15434.7 (12820 , 18264.8)	59.8 (43 , 76.9)
Chahar Mahaal and Bakhtiari	1141 (930 , 1366)	10501 (8561 , 12573.3)	6400 (5264 , 7554)	15614.8 (12842.8 , 18430.2)	48.7 (33.3 , 63.6)
East Azarbayejan	5361 (4349 , 6444)	10346.8 (8392 , 12436.2)	32304 (26201 , 38031)	17543.5 (14229.3 , 20653.8)	69.6 (51.8 , 93)
Fars	5002 (4103 , 6027)	9244 (7582.6 , 11136.7)	34485 (28622 , 40696)	15577.9 (12929.2 , 18383.4)	68.5 (51.8 , 85.2)
Gilan	4310 (3522 , 5133)	9765.1 (7981.4 , 11630.2)	23968 (19643 , 28159)	15619.3 (12801 , 18350.5)	59.9 (44.2 , 75.5)
Golestan	1642 (1328 , 1966)	8618.3 (6972 , 10318.8)	10594 (8679 , 12493)	15491.8 (12691.7 , 18268.7)	79.8 (61.6 , 98.5)
Hamadan	3056 (2510 , 3644)	9464.9 (7775.5 , 11285.3)	16408 (13433 , 19425)	16956.3 (13881.9 , 20074.6)	79.1 (58.8 , 101.9)
Hormozgan	1375 (1132 , 1632)	8977.1 (7388.3 , 10649.2)	7119 (5833 , 8514)	13494.2 (11057.7 , 16138.6)	50.3 (37.3 , 65.4)
Ilam	641 (521 , 768)	10077 (8180.5 , 12077.2)	3427 (2820 , 4021)	14984.2 (12329.8 , 17583.9)	48.7 (36.2 , 62.8)
Isfahan	7081 (5768 , 8404)	9997.2 (8143.1 , 11863.9)	43896 (36357 , 52044)	17145.9 (14201.3 , 20328.7)	71.5 (56.2 , 88.6)

Kerman	3376 (2795 , 4062)	10125.3 (8383.3 , 12183.7)	20574 (16968 , 24075)	18287.3 (15082.4 , 21399.7)	80.6 (62.1 , 101.8)
Kermanshah	2770 (2236 , 3363)	10221.6 (8252.5 , 12412.9)	16065 (13244 , 19208)	16417.1 (13534 , 19628.3)	60.6 (44.5 , 79.9)
Khorasan-e-Razavi	7566 (6254 , 9126)	9628.6 (7958.8 , 11614.3)	47331 (39015 , 55466)	17748.5 (14630.1 , 20799.1)	84.3 (63.5 , 109.9)
Khuzestan	5995 (4837 , 7169)	10835.1 (8743.4 , 12956.7)	26252 (21653 , 31333)	15944 (13151 , 19030.2)	47.2 (35.8 , 60)
Kohgiluyeh and Boyer-Ahmad	571 (464 , 678)	10164.4 (8258.6 , 12053.8)	4093 (3393 , 4838)	14823.9 (12288.4 , 17522.4)	45.8 (33.5 , 59.4)
Kurdistan	2081 (1691 , 2483)	9707.5 (7888.5 , 11582.9)	12368 (10207 , 14508)	15883.2 (13107.9 , 18630.3)	63.6 (45.2 , 85.6)
Lorestan	2367 (1913 , 2850)	9696.1 (7836.7 , 11674.2)	10937 (8946 , 13044)	15254.6 (12478.3 , 18194.8)	57.3 (42.9 , 71.7)
Markazi	2169 (1768 , 2597)	9821.9 (8005.5 , 11760.6)	14777 (12339 , 17286)	17472.7 (14589.1 , 20438.6)	77.9 (62.8 , 94.5)
Mazandaran	4191 (3433 , 5097)	9620.4 (7878.7 , 11698.2)	28691 (23658 , 34123)	15667.5 (12918.9 , 18633.6)	62.9 (48 , 78.5)
North Khorasan	775 (633 , 919)	9081.6 (7417 , 10774)	5791 (4729 , 6872)	16360.5 (13360.7 , 19415.5)	80.1 (61.2 , 104.8)
Qazvin	1574 (1293 , 1871)	9366.9 (7692.7 , 11131.7)	8836 (7246 , 10392)	16233.3 (13312.4 , 19092)	73.3 (56.7 , 92.6)
Qom	1147 (924 , 1360)	10283.6 (8278.2 , 12185.4)	8212 (6892 , 9626)	16406.6 (13768.9 , 19231.2)	59.5 (44.5 , 75.1)
Semnan	1106 (909 , 1333)	9693.1 (7968.4 , 11687.3)	5797 (4806 , 6848)	16668.2 (13817.3 , 19689.9)	72 (54.1 , 87.1)
Sistan and Baluchistan	2193 (1793 , 2669)	10492 (8574.5 , 12764.4)	11659 (9553 , 13672)	16865.6 (13819.7 , 19777.9)	60.7 (43.9 , 81.1)
South Khorasan	1402 (1152 , 1693)	10324.7 (8482.6 , 12467.8)	7596 (6276 , 8828)	18433.3 (15231.6 , 21424.9)	78.5 (58.4 , 104)
Tehran	15875 (12815 , 18976)	9621.8 (7767 , 11501.5)	116701 (97488 , 140196)	15311.8 (12791 , 18394.6)	59.1 (45.7 , 75.4)
West Azarbajejan	3006 (2484 , 3641)	10289.5 (8503.2 , 12463.3)	19649 (16358 , 23116)	16430.3 (13678.7 , 19329.6)	59.7 (42.6 , 77.7)
Yazd	1487 (1227 , 1753)	10511.4 (8668.6 , 12386.5)	8444 (7009 , 9938)	18048.5 (14980.5 , 21240.4)	71.7 (54 , 88.5)
Zanjan	1395 (1155 , 1674)	10005.7 (8282.9 , 12004)	8914 (7457 , 10399)	16992.9 (14215 , 19822)	69.8 (51.4 , 92.2)

Table S2: Deaths from COPD in 1990 and 2021 for both sexes and the percentage change in age-standardised rates (ASRs) per 100,000 for adults 70 Years and Older in Iran by Province. Note: COPD: Chronic obstructive pulmonary disease

(Generated from data available from <http://ghdx.healthdata.org/gbd-results-tool>)

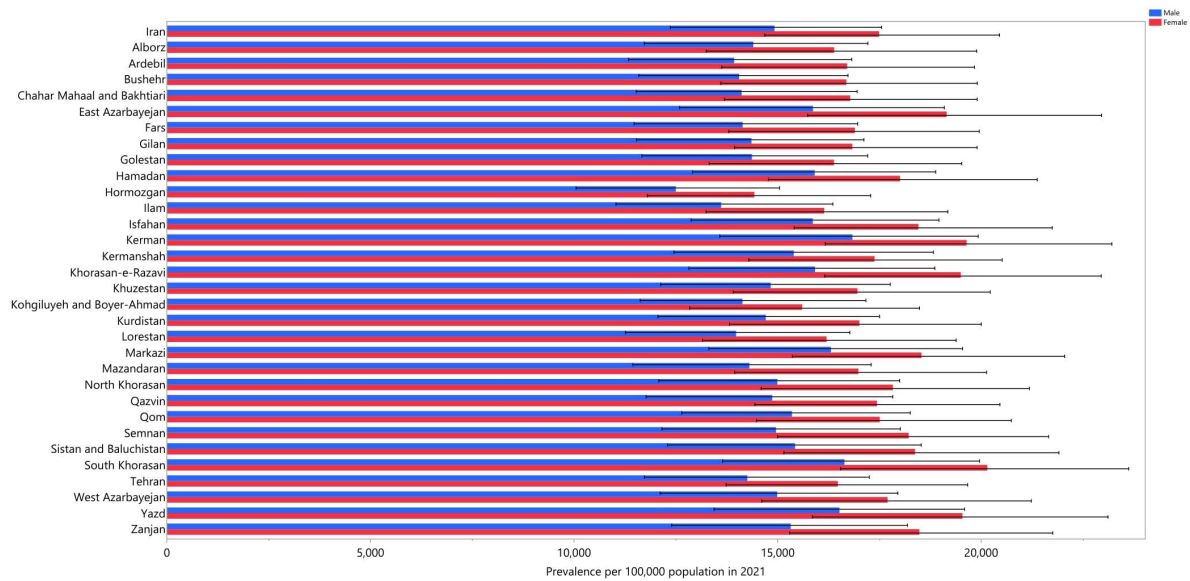
	1990		2021		Percentage change in rate per 100,000
	No (95% UI)	Rate per 100,000 (95% UI)	No (95% UI)	Rate per 100,000 (95% UI)	
Iran	1986 (1624 , 2271)	204.6 (167.3 , 234.1)	8084 (6850 , 8960)	221.4 (187.6 , 245.4)	8.2 (-8.7 , 39.5)
Alborz	48 (38 , 62)	201.5 (158.7 , 259.7)	204 (163 , 245)	194.8 (156.1 , 234.4)	-3.3 (-34.5 , 30.2)
Ardebil	19 (13 , 25)	114 (73.8 , 148.9)	91 (75 , 107)	155.2 (127.8 , 183.1)	36.2 (-0.8 , 122.6)
Bushehr	10 (8 , 13)	117.9 (87.6 , 146.9)	54 (43 , 65)	138.2 (111 , 165.6)	17.2 (-12.9 , 71.1)
Chahar Mahaal and Bakhtiari	18 (14 , 23)	170 (126.9 , 214.2)	54 (43 , 67)	130.6 (105.2 , 163.9)	-23.2 (-42.3 , 19.3)
East Azarbayejan	175 (132 , 215)	337.4 (253.8 , 415.5)	685 (532 , 819)	371.8 (288.7 , 445)	10.2 (-16.4 , 53.4)
Fars	72 (54 , 90)	132.3 (99.1 , 165.6)	404 (321 , 499)	182.6 (144.8 , 225.6)	38 (1.1 , 99.7)
Gilan	60 (48 , 72)	136.2 (107.8 , 163.4)	260 (220 , 304)	169.3 (143.1 , 198.4)	24.3 (-4.7 , 67.7)
Golestan	19 (13 , 25)	99.8 (69.7 , 129.7)	132 (105 , 160)	193.7 (153.6 , 233.3)	94.1 (37.4 , 205.9)
Hamadan	51 (38 , 65)	158.3 (117.5 , 200.5)	180 (144 , 215)	185.8 (149.2 , 222.7)	17.4 (-14.6 , 69.1)
Hormozgan	20 (14 , 25)	127.5 (91.6 , 160)	65 (53 , 77)	122.6 (101.2 , 146.2)	-3.9 (-27.3 , 43.6)
Ilam	8 (5 , 10)	120.4 (84.6 , 156.5)	31 (25 , 38)	134 (109.1 , 165.9)	11.3 (-16.2 , 66.5)
Isfahan	127 (96 , 158)	180 (135.4 , 223.4)	533 (425 , 650)	208.1 (166 , 254.1)	15.6 (-14.6 , 63.8)

Kerman	113 (88 , 137)	338.9 (264.1 , 412.1)	586 (430 , 694)	521.2 (382.5 , 617)	53.8 (16.5 , 108.8)
Kermanshah	78 (60 , 95)	286.2 (223.2 , 349.6)	235 (192 , 286)	240.5 (196.1 , 292)	-16 (-37.6 , 17.7)
Khorasan-e-Razavi	176 (134 , 219)	224 (170.2 , 279.1)	881 (664 , 1035)	330.5 (249 , 388)	47.5 (11.5 , 109.7)
Khuzestan	115 (89 , 139)	207.7 (160.1 , 252.1)	255 (204 , 298)	155.1 (123.8 , 181)	-25.3 (-41.1 , 0.6)
Kohgiluyeh and Boyer-Ahmad	6 (4 , 8)	109.5 (69.2 , 147.2)	27 (21 , 34)	96.3 (74.9 , 123.9)	-12 (-39.2 , 54.1)
Kurdistan	44 (32 , 56)	205.3 (150.4 , 262.9)	145 (117 , 182)	186.3 (150.4 , 233.4)	-9.3 (-37.1 , 38.3)
Lorestan	37 (26 , 48)	152.8 (106.8 , 194.8)	98 (80 , 122)	136.9 (111.7 , 169.9)	-10.4 (-35.5 , 40.5)
Markazi	45 (35 , 56)	205.4 (156.8 , 255.4)	179 (140 , 217)	211.7 (165.6 , 257.1)	3 (-23.5 , 47.7)
Mazandaran	56 (41 , 70)	128.7 (95.1 , 159.6)	242 (194 , 295)	132.1 (106 , 160.9)	2.6 (-23 , 47)
North Khorasan	16 (11 , 21)	183.8 (127.2 , 240.5)	84 (67 , 100)	238.1 (189.4 , 281.2)	29.5 (-8.2 , 92.4)
Qazvin	28 (21 , 35)	167.7 (123.3 , 208.8)	114 (94 , 135)	209.9 (173 , 248.1)	25.2 (-5.3 , 79.5)
Qom	34 (26 , 42)	305.2 (230.5 , 373.8)	129 (106 , 155)	258.2 (211.4 , 310)	-15.4 (-35.3 , 24.9)
Semnan	23 (18 , 28)	201.2 (156.4 , 248.8)	74 (59 , 89)	213.3 (170.7 , 254.9)	6 (-19.8 , 47.7)
Sistan and Baluchistan	83 (59 , 103)	395.1 (283.8 , 491.8)	224 (162 , 276)	324.7 (233.9 , 399.1)	-17.8 (-38.5 , 16.3)
South Khorasan	31 (22 , 40)	230.3 (158.7 , 296.4)	118 (89 , 141)	286.7 (216 , 342.1)	24.5 (-8 , 93.9)
Tehran	318 (237 , 417)	192.8 (143.4 , 253)	1397 (1109 , 1735)	183.3 (145.5 , 227.6)	-4.9 (-32.2 , 34.8)
West Azarbajejan	86 (65 , 105)	293.6 (222.4 , 359.2)	333 (269 , 395)	278.7 (225.2 , 330)	-5.1 (-26.5 , 28.4)
Yazd	38 (29 , 48)	266.9 (204.3 , 338)	138 (109 , 165)	295 (232.4 , 353.2)	10.5 (-18.3 , 48)
Zanjan	32 (24 , 39)	227.6 (175.3 , 282.9)	131 (106 , 152)	249.2 (201.5 , 290.5)	9.5 (-15.8 , 44.1)

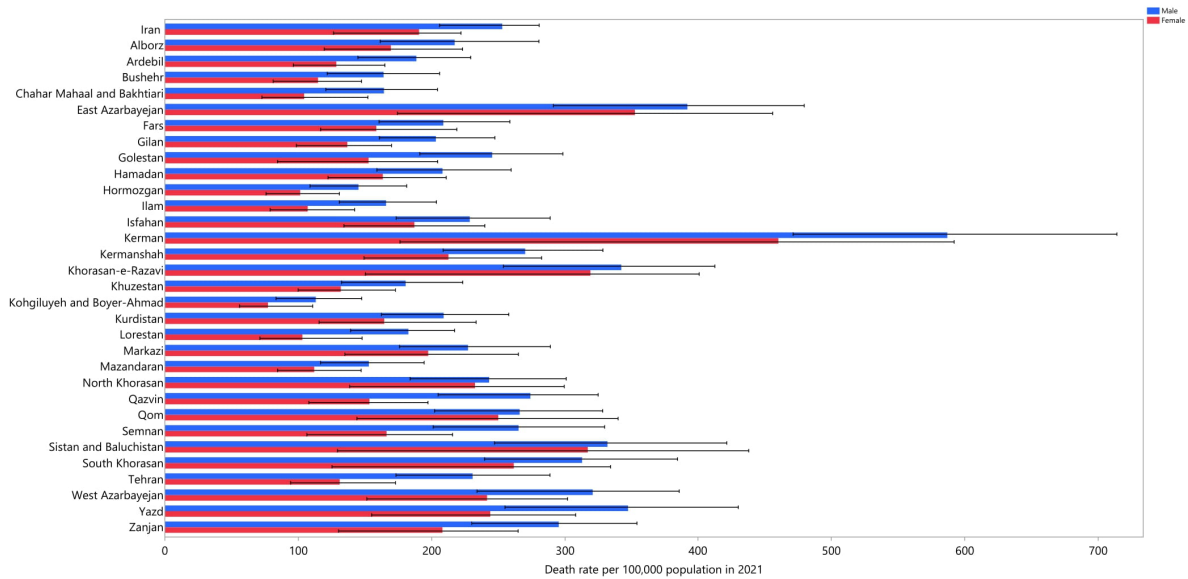
**Table S3: DALYs from COPD in 1990 and 2021 for both sexes and the percentage change in age-standardised rates (ASRs) per 100,000 for adults 70 Years and Older in Iran by Province. Note: DALY=Disability-adjusted life years; COPD: Chronic obstructive pulmonary disease
(Generated from data available from <http://ghdx.healthdata.org/gbd-results-tool>)**

	1990		2021		Percentage change in rate per 100,000
	No (95% UI)	Rate per 100,000 (95% UI)	No (95% UI)	Rate per 100,000 (95% UI)	
Iran	34975 (29424 , 39434)	3604.6 (3032.5 , 4064.1)	140030 (122556 , 153396)	3834.7 (3356.2 , 4200.7)	6.4 (-8.3 , 31.3)
Alborz	888 (704 , 1153)	3735 (2960.4 , 4852.2)	3754 (3137 , 4362)	3584.5 (2995.2 , 4165.7)	-4 (-32 , 24.8)
Ardebil	373 (268 , 467)	2186.3 (1569.5 , 2740.7)	1735 (1492 , 1989)	2962.1 (2547.4 , 3395.9)	35.5 (4.2 , 96.2)
Bushehr	194 (152 , 235)	2266.4 (1774.4 , 2739)	1099 (948 , 1255)	2811.3 (2426.8 , 3212.5)	24 (-2.8 , 63.9)
Chahar Mahaal and Bakhtiari	339 (262 , 426)	3120.9 (2408.1 , 3920.9)	1068 (915 , 1271)	2606.7 (2231.9 , 3101.1)	-16.5 (-33.6 , 15.3)
East Azarbayegan	2677 (2069 , 3250)	5165.4 (3993.3 , 6272.3)	10853 (8858 , 12716)	5894.1 (4810.5 , 6906)	14.1 (-9.2 , 53.5)
Fars	1359 (1068 , 1680)	2511.1 (1972.8 , 3104.2)	7327 (6096 , 8571)	3309.8 (2753.5 , 3871.9)	31.8 (3.1 , 75.7)
Gilan	1130 (940 , 1342)	2561.5 (2129.8 , 3041.2)	4857 (4213 , 5475)	3165.2 (2745.7 , 3567.9)	23.6 (-0.4 , 55.7)
Golestan	397 (303 , 495)	2081.5 (1587.8 , 2599.3)	2458 (2038 , 2867)	3594.8 (2979.6 , 4192.3)	72.7 (28.8 , 142.1)
Hamadan	967 (742 , 1190)	2995.8 (2297.1 , 3686.3)	3305 (2823 , 3817)	3415.2 (2917.2 , 3945)	14 (-12.2 , 52.3)
Hormozgan	376 (290 , 463)	2456.1 (1890.5 , 3019.8)	1253 (1074 , 1438)	2374.4 (2035.5 , 2726.2)	-3.3 (-22.9 , 31)
Ilam	147 (113 , 184)	2306.2 (1780.3 , 2897.1)	603 (512 , 704)	2639 (2238.4 , 3078.7)	14.4 (-8 , 52.3)
Isfahan	2303 (1799 , 2830)	3251.3 (2539.2 , 3995.9)	9495 (7950 , 11197)	3708.8 (3105.4 , 4373.8)	14.1 (-11.4 , 52.3)

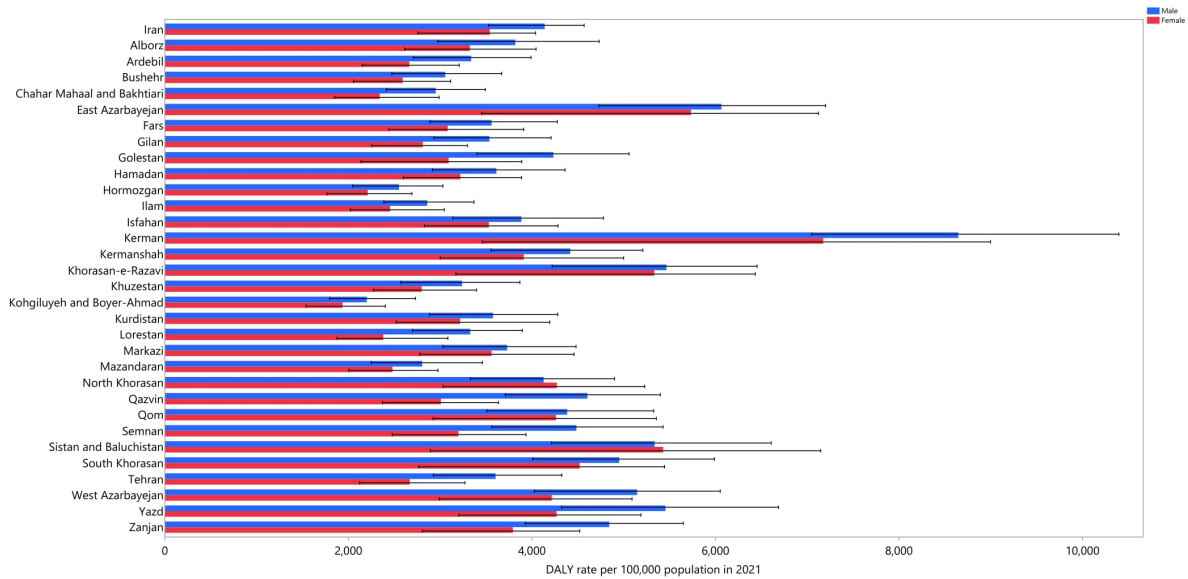
Kerman	1976 (1569 , 2408)	5926.4 (4706.1 , 7222.9)	8868 (6827 , 10444)	7882.6 (6068.2 , 9283.4)	33 (1.8 , 75.6)
Kermanshah	1344 (1072 , 1629)	4959.4 (3954.6 , 6013.2)	4066 (3438 , 4806)	4155.2 (3513.6 , 4910.8)	-16.2 (-34.5 , 13.2)
Khorasan-e-Razavi	3191 (2509 , 3927)	4061.4 (3193.4 , 4997.7)	14392 (11749 , 16345)	5396.8 (4405.6 , 6129.2)	32.9 (3.8 , 80)
Khuzestan	2005 (1582 , 2385)	3624.7 (2859.3 , 4311.2)	4950 (4186 , 5650)	3006.5 (2542.3 , 3431.5)	-17.1 (-31.8 , 6.3)
Kohgiluyeh and Boyer-Ahmad	122 (88 , 158)	2175.2 (1570.5 , 2810.7)	573 (478 , 692)	2075.6 (1731.7 , 2505.3)	-4.6 (-27.9 , 37.1)
Kurdistan	782 (600 , 987)	3648.5 (2800.3 , 4606.3)	2641 (2237 , 3120)	3391.4 (2872.7 , 4006.3)	-7 (-31.2 , 32)
Lorestan	701 (530 , 873)	2872.3 (2170.3 , 3576.3)	1995 (1674 , 2381)	2782.3 (2334.9 , 3320.7)	-3.1 (-27.3 , 38.5)
Markazi	778 (606 , 958)	3525 (2744.1 , 4336.8)	3078 (2560 , 3601)	3639.9 (3027.3 , 4257.7)	3.3 (-20.7 , 40.1)
Mazandaran	1060 (834 , 1275)	2432.2 (1915.2 , 2926.2)	4832 (4090 , 5694)	2638.4 (2233.4 , 3109.2)	8.5 (-13.4 , 41)
North Khorasan	293 (218 , 375)	3430.7 (2552.4 , 4389.4)	1486 (1227 , 1714)	4197.2 (3468.1 , 4843)	22.3 (-9.8 , 70.9)
Qazvin	519 (391 , 639)	3086 (2323.6 , 3802.3)	2043 (1751 , 2339)	3754.1 (3216.8 , 4297)	21.7 (-4.9 , 65.5)
Qom	563 (426 , 696)	5044.8 (3814.9 , 6235.3)	2164 (1851 , 2559)	4323.1 (3698.1 , 5112.9)	-14.3 (-32.9 , 22.2)
Semnan	415 (331 , 510)	3641.8 (2899.2 , 4468.4)	1325 (1117 , 1535)	3808.5 (3210.7 , 4413.9)	4.6 (-17.9 , 39.3)
Sistan and Baluchistan	1453 (1088 , 1787)	6950.7 (5202.1 , 8549.9)	3720 (2872 , 4457)	5381.5 (4155 , 6446.8)	-22.6 (-41.6 , 4.4)
South Khorasan	549 (398 , 704)	4043.7 (2927.5 , 5184.7)	1949 (1593 , 2273)	4729.4 (3865.1 , 5516.2)	17 (-10.6 , 70.1)
Tehran	5454 (4261 , 6933)	3305.5 (2582.3 , 4201.9)	24062 (20224 , 28415)	3157.1 (2653.5 , 3728.2)	-4.5 (-29.4 , 27.7)
West Azarbajejan	1402 (1100 , 1704)	4799.6 (3765.2 , 5832.8)	5561 (4606 , 6425)	4650.3 (3852 , 5372.9)	-3.1 (-23.3 , 27.3)
Yazd	655 (520 , 830)	4631.2 (3675.5 , 5866.2)	2270 (1883 , 2661)	4852 (4025.6 , 5687.6)	4.8 (-19.9 , 35.2)
Zanjan	563 (447 , 685)	4037.6 (3201.7 , 4909.9)	2248 (1908 , 2562)	4284.7 (3637.7 , 4884.4)	6.1 (-17 , 34.9)



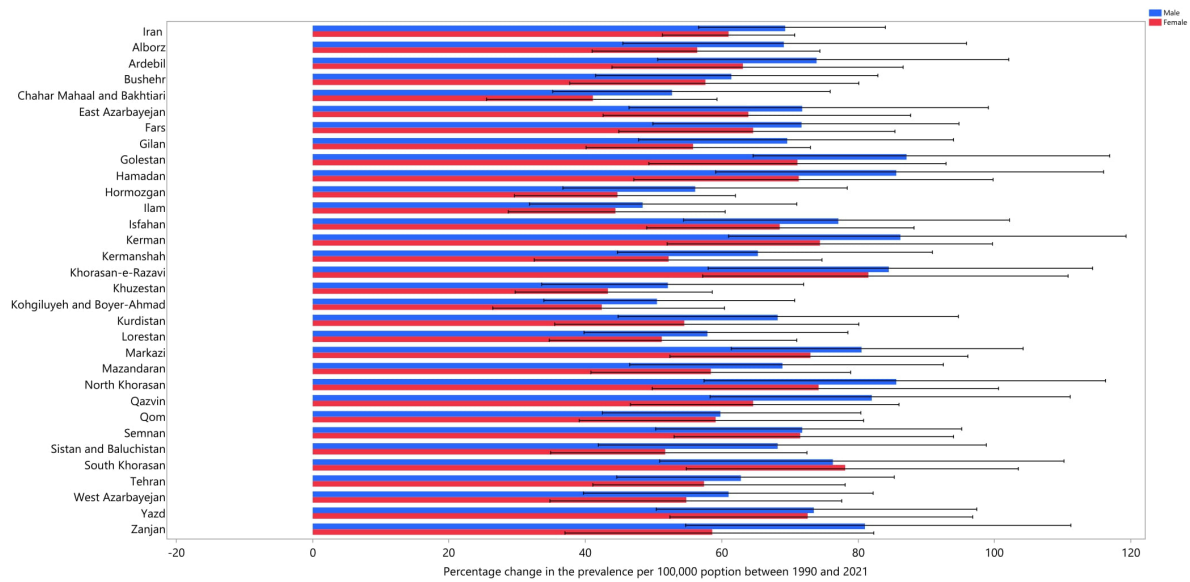
Supplementary Figure S1: Age-standardised point prevalence of COPD (per 100,000 population) for adults 70 Years and Older in Iran in 2021, by sex and province. Note: COPD: Chronic obstructive pulmonary disease (generated from data available from <http://ghdx.healthdata.org/gbd-results-tool>).



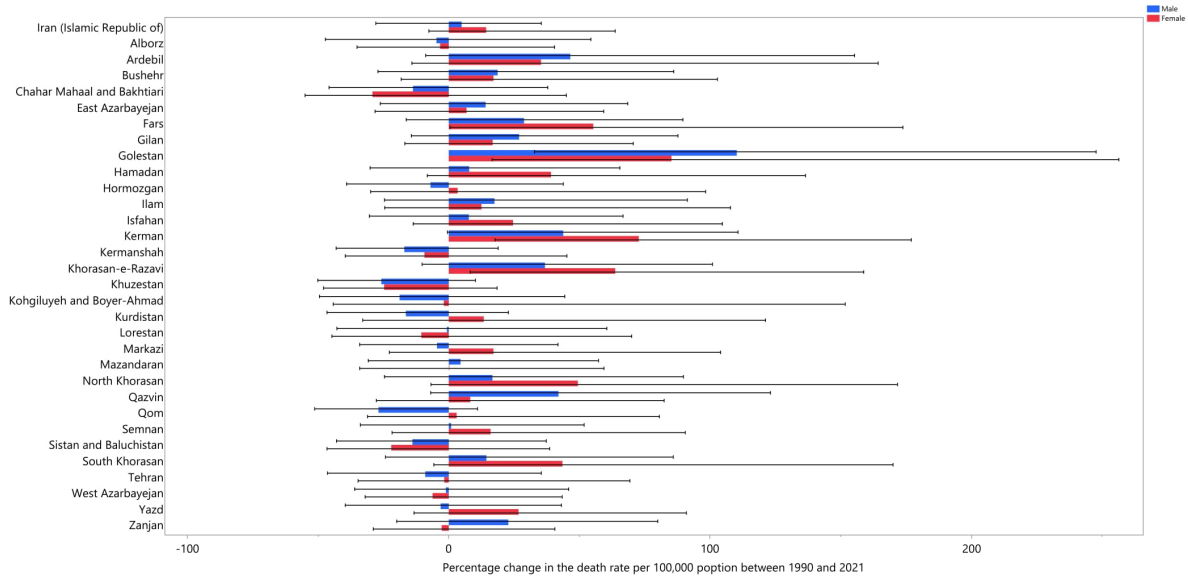
Supplementary Figure S2: Age-standardised death rates of COPD (per 100,000 population) for adults 70 Years and Older in Iran in 2021, by sex and province. Note: COPD: Chronic obstructive pulmonary disease (generated from data available from <http://ghdx.healthdata.org/gbd-results-tool>).



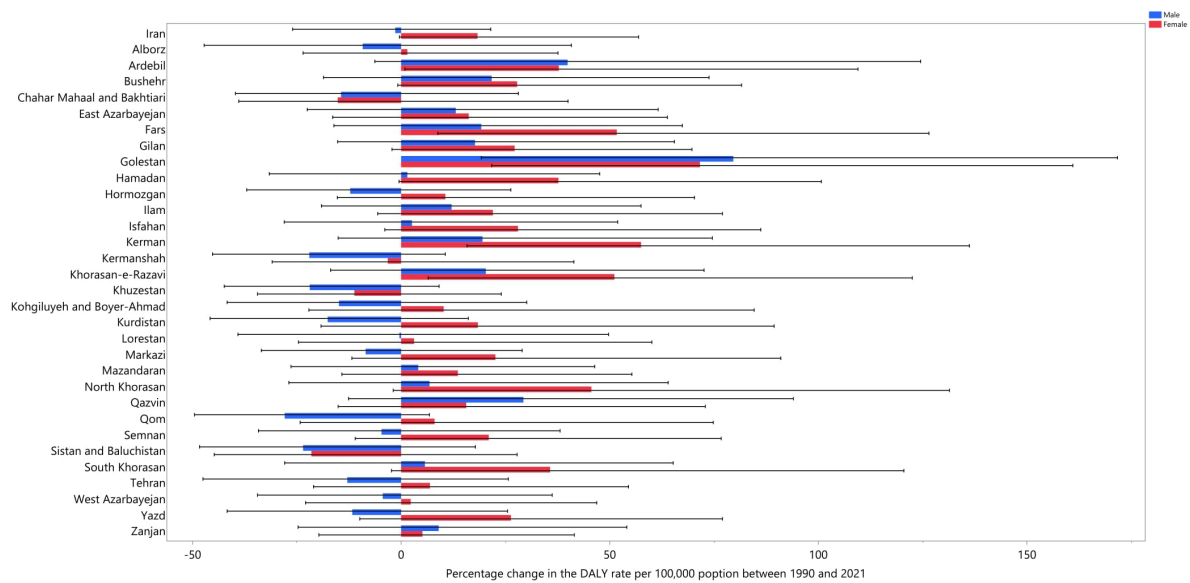
Supplementary Figure S3: Age-standardised DALY rates of COPD (per 100,000 population) for adults 70 Years and Older in Iran in 2021, by sex and province. Note: DALY=Disability-adjusted life years; COPD: Chronic obstructive pulmonary disease (generated from data available from <http://ghdx.healthdata.org/gbd-results-tool>).



Supplementary Figure S4: The percentage change in the age-standardised prevalence of COPD for adults 70 Years and Older in Iran from 1990 to 2021, by sex and province. Note: COPD: Chronic obstructive pulmonary disease (generated from data available from <http://ghdx.healthdata.org/gbd-results-tool>).



Supplementary Figure S5: The percentage change in the age-standardised death rate of COPD for adults 70 Years and Older in Iran from 1990 to 2021, by sex and province. Note: COPD: Chronic obstructive pulmonary disease (generated from data available from <http://ghdx.healthdata.org/gbd-results-tool>).



Supplementary Figure S6: The percentage change in the age-standardised DALYs of COPD for

adults 70 Years and Older in Iran from 1990 to 2021, by sex and province. Note:

DALY=Disability-adjusted life years; COPD: Chronic obstructive pulmonary disease (generated from data available from <http://ghdx.healthdata.org/gbd-results-tool>).