COVID-19 severity by smoking status

|  | | Non severe disease | | | | | | | Severe disease | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Author | Population with severity | N (%) | Current smoker (%) | Former smoker (%) | Current/former smoker (%) | Never smoker (%) | Never/unknown smoker (%) | Not stated (%) | N (%) | Current smoker (%) | Former smoker (%) | Current/former smoker (%) | Never smoker (%) | Never/unknown smoker (%) | Not stated (%) |
| Guan, Ni | 1,085 | 913 (84%) | 108 (11.83%) | 12 (1.31%) | - | 793 (86.86%) | - | - | 172 (15%) | 29 (16.86%) | 9 (5.23%) | - | 134 (77.91%) | - | - |
| Zhang, Dong | 9 | 3 (33%) | 0 (0.00%) | 3 (100.00%) | - | 0 (0.00%) | - | - | 6 (66%) | 2 (33.33%) | 4 (66.67%) | - | 0 (0.00%) | - | - |
| Wan | 9 | 8 (88%) | 8 (100.00%) | 0 (0.00%) | - | 0 (0.00%) | - | - | 1 (11%) | 1 (100.00%) | 0 (0.00%) | - | 0 (0.00%) | - | - |
| Huang, Wang | 3 | 3 (100%) | 3 (100.00%) | 0 (0.00%) | - | 0 (0.00%) | - | - | 0 (0%) | 0 (NaN%) | 0 (NaN%) | - | 0 (NaN%) | - | - |
| Rentsch | 285 | 168 (58%) | 47 (27.98%) | 53 (31.55%) | - | 68 (40.48%) | - | - | 117 (41%) | 43 (36.75%) | 36 (30.77%) | - | 38 (32.48%) | - | - |
| Hu | 323 | 151 (46%) | - | - | 12 (7.95%) | - | 139 (92.05%) | - | 172 (53%) | - | - | 26 (15.12%) | - | 146 (84.88%) | - |
| Wang, Pan | 125 | 100 (80%) | - | - | 9 (9.00%) | - | 91 (91.00%) | - | 25 (20%) | - | - | 7 (28.00%) | - | 18 (72.00%) | - |
| Kim | 27 | 21 (77%) | 3 (14.29%) | - | - | - | 18 (85.71%) | - | 6 (22%) | 2 (33.33%) | 0 (0.00%) | - | - | 4 (66.67%) | - |
| Shi, Yu | 474 | 425 (89%) | - | - | 34 (8.00%) | - | 391 (92.00%) | - | 49 (10%) | - | - | 6 (12.24%) | - | 43 (87.76%) | - |
| Liao, Feng | 148 | 92 (62%) | - | - | 5 (5.43%) | - | - | 87 (94.57%) | 56 (37%) | 3 (5.36%) | - | - | - | - | 53 (94.64%) |
| Shi, Ren | 134 | 88 (65%) | - | - | 8 (9.09%) | - | - | 80 (90.91%) | 46 (34%) | - | - | 6 (13.04%) | - | - | 40 (86.96%) |
| Hadjadj | 50 | 15 (30%) | 1 (6.67%) | 2 (13.33%) | - | 12 (80.00%) | - | - | 35 (70%) | 0 (0.00%) | 7 (20.00%) | - | 28 (80.00%) | - | - |
| Zheng, Xiong | 73 | 43 (58%) | - | - | 6 (13.95%) | 37 (86.05%) | - | - | 30 (41%) | - | - | 2 (6.67%) | 28 (93.33%) | - | - |
| de la Rica | 48 | 26 (54%) | - | - | 6 (23.08%) | - | - | 20 (76.92%) | 20 (41%) | - | - | 4 (20.00%) | - | - | 16 (80.00%) |
| Yin, Yang | 106 | 47 (44%) | - | - | 6 (12.77%) | - | - | 41 (87.23%) | 59 (55%) | - | - | 12 (20.34%) | - | - | 47 (79.66%) |
| Allenbach | 147 | 100 (68%) | - | - | 9 (9.00%) | - | - | 91 (91.00%) | 47 (31%) | - | - | 0 (0.00%) | - | - | 47 (100.00%) |
| Goyal | 393 | 263 (66%) | 14 (5.32%) | - | - | - | - | 249 (94.68%) | 130 (33%) | 6 (4.62%) | - | - | - | - | 124 (95.38%) |
| Feng | 454 | 333 (73%) | 27 (8.11%) | - | - | - | - | 306 (91.89%) | 121 (26%) | 17 (14.05%) | - | - | - | - | 104 (85.95%) |
| Yao | 108 | 83 (76%) | 1 (1.20%) | - | - | - | - | 82 (98.80%) | 25 (23%) | 3 (12.00%) | - | - | - | - | 22 (88.00%) |
| Regina | 200 | 163 (81%) | 9 (5.52%) | - | - | - | - | 154 (94.48%) | 37 (18%) | 0 (0.00%) | - | - | - | - | 37 (100.00%) |
| Feuth | 28 | 21 (75%) | 1 (4.76%) | 7 (33.33%) | - | 13 (61.90%) | - | - | 7 (25%) | 2 (28.57%) | 1 (14.29%) | - | 4 (57.14%) | - | - |
| Mejia-Vilet | 329 | 214 (65%) | - | - | 13 (6.07%) | - | - | 201 (93.93%) | 115 (34%) | - | - | 10 (8.70%) | - | - | 105 (91.30%) |
| Chen, Jiang | 135 | 54 (40%) | - | - | 4 (7.41%) | - | - | 50 (92.59%) | 81 (60%) | - | - | 9 (11.11%) | - | - | 72 (88.89%) |
| Vaquero-Roncero | 146 | 75 (51%) | - | - | 4 (5.33%) | - | - | 71 (94.67%) | 71 (48%) | - | - | 6 (8.45%) | - | - | 65 (91.55%) |
| Kim, Garg | 2,490 | 1692 (67%) | 112 (6.62%) | 395 (23.35%) | - | - | 1185 (70.04%) | - | 798 (32%) | 38 (4.76%) | 247 (30.95%) | - | - | 512 (64.16%) | - |
| Wu | 174 | 92 (52%) | - | - | 47 (51.09%) | - | 45 (48.91%) | - | 82 (47%) | 11 (13.41%) | - | - | - | 71 (86.59%) | - |
| Chaudhry | 40 | 34 (85%) | - | - | 5 (14.71%) | - | - | 29 (85.29%) | 6 (15%) | - | - | 1 (16.67%) | - | - | 5 (83.33%) |
| Garibaldi | 832 | 532 (63%) | 25 (4.70%) | 107 (20.11%) | - | - | - | 400 (75.19%) | 300 (36%) | 21 (7.00%) | 81 (27.00%) | - | - | - | 198 (66.00%) |
| Kuderer | 928 | 686 (73%) | 35 (5.10%) | 210 (30.61%) | - | 370 (53.94%) | - | 29 (4.23%) | 242 (26%) | 8 (3.31%) | 116 (47.93%) | - | 99 (40.91%) | 15 (6.20%) | 4 (1.65%) |
| Romao | 14 | 14 (100%) | - | - | 4 (28.57%) | - | - | 10 (71.43%) | 0 (0%) | - | - | - | - | - | - |
| Giannouchos | 89,756 | 78050 (86%) | 6322 (8.10%) | - | - | - | 71728 (91.90%) | - | 11706 (13%) | 1089 (9.30%) | - | - | - | 10617 (90.70%) | - |
| Cen | 1,007 | 720 (71%) | - | - | 70 (9.72%) | - | - | 650 (90.28%) | 287 (28%) | - | - | 18 (6.27%) | - | - | 269 (93.73%) |
| Maraschini | 132 | 89 (67%) | - | 11 (12.36%) | - | 78 (87.64%) | - | - | 43 (32%) | - | 3 (6.98%) | - | 40 (93.02%) | - | - |
| Russell | 156 | 128 (82%) | 9 (7.03%) | 31 (24.22%) | - | 51 (39.84%) | - | 37 (28.91%) | 28 (17%) | 2 (7.14%) | 8 (28.57%) | - | 8 (28.57%) | - | 10 (35.71%) |
| Siso-Almirall | 260 | 212 (81%) | - | - | 60 (28.30%) | - | - | 152 (71.70%) | 48 (18%) | - | - | 21 (43.75%) | - | - | 27 (56.25%) |
| Gu | 884 | 511 (57%) | 30 (5.87%) | 126 (24.66%) | - | 355 (69.47%) | - | - | 134 (15%) | 3 (2.24%) | 61 (45.52%) | - | 70 (52.24%) | - | - |
| Mendy | 689 | 598 (86%) | - | - | 133 (22.24%) | - | - | 465 (77.76%) | 91 (13%) | - | - | 37 (40.66%) | - | - | 54 (59.34%) |
| Jin, Gu | 6 | 2 (33%) | - | - | 0 (0.00%) | - | - | 4 (200.00%) | 4 (66%) | - | - | 2 (50.00%) | - | - | 2 (50.00%) |
| Senkal | 611 | 446 (73%) | 48 (10.76%) | - | - | - | - | 398 (89.24%) | 165 (27%) | 21 (12.73%) | - | - | - | - | 144 (87.27%) |
| Patel | 129 | 89 (68%) | 26 (29.21%) | - | - | - | 58 (65.17%) | 5 (5.62%) | 40 (31%) | 22 (55.00%) | - | - | - | 14 (35.00%) | 4 (10.00%) |
| Maucourant | 27 | 10 (37%) | 1 (10.00%) | 2 (20.00%) | - | 2 (20.00%) | - | 5 (50.00%) | 17 (62%) | 2 (11.76%) | 5 (29.41%) | - | 9 (52.94%) | - | 1 (5.88%) |
| Xie | 619 | 469 (75%) | - | - | 32 (6.82%) | - | - | 437 (93.18%) | 150 (24%) | - | - | 19 (12.67%) | - | - | 131 (87.33%) |
| Fox | 55 | 30 (54%) | 1 (3.33%) | 4 (13.33%) | - | 17 (56.67%) | - | 8 (26.67%) | 25 (45%) | 0 (0.00%) | 2 (8.00%) | - | 14 (56.00%) | - | 9 (36.00%) |
| Zhang, Cao | 240 | 162 (67%) | 2 (1.23%) | 6 (3.70%) | - | - | - | 154 (95.06%) | 78 (32%) | 4 (5.13%) | 4 (5.13%) | - | - | - | 70 (89.74%) |
| Kurashima | 53 | 10 (18%) | - | - | 3 (30.00%) | - | - | 7 (70.00%) | 43 (81%) | - | - | 24 (55.81%) | - | - | 19 (44.19%) |
| Zhan | 75 | NA (NA%) | - | - | - | - | - | - | 75 (100%) | - | - | 9 (12.00%) | - | - | 66 (88.00%) |
| Omrani | 858 | 806 (93%) | - | - | 121 (15.01%) | - | - | 685 (84.99%) | 52 (6%) | - | - | 9 (17.31%) | - | - | 43 (82.69%) |
| Marcos | 918 | 555 (60%) | 38 (6.85%) | - | 69 (12.43%) | - | - | 448 (80.72%) | 363 (39%) | 18 (4.96%) | - | 71 (19.56%) | - | - | 292 (80.44%) |
| Hoertel, Sanchez, Rico | 7,345 | 6014 (81%) | 433 (7.20%) | - | - | - | - | 5581 (92.80%) | 1331 (18%) | 190 (14.27%) | - | - | - | - | 1141 (85.73%) |
| Qi | 267 | 217 (81%) | 22 (10.14%) | - | - | - | 195 (89.86%) | - | 50 (18%) | 31 (62.00%) | - | - | - | 19 (38.00%) | - |
| Monteiro | 112 | 84 (75%) | 3 (3.57%) | 14 (16.67%) | - | 63 (75.00%) | - | 4 (4.76%) | 28 (25%) | 4 (14.29%) | 6 (21.43%) | - | 14 (50.00%) | - | 4 (14.29%) |
| Morshed | 103 | 87 (84%) | 28 (32.18%) | - | - | - | 59 (67.82%) | - | 16 (15%) | 4 (25.00%) | - | - | - | 12 (75.00%) | - |
| Zhou, Sun | 144 | 108 (75%) | 11 (10.19%) | - | - | - | - | 97 (89.81%) | 36 (25%) | 2 (5.56%) | - | - | - | - | 34 (94.44%) |
| Hippisley, Cox | - | NA (NA%) | - | - | - | - | - | - | 1286 (NA%) | 56 (4.35%) | 427 (33.20%) | - | 791 (61.51%) | - | 12 (0.93%) |
| Zhao, Chen | 641 | 398 (62%) | 87 (21.86%) | - | - | - | - | 311 (78.14%) | 195 (30%) | 52 (26.67%) | - | - | - | - | 143 (73.33%) |
| Qu | 246 | 226 (91%) | 90 (39.82%) | - | - | - | - | 136 (60.18%) | 20 (8%) | 14 (70.00%) | - | - | - | - | 6 (30.00%) |
| Petrilli | 2,729 | 1739 (63%) | 97 (5.58%) | 325 (18.69%) | - | 1067 (61.36%) | - | 250 (14.38%) | 990 (36%) | 44 (4.44%) | 236 (23.84%) | - | 517 (52.22%) | - | 193 (19.49%) |
| Ren | 432 | 314 (72%) | 26 (8.28%) | - | - | 288 (91.72%) | - | - | 118 (27%) | 17 (14.41%) | - | - | 101 (85.59%) | - | - |
| Yan | 578 | 450 (77%) | 31 (6.89%) | - | - | - | - | 419 (93.11%) | 128 (22%) | 20 (15.62%) | - | - | - | - | 108 (84.38%) |
| Nicholson | 1,042 | 550 (52%) | 37 (6.73%) | 106 (19.27%) | - | 211 (38.36%) | - | 196 (35.64%) | 401 (38%) | 41 (10.22%) | 92 (22.94%) | - | 155 (38.65%) | - | 113 (28.18%) |
| Zhu | 432 | 285 (65%) | 46 (16.14%) | - | - | - | - | 239 (83.86%) | 147 (34%) | 16 (10.88%) | - | - | - | - | 147 (100.00%) |
| Kalan | 193 | 122 (63%) | 9 (7.38%) | - | - | 102 (83.61%) | - | 11 (9.02%) | 71 (36%) | 5 (7.04%) | - | - | 62 (87.32%) | - | 4 (5.63%) |
| Burrell | 204 | 85 (41%) | - | - | 7 (8.24%) | - | 75 (88.24%) | 3 (3.53%) | 119 (58%) | - | - | 20 (16.81%) | - | 94 (78.99%) | 5 (4.20%) |
| Chudasama | 1,706 | NA (NA%) | - | - | - | - | - | - | 1706 (100%) | 235 (13.77%) | 699 (40.97%) | - | 772 (45.25%) | - | - |
| Perico | 89 | NA (NA%) | - | - | - | - | - | - | 25 (28%) | 1 (4.00%) | 5 (20.00%) | - | 15 (60.00%) | - | 4 (16.00%) |
| Ziehr | 1,087 | 990 (91%) | - | - | 849 (85.76%) | 141 (14.24%) | - | - | 97 (8%) | - | - | 75 (77.32%) | 22 (22.68%) | - | - |
| Zhou, Song | 51 | NA (NA%) | - | - | - | - | - | - | 51 (100%) | - | - | 40 (78.43%) | 11 (21.57%) | - | - |
| Zhang, Li | 405 | 257 (63%) | - | - | 21 (8.17%) | 236 (91.83%) | - | - | 148 (36%) | - | - | 25 (16.89%) | 123 (83.11%) | - | - |
| Martini | 954 | 838 (87%) | - | - | 34 (4.06%) | 804 (95.94%) | - | - | 116 (12%) | - | - | 22 (18.97%) | 94 (81.03%) | - | - |
| Jehi | 2,155 | 1400 (64%) | - | - | 92 (6.57%) | 99 (7.07%) | - | 669 (47.79%) | 755 (35%) | 51 (6.75%) | 58 (7.68%) | - | 200 (26.49%) | - | 446 (59.07%) |
| Alguwaihes | 123 | 34 (27%) | 3 (8.82%) | - | - | - | 31 (91.18%) | - | 89 (72%) | 11 (12.36%) | - | - | - | 78 (87.64%) | - |
| Aksu | 1,173 | 162 (13%) | - | - | 36 (22.22%) | - | 126 (77.78%) | - | 1011 (86%) | - | - | 300 (29.67%) | 711 (70.33%) | - | - |
| Adrish | 12,210 | 11018 (90%) | 921 (8.36%) | - | - | - | - | 10097 (91.64%) | 1192 (9%) | 181 (15.18%) | - | - | - | - | 1011 (84.82%) |
| Iftimie | 282 | 218 (77%) | - | - | 21 (9.63%) | - | - | 197 (90.37%) | 64 (22%) | - | - | 4 (6.25%) | - | - | 60 (93.75%) |