| Variable.main | levels | HSA | non\_HSA | HR | CI\_95 | level\_pval | lrt\_pvalue |
| --- | --- | --- | --- | --- | --- | --- | --- |
| avg\_activity\_freq\_sy3\_terciles | ≥1.1 - <5.41 | 108 (22.0) | 549 (21.5) | base | 0-0 |  | 0.0000 |
|  | ≥12.65 - <100 | 137 (28.0) | 511 (20.0) | 4.26 | 3.29, 5.50 | <0.001 | 0.0000 |
|  | ≥5.41 - <8.4 | 121 (24.7) | 538 (21.1) | 1.28 | 0.98, 1.66 | 0.065 | 0.0000 |
|  | ≥8.4 - <12.65 | 114 (23.3) | 540 (21.1) | 1.39 | 1.06, 1.81 | 0.015 | 0.0000 |
| avg\_activity\_intensity\_sy3\_quartiles | ≥0.91 - <4.06 | 54 (11.0) | 278 (10.9) | base | 0-0 |  | 0.0000 |
|  | ≥4.06 - <5.71 | 70 (14.3) | 325 (12.7) | 1.28 | 0.90, 1.82 | 0.2 | 0.0000 |
|  | ≥5.71 - <9.38 | 140 (28.6) | 648 (25.4) | 1.36 | 0.99, 1.86 | 0.057 | 0.0000 |
|  | ≥9.38 - <100 | 216 (44.1) | 887 (34.7) | 2.67 | 1.98, 3.61 | <0.001 | 0.0000 |
| avg\_weight\_5y\_prior\_endpoint\_quartiles | >=21.31-<24.66kg | 99 (20.2) | 647 (25.3) | 1.12 | 0.85, 1.48 | 0.4 | 0.0000 |
|  | >=24.66-<29.37kg | 149 (30.4) | 597 (23.4) | 3.06 | 2.37, 3.96 | <0.001 | 0.0000 |
|  | >=29.37-41.52kg | 131 (26.7) | 616 (24.1) | 4.54 | 3.48, 5.92 | <0.001 | 0.0000 |
|  | 9.75-<21.31kg | 97 (19.8) | 649 (25.4) | base | 0-0 |  | 0.0000 |
|  | not\_recorded | 14 (2.9) | 45 (1.8) | base | 0-0 |  | 0.0000 |
| quartile\_anti\_parasites\_5y\_prior\_endpoint | drug\_not\_administered | 76 (15.5) | 363 (14.2) | base | 0-0 |  | 0.0000 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.59 | 0.30, 1.18 | 0.13 | 0.0000 |
|  | Q1 | 111 (22.7) | 668 (26.2) | 0.78 | 0.58, 1.05 | 0.10 | 0.0000 |
|  | Q2 | 107 (21.8) | 595 (23.3) | 0.81 | 0.61, 1.09 | 0.2 | 0.0000 |
|  | Q3 | 72 (14.7) | 463 (18.1) | 0.69 | 0.50, 0.95 | 0.023 | 0.0000 |
|  | Q4 | 115 (23.5) | 319 (12.5) | 2.00 | 1.49, 2.67 | <0.001 | 0.0000 |
| in.the.house\_YN\_study\_years\_rest\_of\_life | Not within rest of life | 11 (2.2) | 438 (17.1) | base | 0-0 |  | 0.0001 |
|  | Within rest of life | 479 (97.8) | 2116 (82.9) | 2.74 | 1.51, 4.99 | <0.001 | 0.0001 |
| half\_anti\_parasites\_5y\_prior\_endpoint | drug\_not\_administered | 76 (15.5) | 363 (14.2) | base | 0-0 |  | 0.0011 |
|  | lower\_half | 218 (44.5) | 1263 (49.5) | 0.80 | 0.61, 1.04 | 0.089 | 0.0011 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.59 | 0.29, 1.17 | 0.13 | 0.0011 |
|  | upper\_half | 187 (38.2) | 782 (30.6) | 1.15 | 0.88, 1.50 | 0.3 | 0.0011 |
| spayed\_while\_in\_heat | 0 | 162 (33.1) | 883 (34.6) | base | 0-0 |  | 0.0028 |
|  | 1 | 40 (8.2) | 225 (8.8) | 1.52 | 1.08, 2.15 | 0.018 | 0.0028 |
|  | Intact Female | 11 (2.2) | 183 (7.2) | 0.84 | 0.46, 1.55 | 0.6 | 0.0028 |
|  | Male | 277 (56.5) | 1263 (49.5) | 1.37 | 1.13, 1.67 | 0.001 | 0.0028 |
| sex | F | 213 (43.5) | 1291 (50.5) | base | 0-0 |  | 0.0040 |
|  | M | 277 (56.5) | 1263 (49.5) | 1.30 | 1.09, 1.55 | 0.004 | 0.0040 |
| outside\_YN\_study\_years\_whole\_life | Not within whole life | 466 (95.1) | 2343 (91.7) | base | 0-0 |  | 0.0045 |
|  | Within whole life | 24 (4.9) | 210 (8.2) | 0.58 | 0.38, 0.87 | 0.009 | 0.0045 |
| in.the.house\_YN\_sum\_rest\_of\_life\_quartiles | ≥0 - <4 | 63 (12.9) | 757 (29.6) | base | 0-0 |  | 0.0051 |
|  | ≥13 - <60 | 144 (29.4) | 582 (22.8) | 0.73 | 0.54, 0.98 | 0.035 | 0.0051 |
|  | ≥4 - <9 | 171 (34.9) | 706 (27.6) | 1.01 | 0.76, 1.35 | >0.9 | 0.0051 |
|  | ≥9 - <13 | 112 (22.9) | 509 (19.9) | 0.73 | 0.53, 0.99 | 0.045 | 0.0051 |
| no\_pregnancy\_ever | 0 | 282 (57.6) | 1291 (50.5) | base | 0-0 |  | 0.0051 |
|  | 1 | 208 (42.4) | 1263 (49.5) | 0.78 | 0.65, 0.93 | 0.005 | 0.0051 |
| outside\_YN\_study\_years\_rest\_of\_life | Not within rest of life | 473 (96.5) | 2418 (94.7) | base | 0-0 |  | 0.0067 |
|  | Within rest of life | 17 (3.5) | 135 (5.3) | 0.54 | 0.34, 0.88 | 0.014 | 0.0067 |
| main\_lifestyle\_category\_mode\_5yrs\_prior | breed/showing | 7 (1.4) | 52 (2.0) | base | 0-0 |  | 0.0108 |
|  | companion/pet | 435 (88.8) | 2062 (80.7) | 0.53 | 0.25, 1.12 | 0.095 | 0.0108 |
|  | competitive | 22 (4.5) | 192 (7.5) | 0.31 | 0.13, 0.73 | 0.007 | 0.0108 |
|  | miscellaneous | 6 (1.2) | 15 (0.6) | 0.81 | 0.27, 2.40 | 0.7 | 0.0108 |
|  | working | 8 (1.6) | 32 (1.3) | 0.97 | 0.35, 2.69 | >0.9 | 0.0108 |
| heats\_before\_neutering\_terciles | >2-<=4 | 24 (4.9) | 86 (3.4) | 1.36 | 0.88, 2.12 | 0.2 | 0.0109 |
|  | >4-12 | 18 (3.7) | 129 (5.1) | 0.64 | 0.39, 1.05 | 0.078 | 0.0109 |
|  | 0 | 114 (23.3) | 676 (26.5) | base | 0-0 |  | 0.0109 |
|  | 1-<=2 | 38 (7.8) | 165 (6.5) | 1.16 | 0.80, 1.67 | 0.4 | 0.0109 |
|  | Intact Female | 11 (2.2) | 183 (7.2) | 0.78 | 0.42, 1.44 | 0.4 | 0.0109 |
|  | Male | 277 (56.5) | 1263 (49.5) | 1.27 | 1.02, 1.57 | 0.034 | 0.0109 |
|  | not\_recorded | 8 (1.6) | 52 (2.0) | base | 0-0 |  | 0.0109 |
| use\_incense\_or\_candles\_study\_years\_whole\_life | Not within whole life | 165 (33.7) | 785 (30.7) | base | 0-0 |  | 0.0156 |
|  | Within whole life | 325 (66.3) | 1769 (69.3) | 0.79 | 0.66, 0.95 | 0.014 | 0.0156 |
| comorb\_immune\_mediated\_chronic | FALSE | 490 (100.0) | 2541 (99.5) | base | 0-0 |  | 0.0191 |
|  | TRUE | 0 (0.0) | 13 (0.5) | 0.00 | 0.00, Inf | >0.9 | 0.0191 |
| mismating\_ever | 0 | 490 (100.0) | 2541 (99.5) | base | 0-0 |  | 0.0210 |
|  | 1 | 0 (0.0) | 13 (0.5) | 0.00 | 0.00, Inf | >0.9 | 0.0210 |
| avg\_height\_5y\_prior\_endpoint\_quartiles | >=56.07-<58.42cm | 115 (23.5) | 517 (20.2) | 1.20 | 0.92, 1.58 | 0.2 | 0.0225 |
|  | >=58.42-<60.32cm | 118 (24.1) | 514 (20.1) | 1.30 | 0.99, 1.71 | 0.055 | 0.0225 |
|  | >=60.32cm-67.73cm | 89 (18.2) | 543 (21.3) | 0.88 | 0.66, 1.18 | 0.4 | 0.0225 |
|  | 49.13-<56.07cm | 93 (19.0) | 539 (21.1) | base | 0-0 |  | 0.0225 |
|  | not\_recorded | 75 (15.3) | 441 (17.3) | base | 0-0 |  | 0.0225 |
| main\_lifestyle\_category | breed/showing | 8 (1.6) | 70 (2.7) | base | 0-0 |  | 0.0282 |
|  | companion/pet | 444 (90.6) | 2222 (87.0) | 0.80 | 0.40, 1.61 | 0.5 | 0.0282 |
|  | competitive | 24 (4.9) | 211 (8.3) | 0.49 | 0.22, 1.09 | 0.078 | 0.0282 |
|  | miscellaneous | 6 (1.2) | 18 (0.7) | 1.25 | 0.43, 3.62 | 0.7 | 0.0282 |
|  | working | 8 (1.6) | 33 (1.3) | 1.50 | 0.56, 4.00 | 0.4 | 0.0282 |
| use\_hepa\_filter\_study\_years\_rest\_of\_life | Not within rest of life | 234 (47.8) | 1342 (52.5) | base | 0-0 |  | 0.0305 |
|  | Within rest of life | 256 (52.2) | 1212 (47.5) | 0.82 | 0.69, 0.98 | 0.030 | 0.0305 |
| use\_air\_cleaner\_study\_years\_whole\_life | Not within whole life | 336 (68.6) | 1722 (67.4) | base | 0-0 |  | 0.0417 |
|  | Within whole life | 154 (31.4) | 832 (32.6) | 0.82 | 0.68, 1.0 | 0.044 | 0.0417 |
| avg\_purina\_BCS\_5y\_prior\_endpoint\_quartiles | >=5-<5.28 | 154 (31.4) | 617 (24.2) | 1.14 | 0.88, 1.48 | 0.3 | 0.0454 |
|  | >=5.28-<5.86 | 114 (23.3) | 558 (21.8) | 0.81 | 0.62, 1.06 | 0.12 | 0.0454 |
|  | >=5.86 - 9 | 115 (23.5) | 553 (21.7) | 0.98 | 0.75, 1.29 | 0.9 | 0.0454 |
|  | 3.3-<5 | 95 (19.4) | 386 (15.1) | base | 0-0 |  | 0.0454 |
|  | not\_recorded | 12 (2.4) | 440 (17.2) | base | 0-0 |  | 0.0454 |
| age\_at\_neuter\_years\_quartiles | >=0.52-<0.83y | 40 (8.2) | 272 (10.6) | 0.95 | 0.61, 1.47 | 0.8 | 0.0474 |
|  | >=0.83-2.44y | 63 (12.9) | 250 (9.8) | 1.55 | 1.04, 2.32 | 0.031 | 0.0474 |
|  | >=2.44-9.59y | 52 (10.6) | 261 (10.2) | 1.07 | 0.70, 1.61 | 0.8 | 0.0474 |
|  | 0.15-<0.52y | 39 (8.0) | 273 (10.7) | base | 0-0 |  | 0.0474 |
|  | Entire | 75 (15.3) | 527 (20.6) | 1.37 | 0.93, 2.01 | 0.11 | 0.0474 |
|  | not\_recorded | 221 (45.1) | 971 (38.0) | base | 0-0 |  | 0.0474 |
| in.the.garage\_YN\_study\_years\_early\_life | Not within early life | 484 (98.8) | 2485 (97.3) | base | 0-0 |  | 0.0494 |
|  | Within early life | 6 (1.2) | 67 (2.6) | 0.49 | 0.22, 1.10 | 0.082 | 0.0494 |
| avg\_activity\_duration\_sy1\_2\_quartiles | ≥0 - <26.67 | 171 (34.9) | 844 (33.0) | base | 0-0 |  | 0.0527 |
|  | ≥26.67 - <33.33 | 103 (21.0) | 433 (17.0) | 1.18 | 0.93, 1.51 | 0.2 | 0.0527 |
|  | ≥33.33 - <40 | 121 (24.7) | 709 (27.8) | 0.88 | 0.70, 1.12 | 0.3 | 0.0527 |
|  | ≥40 - <100 | 95 (19.4) | 568 (22.2) | 0.82 | 0.64, 1.06 | 0.13 | 0.0527 |
| outside\_YN\_study\_years\_early\_life | Not within early life | 472 (96.3) | 2397 (93.9) | base | 0-0 |  | 0.0547 |
|  | Within early life | 18 (3.7) | 157 (6.1) | 0.65 | 0.41, 1.04 | 0.073 | 0.0547 |
| in.the.garage\_YN\_study\_years\_whole\_life | Not within whole life | 479 (97.8) | 2454 (96.1) | base | 0-0 |  | 0.0596 |
|  | Within whole life | 11 (2.2) | 97 (3.8) | 0.59 | 0.32, 1.07 | 0.084 | 0.0596 |
| comorb\_intestinal\_parasitism\_chronic | FALSE | 485 (99.0) | 2536 (99.3) | base | 0-0 |  | 0.0609 |
|  | TRUE | 5 (1.0) | 18 (0.7) | 2.66 | 1.10, 6.41 | 0.030 | 0.0609 |
| in.the.house\_YN\_sum\_whole\_life\_quartiles | ≥0 - <7 | 64 (13.1) | 727 (28.5) | base | 0-0 |  | 0.0617 |
|  | ≥12 - <17 | 140 (28.6) | 588 (23.0) | 0.80 | 0.60, 1.08 | 0.15 | 0.0617 |
|  | ≥17 - <69 | 146 (29.8) | 586 (22.9) | 0.74 | 0.55, 1.00 | 0.046 | 0.0617 |
|  | ≥7 - <12 | 140 (28.6) | 653 (25.6) | 0.97 | 0.72, 1.31 | 0.9 | 0.0617 |
| comorb\_tick\_borne\_parasitism\_chronic | FALSE | 483 (98.6) | 2535 (99.3) | base | 0-0 |  | 0.0646 |
|  | TRUE | 7 (1.4) | 19 (0.7) | 2.21 | 1.05, 4.67 | 0.037 | 0.0646 |
| in.the.house\_YN\_sum\_early\_life\_terciles | ≥0 - <3 | 223 (45.5) | 1393 (54.5) | base | 0-0 |  | 0.0659 |
|  | ≥3 - <4 | 126 (25.7) | 627 (24.5) | 1.07 | 0.86, 1.34 | 0.5 | 0.0659 |
|  | ≥4 - <15 | 141 (28.8) | 534 (20.9) | 1.29 | 1.04, 1.59 | 0.019 | 0.0659 |
| neutered\_reason | Elective | 374 (76.3) | 1772 (69.4) | base | 0-0 |  | 0.0667 |
|  | Entire | 83 (16.9) | 555 (21.7) | 1.11 | 0.88, 1.41 | 0.4 | 0.0667 |
|  | Medical Reason | 23 (4.7) | 156 (6.1) | 0.62 | 0.41, 0.94 | 0.025 | 0.0667 |
|  | Unknown | 1 (0.2) | 8 (0.3) | 0.81 | 0.11, 5.74 | 0.8 | 0.0667 |
| avg\_frequency\_5y\_prior\_endpoint\_quartiles | ≥20 - <71.67 | 106 (21.6) | 660 (25.8) | base | 0-0 |  | 0.0807 |
|  | ≥71.67 - <80 | 225 (45.9) | 929 (36.4) | 1.34 | 1.06, 1.68 | 0.014 | 0.0807 |
|  | ≥80 - <85 | 64 (13.1) | 299 (11.7) | 1.12 | 0.82, 1.52 | 0.5 | 0.0807 |
|  | ≥85 - <100 | 86 (17.6) | 666 (26.1) | 1.13 | 0.85, 1.50 | 0.4 | 0.0807 |
| half\_neurological\_lifetime | drug\_not\_administered | 278 (56.7) | 1435 (56.2) | base | 0-0 |  | 0.0811 |
|  | lower\_half | 125 (25.5) | 622 (24.4) | 0.84 | 0.68, 1.04 | 0.11 | 0.0811 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.57 | 0.30, 1.12 | 0.10 | 0.0811 |
|  | upper\_half | 78 (15.9) | 351 (13.7) | 0.80 | 0.62, 1.03 | 0.082 | 0.0811 |
| half\_enteric\_lifetime | drug\_not\_administered | 326 (66.5) | 1734 (67.9) | base | 0-0 |  | 0.0831 |
|  | lower\_half | 89 (18.2) | 330 (12.9) | 1.22 | 0.96, 1.54 | 0.10 | 0.0831 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.63 | 0.33, 1.23 | 0.2 | 0.0831 |
|  | upper\_half | 66 (13.5) | 344 (13.5) | 0.87 | 0.67, 1.14 | 0.3 | 0.0831 |
| use\_air\_cleaner\_study\_years\_rest\_of\_life | Not within rest of life | 358 (73.1) | 1925 (75.4) | base | 0-0 |  | 0.0845 |
|  | Within rest of life | 132 (26.9) | 629 (24.6) | 0.84 | 0.69, 1.03 | 0.089 | 0.0845 |
| half\_enteric\_5y\_prior\_endpoint | drug\_not\_administered | 353 (72.0) | 1885 (73.8) | base | 0-0 |  | 0.0912 |
|  | lower\_half | 76 (15.5) | 275 (10.8) | 1.31 | 1.02, 1.67 | 0.035 | 0.0912 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.65 | 0.34, 1.26 | 0.2 | 0.0912 |
|  | upper\_half | 52 (10.6) | 248 (9.7) | 1.05 | 0.78, 1.40 | 0.8 | 0.0912 |
| number\_comorbs\_present\_5y | 0 | 476 (97.1) | 2494 (97.7) | base | 0-0 |  | 0.0917 |
|  | 1 | 14 (2.9) | 44 (1.7) | 1.62 | 0.95, 2.76 | 0.075 | 0.0917 |
|  | 2 | 0 (0.0) | 11 (0.4) | 0.00 | 0.00, Inf | >0.9 | 0.0917 |
|  | 3 | 0 (0.0) | 5 (0.2) | 0.00 | 0.00, Inf | >0.9 | 0.0917 |
| use\_air\_cleaner\_exposed\_5yrs\_prior | No | 373 (76.1) | 1916 (75.0) | base | 0-0 |  | 0.0933 |
|  | Yes | 117 (23.9) | 638 (25.0) | 0.84 | 0.68, 1.03 | 0.10 | 0.0933 |
| number\_comorbs\_present\_lifetime | 0 | 469 (95.7) | 2468 (96.6) | base | 0-0 |  | 0.1110 |
|  | 1 | 21 (4.3) | 67 (2.6) | 1.32 | 0.85, 2.04 | 0.2 | 0.1110 |
|  | 2 | 0 (0.0) | 13 (0.5) | 0.00 | 0.00, Inf | >0.9 | 0.1110 |
|  | 3 | 0 (0.0) | 6 (0.2) | 0.00 | 0.00, Inf | >0.9 | 0.1110 |
| prevent\_heat\_ever | 0 | 490 (100.0) | 2549 (99.8) | base | 0-0 |  | 0.1229 |
|  | 1 | 0 (0.0) | 5 (0.2) | 0.00 | 0.00, Inf | >0.9 | 0.1229 |
| half\_anti\_septics\_lifetime | drug\_not\_administered | 454 (92.7) | 2237 (87.6) | base | 0-0 |  | 0.1300 |
|  | lower\_half | 19 (3.9) | 126 (4.9) | 0.71 | 0.45, 1.12 | 0.14 | 0.1300 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.61 | 0.32, 1.18 | 0.14 | 0.1300 |
|  | upper\_half | 8 (1.6) | 45 (1.8) | 0.71 | 0.35, 1.43 | 0.3 | 0.1300 |
| half\_anti\_inflam\_5y\_prior\_endpoint | drug\_not\_administered | 145 (29.6) | 858 (33.6) | base | 0-0 |  | 0.1301 |
|  | lower\_half | 194 (39.6) | 881 (34.5) | 1.09 | 0.88, 1.35 | 0.5 | 0.1301 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.62 | 0.32, 1.22 | 0.2 | 0.1301 |
|  | upper\_half | 142 (29.0) | 669 (26.2) | 0.89 | 0.70, 1.12 | 0.3 | 0.1301 |
| use\_incense\_or\_candles\_study\_years\_rest\_of\_life | Not within rest of life | 221 (45.1) | 1275 (49.9) | base | 0-0 |  | 0.1386 |
|  | Within rest of life | 269 (54.9) | 1279 (50.1) | 0.87 | 0.73, 1.04 | 0.14 | 0.1386 |
| num\_breeding\_before\_neutering\_quartiles | >=14-142 | 8 (1.6) | 20 (0.8) | base | 0-0 |  | 0.1400 |
|  | >=3-<6 | 8 (1.6) | 19 (0.7) | 1.19 | 0.45, 3.16 | 0.7 | 0.1400 |
|  | >=6-14 | 3 (0.6) | 25 (1.0) | 0.37 | 0.10, 1.38 | 0.14 | 0.1400 |
|  | 1-<3 | 5 (1.0) | 15 (0.6) | 1.13 | 0.37, 3.44 | 0.8 | 0.1400 |
|  | not\_bred | 466 (95.1) | 2475 (96.9) | 0.61 | 0.30, 1.23 | 0.2 | 0.1400 |
| use\_aerosol\_study\_years\_whole\_life | Not within whole life | 185 (37.8) | 930 (36.4) | base | 0-0 |  | 0.1421 |
|  | Within whole life | 305 (62.2) | 1624 (63.6) | 0.87 | 0.73, 1.05 | 0.14 | 0.1421 |
| smoke\_exposure\_study\_years\_early\_life | Not within early life | 451 (92.0) | 2282 (89.4) | base | 0-0 |  | 0.1505 |
|  | Within early life | 39 (8.0) | 272 (10.6) | 0.79 | 0.57, 1.10 | 0.2 | 0.1505 |
| use\_moth\_balls\_study\_years\_rest\_of\_life | Not within rest of life | 484 (98.8) | 2512 (98.4) | base | 0-0 |  | 0.1544 |
|  | Within rest of life | 6 (1.2) | 42 (1.6) | 0.59 | 0.26, 1.31 | 0.2 | 0.1544 |
| half\_cardio\_respiratory\_lifetime | drug\_not\_administered | 449 (91.6) | 2256 (88.3) | base | 0-0 |  | 0.1568 |
|  | lower\_half | 24 (4.9) | 96 (3.8) | 1.06 | 0.71, 1.60 | 0.8 | 0.1568 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.62 | 0.32, 1.20 | 0.2 | 0.1568 |
|  | upper\_half | 8 (1.6) | 56 (2.2) | 0.58 | 0.29, 1.17 | 0.13 | 0.1568 |
| mode\_purina\_BCS\_5y\_prior\_endpoint | 3 | 0 (0.0) | 3 (0.1) | 0.00 | 0.00, Inf | >0.9 | 0.1570 |
|  | 4 | 22 (4.5) | 106 (4.2) | 0.82 | 0.53, 1.26 | 0.4 | 0.1570 |
|  | 5 | 253 (51.6) | 1008 (39.5) | base | 0-0 |  | 0.1570 |
|  | 6 | 80 (16.3) | 426 (16.7) | 0.78 | 0.61, 1.01 | 0.056 | 0.1570 |
|  | 7 | 44 (9.0) | 151 (5.9) | 1.12 | 0.81, 1.54 | 0.5 | 0.1570 |
|  | 8 | 6 (1.2) | 43 (1.7) | 0.63 | 0.28, 1.41 | 0.3 | 0.1570 |
|  | 9 | 1 (0.2) | 13 (0.5) | 0.35 | 0.05, 2.50 | 0.3 | 0.1570 |
|  | not\_recorded | 84 (17.1) | 804 (31.5) | base | 0-0 |  | 0.1570 |
| pipes\_plastic\_any\_mode\_5yrs\_prior | 0 | 240 (49.0) | 1159 (45.4) | base | 0-0 |  | 0.1582 |
|  | 1 | 238 (48.6) | 1194 (46.8) | 0.88 | 0.73, 1.05 | 0.2 | 0.1582 |
| use\_aerosol\_study\_years\_early\_life | Not within early life | 230 (46.9) | 1122 (43.9) | base | 0-0 |  | 0.1588 |
|  | Within early life | 260 (53.1) | 1432 (56.1) | 0.88 | 0.74, 1.05 | 0.2 | 0.1588 |
| avg\_intensity\_5y\_prior\_endpoint\_quartiles | >=50-<61 | 139 (28.4) | 646 (25.3) | base | 0-0 |  | 0.1615 |
|  | >=61-<68.9 | 81 (16.5) | 671 (26.3) | 0.83 | 0.63, 1.10 | 0.2 | 0.1615 |
|  | >=68.9-100 | 132 (26.9) | 634 (24.8) | 1.02 | 0.81, 1.30 | 0.9 | 0.1615 |
|  | 0-<50 | 129 (26.3) | 603 (23.6) | 0.81 | 0.64, 1.04 | 0.093 | 0.1615 |
| use\_incense\_or\_candles\_study\_years\_early\_life | Not within early life | 199 (40.6) | 983 (38.5) | base | 0-0 |  | 0.1717 |
|  | Within early life | 291 (59.4) | 1571 (61.5) | 0.88 | 0.74, 1.06 | 0.2 | 0.1717 |
| use\_hepa\_filter\_study\_years\_whole\_life | Not within whole life | 190 (38.8) | 1029 (40.3) | base | 0-0 |  | 0.1744 |
|  | Within whole life | 300 (61.2) | 1525 (59.7) | 0.88 | 0.73, 1.06 | 0.2 | 0.1744 |
| heating\_fuel\_primary\_mode\_5yrs\_prior | electric | 127 (25.9) | 572 (22.4) | base | 0-0 |  | 0.1754 |
|  | natural\_gas | 274 (55.9) | 1303 (51.0) | 0.92 | 0.75, 1.14 | 0.4 | 0.1754 |
|  | oil | 25 (5.1) | 221 (8.7) | 0.59 | 0.38, 0.91 | 0.016 | 0.1754 |
|  | other | 2 (0.4) | 18 (0.7) | 0.58 | 0.14, 2.36 | 0.4 | 0.1754 |
|  | propane | 34 (6.9) | 176 (6.9) | 0.89 | 0.61, 1.30 | 0.5 | 0.1754 |
|  | renewable | 3 (0.6) | 17 (0.7) | 0.56 | 0.18, 1.75 | 0.3 | 0.1754 |
|  | wood | 12 (2.4) | 41 (1.6) | 1.24 | 0.69, 2.25 | 0.5 | 0.1754 |
| use\_moth\_balls\_exposed\_5yrs\_prior | No | 484 (98.8) | 2506 (98.1) | base | 0-0 |  | 0.1798 |
|  | Yes | 6 (1.2) | 48 (1.9) | 0.60 | 0.27, 1.35 | 0.2 | 0.1798 |
| comorb\_orthopaedic | FALSE | 489 (99.8) | 2544 (99.6) | base | 0-0 |  | 0.1848 |
|  | TRUE | 1 (0.2) | 10 (0.4) | 0.34 | 0.05, 2.39 | 0.3 | 0.1848 |
| chronic\_inflam\_present\_no\_min\_year | 0 | 477 (97.3) | 2455 (96.1) | base | 0-0 |  | 0.1907 |
|  | 1 | 13 (2.7) | 99 (3.9) | 0.71 | 0.41, 1.23 | 0.2 | 0.1907 |
| house\_type\_mode\_5yrs\_prior | apartment/condo/townhome | 33 (6.7) | 131 (5.1) | base | 0-0 |  | 0.1928 |
|  | motor home | 0 (0.0) | 2 (0.1) | 0.00 | 0.00, Inf | >0.9 | 0.1928 |
|  | single family | 445 (90.8) | 2220 (86.9) | 0.75 | 0.53, 1.07 | 0.12 | 0.1928 |
| half\_fluid\_metabolites\_5y\_prior\_endpoint | drug\_not\_administered | 471 (96.1) | 2383 (93.3) | base | 0-0 |  | 0.1943 |
|  | lower\_half | 8 (1.6) | 21 (0.8) | 1.71 | 0.85, 3.45 | 0.13 | 0.1943 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.63 | 0.33, 1.22 | 0.2 | 0.1943 |
|  | upper\_half | 2 (0.4) | 4 (0.2) | 1.75 | 0.44, 7.01 | 0.4 | 0.1943 |
| sleep\_location\_mode\_5yrs\_prior | in the garage | 5 (1.0) | 27 (1.1) | base | 0-0 |  | 0.1947 |
|  | in the house | 472 (96.3) | 2301 (90.1) | 0.95 | 0.40, 2.31 | >0.9 | 0.1947 |
|  | outside | 1 (0.2) | 25 (1.0) | 0.24 | 0.03, 2.03 | 0.2 | 0.1947 |
| in.the.house\_YN\_study\_years\_early\_life | Not within early life | 4 (0.8) | 37 (1.4) | base | 0-0 |  | 0.2027 |
|  | Within early life | 486 (99.2) | 2515 (98.5) | 1.78 | 0.67, 4.77 | 0.2 | 0.2027 |
| half\_neurological\_5y\_prior\_endpoint | drug\_not\_administered | 311 (63.5) | 1585 (62.1) | base | 0-0 |  | 0.2093 |
|  | lower\_half | 111 (22.7) | 564 (22.1) | 0.86 | 0.69, 1.07 | 0.2 | 0.2093 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.59 | 0.31, 1.15 | 0.12 | 0.2093 |
|  | upper\_half | 59 (12.0) | 259 (10.1) | 0.88 | 0.66, 1.16 | 0.3 | 0.2093 |
| quartile\_neurological\_lifetime | drug\_not\_administered | 278 (56.7) | 1435 (56.2) | base | 0-0 |  | 0.2154 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.57 | 0.30, 1.12 | 0.10 | 0.2154 |
|  | Q1 | 82 (16.7) | 430 (16.8) | 0.82 | 0.64, 1.04 | 0.11 | 0.2154 |
|  | Q2 | 43 (8.8) | 192 (7.5) | 0.90 | 0.65, 1.24 | 0.5 | 0.2154 |
|  | Q3 | 27 (5.5) | 122 (4.8) | 0.84 | 0.57, 1.25 | 0.4 | 0.2154 |
|  | Q4 | 51 (10.4) | 229 (9.0) | 0.78 | 0.58, 1.05 | 0.10 | 0.2154 |
| majority\_sleep\_location\_lifetime | in the garage\_YN | 3 (0.6) | 20 (0.8) | base | 0-0 |  | 0.2234 |
|  | in the house\_YN | 485 (99.0) | 2498 (97.8) | 1.20 | 0.38, 3.72 | 0.8 | 0.2234 |
|  | outside\_YN | 2 (0.4) | 36 (1.4) | 0.44 | 0.07, 2.61 | 0.4 | 0.2234 |
| half\_anti\_microbials\_5y\_prior\_endpoint | drug\_not\_administered | 112 (22.9) | 630 (24.7) | base | 0-0 |  | 0.2278 |
|  | lower\_half | 222 (45.3) | 1038 (40.6) | 1.07 | 0.85, 1.34 | 0.6 | 0.2278 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.63 | 0.32, 1.24 | 0.2 | 0.2278 |
|  | upper\_half | 147 (30.0) | 740 (29.0) | 0.92 | 0.72, 1.17 | 0.5 | 0.2278 |
| cooking\_fuel\_secondary\_mode\_5yrs\_prior | electric | 130 (26.5) | 576 (22.6) | 1.15 | 0.92, 1.43 | 0.2 | 0.2309 |
|  | natural gas | 11 (2.2) | 62 (2.4) | 0.88 | 0.48, 1.62 | 0.7 | 0.2309 |
|  | other | 98 (20.0) | 360 (14.1) | 0.93 | 0.73, 1.18 | 0.5 | 0.2309 |
|  | propane | 28 (5.7) | 126 (4.9) | 1.42 | 0.96, 2.11 | 0.082 | 0.2309 |
| region\_mode\_5y\_prior | midwest | 61 (12.4) | 317 (12.4) | base | 0-0 |  | 0.2383 |
|  | northeast | 60 (12.2) | 256 (10.0) | 1.27 | 0.89, 1.81 | 0.2 | 0.2383 |
|  | south | 104 (21.2) | 438 (17.1) | 1.38 | 1.00, 1.89 | 0.048 | 0.2383 |
|  | west | 86 (17.6) | 401 (15.7) | 1.18 | 0.85, 1.63 | 0.3 | 0.2383 |
| comorb\_gastrointestinal | FALSE | 488 (99.6) | 2549 (99.8) | base | 0-0 |  | 0.2393 |
|  | TRUE | 2 (0.4) | 5 (0.2) | 2.63 | 0.66, 10.5 | 0.2 | 0.2393 |
| smoke\_exposure\_study\_years\_whole\_life | Not within whole life | 420 (85.7) | 2151 (84.2) | base | 0-0 |  | 0.2421 |
|  | Within whole life | 70 (14.3) | 403 (15.8) | 0.86 | 0.67, 1.11 | 0.3 | 0.2421 |
| quartile\_anti\_microbials\_lifetime | drug\_not\_administered | 64 (13.1) | 450 (17.6) | base | 0-0 |  | 0.2527 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.61 | 0.30, 1.22 | 0.2 | 0.2527 |
|  | Q1 | 136 (27.8) | 671 (26.3) | 1.06 | 0.79, 1.43 | 0.7 | 0.2527 |
|  | Q2 | 89 (18.2) | 427 (16.7) | 0.95 | 0.69, 1.31 | 0.7 | 0.2527 |
|  | Q3 | 98 (20.0) | 405 (15.9) | 1.03 | 0.75, 1.41 | 0.9 | 0.2527 |
|  | Q4 | 94 (19.2) | 455 (17.8) | 0.82 | 0.60, 1.13 | 0.2 | 0.2527 |
| any\_treated\_insects\_exposed\_5yrs\_prior | No | 212 (43.3) | 1252 (49.0) | base | 0-0 |  | 0.2575 |
|  | Yes | 278 (56.7) | 1302 (51.0) | 0.90 | 0.75, 1.08 | 0.3 | 0.2575 |
| half\_cardio\_respiratory\_5y\_prior\_endpoint | drug\_not\_administered | 458 (93.5) | 2288 (89.6) | base | 0-0 |  | 0.2683 |
|  | lower\_half | 17 (3.5) | 79 (3.1) | 0.97 | 0.60, 1.58 | >0.9 | 0.2683 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.62 | 0.32, 1.20 | 0.2 | 0.2683 |
|  | upper\_half | 6 (1.2) | 41 (1.6) | 0.61 | 0.27, 1.37 | 0.2 | 0.2683 |
| preg\_pre\_neuter | 0 | 478 (97.6) | 2481 (97.1) | base | 0-0 |  | 0.2724 |
|  | 1 | 12 (2.4) | 73 (2.9) | 0.74 | 0.42, 1.31 | 0.3 | 0.2724 |
| quartile\_anti\_inflam\_5y\_prior\_endpoint | drug\_not\_administered | 145 (29.6) | 858 (33.6) | base | 0-0 |  | 0.2769 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.62 | 0.32, 1.22 | 0.2 | 0.2769 |
|  | Q1 | 109 (22.2) | 538 (21.1) | 1.05 | 0.82, 1.34 | 0.7 | 0.2769 |
|  | Q2 | 85 (17.3) | 343 (13.4) | 1.14 | 0.87, 1.49 | 0.3 | 0.2769 |
|  | Q3 | 92 (18.8) | 425 (16.6) | 0.92 | 0.71, 1.19 | 0.5 | 0.2769 |
|  | Q4 | 50 (10.2) | 244 (9.6) | 0.84 | 0.61, 1.15 | 0.3 | 0.2769 |
| heats\_before\_neutering | 0 | 114 (23.3) | 676 (26.5) | base | 0-0 |  | 0.2797 |
|  | 1 | 28 (5.7) | 102 (4.0) | 1.39 | 0.92, 2.09 | 0.12 | 0.2797 |
|  | 10 | 0 (0.0) | 1 (0.0) | 0.00 | 0.00, Inf | >0.9 | 0.2797 |
|  | 12 | 0 (0.0) | 1 (0.0) | 0.00 | 0.00, Inf | >0.9 | 0.2797 |
|  | 2 | 10 (2.0) | 63 (2.5) | 0.79 | 0.41, 1.50 | 0.5 | 0.2797 |
|  | 3 | 10 (2.0) | 37 (1.4) | 1.32 | 0.69, 2.51 | 0.4 | 0.2797 |
|  | 4 | 14 (2.9) | 49 (1.9) | 1.44 | 0.82, 2.51 | 0.2 | 0.2797 |
|  | 5 | 10 (2.0) | 67 (2.6) | 0.75 | 0.39, 1.43 | 0.4 | 0.2797 |
|  | 6 | 6 (1.2) | 47 (1.8) | 0.52 | 0.23, 1.19 | 0.12 | 0.2797 |
|  | 7 | 1 (0.2) | 11 (0.4) | 0.31 | 0.04, 2.26 | 0.3 | 0.2797 |
|  | 8 | 1 (0.2) | 2 (0.1) | 1.42 | 0.20, 10.2 | 0.7 | 0.2797 |
| use\_moth\_balls\_study\_years\_whole\_life | Not within whole life | 476 (97.1) | 2468 (96.6) | base | 0-0 |  | 0.2843 |
|  | Within whole life | 14 (2.9) | 86 (3.4) | 0.76 | 0.45, 1.29 | 0.3 | 0.2843 |
| quartile\_neurological\_5y\_prior\_endpoint | drug\_not\_administered | 311 (63.5) | 1585 (62.1) | base | 0-0 |  | 0.2915 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.59 | 0.31, 1.15 | 0.12 | 0.2915 |
|  | Q1 | 68 (13.9) | 387 (15.2) | 0.79 | 0.61, 1.03 | 0.079 | 0.2915 |
|  | Q2 | 43 (8.8) | 177 (6.9) | 1.01 | 0.73, 1.39 | >0.9 | 0.2915 |
|  | Q3 | 20 (4.1) | 94 (3.7) | 0.84 | 0.53, 1.31 | 0.4 | 0.2915 |
|  | Q4 | 39 (8.0) | 165 (6.5) | 0.90 | 0.64, 1.25 | 0.5 | 0.2915 |
| comorb\_immune\_mediated | FALSE | 486 (99.2) | 2525 (98.9) | base | 0-0 |  | 0.2947 |
|  | TRUE | 4 (0.8) | 29 (1.1) | 0.62 | 0.23, 1.65 | 0.3 | 0.2947 |
| in.the.house\_YN\_study\_years\_whole\_life | Not within whole life | 2 (0.4) | 23 (0.9) | base | 0-0 |  | 0.2986 |
|  | Within whole life | 488 (99.6) | 2529 (99.0) | 1.93 | 0.48, 7.74 | 0.4 | 0.2986 |
| quartile\_anti\_inflam\_lifetime | drug\_not\_administered | 105 (21.4) | 689 (27.0) | base | 0-0 |  | 0.3022 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.60 | 0.31, 1.20 | 0.15 | 0.3022 |
|  | Q1 | 101 (20.6) | 501 (19.6) | 1.05 | 0.80, 1.39 | 0.7 | 0.3022 |
|  | Q2 | 138 (28.2) | 608 (23.8) | 1.01 | 0.79, 1.31 | >0.9 | 0.3022 |
|  | Q3 | 46 (9.4) | 196 (7.7) | 0.92 | 0.65, 1.30 | 0.6 | 0.3022 |
|  | Q4 | 91 (18.6) | 414 (16.2) | 0.82 | 0.62, 1.09 | 0.2 | 0.3022 |
| half\_anti\_septics\_5y\_prior\_endpoint | drug\_not\_administered | 462 (94.3) | 2289 (89.6) | base | 0-0 |  | 0.3058 |
|  | lower\_half | 14 (2.9) | 94 (3.7) | 0.74 | 0.44, 1.27 | 0.3 | 0.3058 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.62 | 0.32, 1.20 | 0.2 | 0.3058 |
|  | upper\_half | 5 (1.0) | 25 (1.0) | 0.90 | 0.37, 2.17 | 0.8 | 0.3058 |
| chronic\_inflam\_present\_5y | 0 | 476 (97.1) | 2494 (97.7) | base | 0-0 |  | 0.3074 |
|  | 1 | 14 (2.9) | 60 (2.3) | 1.34 | 0.78, 2.27 | 0.3 | 0.3074 |
| comorb\_cardiovascular | FALSE | 490 (100.0) | 2552 (99.9) | base | 0-0 |  | 0.3092 |
|  | TRUE | 0 (0.0) | 2 (0.1) | 0.00 | 0.00, Inf | >0.9 | 0.3092 |
| half\_diuretics\_lifetime | drug\_not\_administered | 479 (97.8) | 2391 (93.6) | base | 0-0 |  | 0.3151 |
|  | lower\_half | 2 (0.4) | 16 (0.6) | 0.56 | 0.14, 2.25 | 0.4 | 0.3151 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.62 | 0.32, 1.20 | 0.2 | 0.3151 |
|  | upper\_half | 0 (0.0) | 1 (0.0) | 0.00 | 0.00, Inf | >0.9 | 0.3151 |
| quartile\_immunologicals\_5y\_prior\_endpoint | drug\_not\_administered | 331 (67.6) | 1791 (70.1) | base | 0-0 |  | 0.3167 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.63 | 0.33, 1.22 | 0.2 | 0.3167 |
|  | Q1 | 58 (11.8) | 287 (11.2) | 0.90 | 0.68, 1.19 | 0.4 | 0.3167 |
|  | Q2 | 30 (6.1) | 111 (4.3) | 1.16 | 0.80, 1.68 | 0.4 | 0.3167 |
|  | Q3 | 38 (7.8) | 116 (4.5) | 1.28 | 0.92, 1.80 | 0.14 | 0.3167 |
|  | Q4 | 24 (4.9) | 103 (4.0) | 0.93 | 0.61, 1.40 | 0.7 | 0.3167 |
| half\_anti\_microbials\_lifetime | drug\_not\_administered | 64 (13.1) | 450 (17.6) | base | 0-0 |  | 0.3298 |
|  | lower\_half | 225 (45.9) | 1098 (43.0) | 1.01 | 0.77, 1.34 | >0.9 | 0.3298 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.61 | 0.30, 1.22 | 0.2 | 0.3298 |
|  | upper\_half | 192 (39.2) | 860 (33.7) | 0.91 | 0.69, 1.21 | 0.5 | 0.3298 |
| use\_aerosol\_study\_years\_rest\_of\_life | Not within rest of life | 242 (49.4) | 1414 (55.4) | base | 0-0 |  | 0.3340 |
|  | Within rest of life | 248 (50.6) | 1140 (44.6) | 0.92 | 0.77, 1.09 | 0.3 | 0.3340 |
| half\_diuretics\_5y\_prior\_endpoint | drug\_not\_administered | 479 (97.8) | 2392 (93.7) | base | 0-0 |  | 0.3407 |
|  | lower\_half | 2 (0.4) | 15 (0.6) | 0.60 | 0.15, 2.41 | 0.5 | 0.3407 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.62 | 0.32, 1.21 | 0.2 | 0.3407 |
|  | upper\_half | 0 (0.0) | 1 (0.0) | 0.00 | 0.00, Inf | >0.9 | 0.3407 |
| half\_dietary\_supplements\_5y\_prior\_endpoint | drug\_not\_administered | 319 (65.1) | 1707 (66.8) | base | 0-0 |  | 0.3434 |
|  | lower\_half | 103 (21.0) | 476 (18.6) | 0.99 | 0.79, 1.23 | >0.9 | 0.3434 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.63 | 0.33, 1.23 | 0.2 | 0.3434 |
|  | upper\_half | 59 (12.0) | 225 (8.8) | 1.15 | 0.87, 1.52 | 0.3 | 0.3434 |
| use\_incense\_or\_candles\_exposed\_5yrs\_prior | No | 229 (46.7) | 1157 (45.3) | base | 0-0 |  | 0.3523 |
|  | Yes | 261 (53.3) | 1397 (54.7) | 0.92 | 0.77, 1.10 | 0.4 | 0.3523 |
| time\_between\_first\_comorb\_and\_endpoint | 1 | 0 (0.0) | 6 (0.2) | base | 0-0 |  | 0.3553 |
|  | 10 | 5 (1.0) | 8 (0.3) | 10,089,004 | 0.00, Inf | >0.9 | 0.3553 |
|  | 2 | 1 (0.2) | 13 (0.5) | 8,605,376 | 0.00, Inf | >0.9 | 0.3553 |
|  | 3 | 5 (1.0) | 14 (0.5) | 27,000,178 | 0.00, Inf | >0.9 | 0.3553 |
|  | 4 | 4 (0.8) | 19 (0.7) | 12,440,867 | 0.00, Inf | >0.9 | 0.3553 |
|  | 5 | 7 (1.4) | 21 (0.8) | 13,322,489 | 0.00, Inf | >0.9 | 0.3553 |
|  | 6 | 9 (1.8) | 20 (0.8) | 15,545,586 | 0.00, Inf | >0.9 | 0.3553 |
|  | 7 | 9 (1.8) | 35 (1.4) | 10,470,697 | 0.00, Inf | >0.9 | 0.3553 |
|  | 8 | 9 (1.8) | 46 (1.8) | 7,525,621 | 0.00, Inf | >0.9 | 0.3553 |
|  | 9 | 7 (1.4) | 27 (1.1) | 6,316,590 | 0.00, Inf | >0.9 | 0.3553 |
| comorb\_inflammatory\_other | FALSE | 484 (98.8) | 2495 (97.7) | base | 0-0 |  | 0.3649 |
|  | TRUE | 6 (1.2) | 59 (2.3) | 0.70 | 0.31, 1.57 | 0.4 | 0.3649 |
| hours\_of\_smoke\_whole\_life\_total\_dosage\_terciles | >=10-388h | 28 (5.7) | 132 (5.2) | base | 0-0 |  | 0.3766 |
|  | >=2-<10h | 19 (3.9) | 160 (6.3) | 0.68 | 0.38, 1.22 | 0.2 | 0.3766 |
|  | >0-<2h | 23 (4.7) | 108 (4.2) | 0.94 | 0.54, 1.63 | 0.8 | 0.3766 |
|  | no\_smoke | 420 (85.7) | 2154 (84.3) | 1.00 | 0.68, 1.46 | >0.9 | 0.3766 |
| half\_dietary\_supplements\_lifetime | drug\_not\_administered | 287 (58.6) | 1560 (61.1) | base | 0-0 |  | 0.3772 |
|  | lower\_half | 115 (23.5) | 544 (21.3) | 0.92 | 0.74, 1.15 | 0.5 | 0.3772 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.62 | 0.32, 1.20 | 0.2 | 0.3772 |
|  | upper\_half | 79 (16.1) | 304 (11.9) | 1.05 | 0.82, 1.34 | 0.7 | 0.3772 |
| quartile\_immunologicals\_lifetime | drug\_not\_administered | 322 (65.7) | 1774 (69.5) | base | 0-0 |  | 0.3782 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.64 | 0.33, 1.23 | 0.2 | 0.3782 |
|  | Q1 | 62 (12.7) | 289 (11.3) | 0.94 | 0.72, 1.24 | 0.7 | 0.3782 |
|  | Q2 | 32 (6.5) | 112 (4.4) | 1.20 | 0.84, 1.73 | 0.3 | 0.3782 |
|  | Q3 | 37 (7.6) | 116 (4.5) | 1.26 | 0.90, 1.78 | 0.2 | 0.3782 |
|  | Q4 | 28 (5.7) | 117 (4.6) | 0.95 | 0.65, 1.40 | 0.8 | 0.3782 |
| half\_immunologicals\_5y\_prior\_endpoint | drug\_not\_administered | 331 (67.6) | 1791 (70.1) | base | 0-0 |  | 0.3846 |
|  | lower\_half | 88 (18.0) | 398 (15.6) | 0.97 | 0.77, 1.23 | 0.8 | 0.3846 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.63 | 0.33, 1.22 | 0.2 | 0.3846 |
|  | upper\_half | 62 (12.7) | 219 (8.6) | 1.12 | 0.85, 1.47 | 0.4 | 0.3846 |
| half\_anti\_parasites\_lifetime | drug\_not\_administered | 32 (6.5) | 229 (9.0) | base | 0-0 |  | 0.4007 |
|  | lower\_half | 217 (44.3) | 1249 (48.9) | 1.04 | 0.72, 1.51 | 0.8 | 0.4007 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.67 | 0.32, 1.40 | 0.3 | 0.4007 |
|  | upper\_half | 232 (47.3) | 930 (36.4) | 1.11 | 0.77, 1.61 | 0.6 | 0.4007 |
| spayed\_while\_pregnant | 0 | 487 (99.4) | 2548 (99.8) | base | 0-0 |  | 0.4021 |
|  | 1 | 3 (0.6) | 6 (0.2) | 1.69 | 0.54, 5.27 | 0.4 | 0.4021 |
| comorb\_orthopaedic\_chronic | FALSE | 489 (99.8) | 2547 (99.7) | base | 0-0 |  | 0.4024 |
|  | TRUE | 1 (0.2) | 7 (0.3) | 0.48 | 0.07, 3.41 | 0.5 | 0.4024 |
| comorb\_cardiovascular\_chronic | FALSE | 490 (100.0) | 2553 (100.0) | base | 0-0 |  | 0.4040 |
|  | TRUE | 0 (0.0) | 1 (0.0) | 0.00 | 0.00, Inf | >0.9 | 0.4040 |
| half\_anti\_hist\_5y\_prior\_endpoint | drug\_not\_administered | 470 (95.9) | 2362 (92.5) | base | 0-0 |  | 0.4117 |
|  | lower\_half | 7 (1.4) | 32 (1.3) | 1.26 | 0.60, 2.66 | 0.5 | 0.4117 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.63 | 0.32, 1.22 | 0.2 | 0.4117 |
|  | upper\_half | 4 (0.8) | 14 (0.5) | 1.30 | 0.49, 3.49 | 0.6 | 0.4117 |
| cooking\_fuel\_primary\_mode\_5yrs\_prior | electric | 236 (48.2) | 1274 (49.9) | base | 0-0 |  | 0.4143 |
|  | natural gas | 197 (40.2) | 878 (34.4) | 1.14 | 0.94, 1.37 | 0.2 | 0.4143 |
|  | propane | 45 (9.2) | 199 (7.8) | 1.08 | 0.79, 1.49 | 0.6 | 0.4143 |
| quartile\_anti\_parasites\_lifetime | drug\_not\_administered | 32 (6.5) | 229 (9.0) | base | 0-0 |  | 0.4177 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.67 | 0.32, 1.40 | 0.3 | 0.4177 |
|  | Q1 | 100 (20.4) | 680 (26.6) | 0.97 | 0.65, 1.44 | 0.9 | 0.4177 |
|  | Q2 | 117 (23.9) | 569 (22.3) | 1.11 | 0.75, 1.64 | 0.6 | 0.4177 |
|  | Q3 | 116 (23.7) | 453 (17.7) | 1.19 | 0.81, 1.76 | 0.4 | 0.4177 |
|  | Q4 | 116 (23.7) | 477 (18.7) | 1.04 | 0.70, 1.54 | 0.8 | 0.4177 |
| half\_immunologicals\_lifetime | drug\_not\_administered | 322 (65.7) | 1774 (69.5) | base | 0-0 |  | 0.4188 |
|  | lower\_half | 94 (19.2) | 401 (15.7) | 1.02 | 0.81, 1.28 | 0.9 | 0.4188 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.64 | 0.33, 1.23 | 0.2 | 0.4188 |
|  | upper\_half | 65 (13.3) | 233 (9.1) | 1.11 | 0.85, 1.45 | 0.5 | 0.4188 |
| any\_treated\_weeds\_exposed\_5yrs\_prior | No | 189 (38.6) | 1242 (48.6) | base | 0-0 |  | 0.4247 |
|  | Yes | 301 (61.4) | 1312 (51.4) | 0.93 | 0.77, 1.11 | 0.4 | 0.4247 |
| half\_anti\_hist\_lifetime | drug\_not\_administered | 464 (94.7) | 2342 (91.7) | base | 0-0 |  | 0.4261 |
|  | lower\_half | 10 (2.0) | 43 (1.7) | 1.23 | 0.66, 2.30 | 0.5 | 0.4261 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.63 | 0.33, 1.22 | 0.2 | 0.4261 |
|  | upper\_half | 7 (1.4) | 23 (0.9) | 1.15 | 0.55, 2.43 | 0.7 | 0.4261 |
| water\_source\_mode\_5yrs\_prior | municipal | 355 (72.4) | 1718 (67.3) | base | 0-0 |  | 0.4311 |
|  | other | 5 (1.0) | 18 (0.7) | 1.43 | 0.59, 3.45 | 0.4 | 0.4311 |
|  | well | 118 (24.1) | 617 (24.2) | 0.90 | 0.73, 1.11 | 0.3 | 0.4311 |
| USDA\_30min\_sy1\_2 | below\_USDA | 191 (39.0) | 936 (36.6) | base | 0-0 |  | 0.4330 |
|  | more\_than\_USDA | 294 (60.0) | 1576 (61.7) | 0.93 | 0.77, 1.12 | 0.4 | 0.4330 |
| half\_misc\_5y\_prior\_endpoint | drug\_not\_administered | 370 (75.5) | 1931 (75.6) | base | 0-0 |  | 0.4371 |
|  | lower\_half | 58 (11.8) | 281 (11.0) | 0.96 | 0.73, 1.27 | 0.8 | 0.4371 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.63 | 0.32, 1.22 | 0.2 | 0.4371 |
|  | upper\_half | 53 (10.8) | 196 (7.7) | 1.09 | 0.82, 1.45 | 0.6 | 0.4371 |
| num\_lifetime\_chronic\_inflam | 0 | 434 (88.6) | 2345 (91.8) | base | 0-0 |  | 0.4394 |
|  | 1 | 20 (4.1) | 88 (3.4) | 1.11 | 0.71, 1.74 | 0.6 | 0.4394 |
|  | 2 | 25 (5.1) | 69 (2.7) | 1.45 | 0.97, 2.17 | 0.069 | 0.4394 |
|  | 3 | 7 (1.4) | 39 (1.5) | 0.80 | 0.38, 1.68 | 0.5 | 0.4394 |
|  | 4 | 2 (0.4) | 11 (0.4) | 1.07 | 0.27, 4.31 | >0.9 | 0.4394 |
|  | 5 | 2 (0.4) | 2 (0.1) | 2.53 | 0.63, 10.2 | 0.2 | 0.4394 |
| any\_treated\_fertilizer\_study\_years\_rest\_of\_life | Not within rest of life | 134 (27.3) | 1022 (40.0) | base | 0-0 |  | 0.4423 |
|  | Within rest of life | 356 (72.7) | 1532 (60.0) | 1.08 | 0.89, 1.32 | 0.4 | 0.4423 |
| any\_treated\_fertilizer\_study\_years\_whole\_life | Not within whole life | 134 (27.3) | 1022 (40.0) | base | 0-0 |  | 0.4423 |
|  | Within whole life | 356 (72.7) | 1532 (60.0) | 1.08 | 0.89, 1.32 | 0.4 | 0.4423 |
| MDI\_quintile | 1 | 174 (35.5) | 880 (34.5) | base | 0-0 |  | 0.4471 |
|  | 2 | 98 (20.0) | 568 (22.2) | 0.87 | 0.68, 1.11 | 0.3 | 0.4471 |
|  | 3 | 89 (18.2) | 421 (16.5) | 1.10 | 0.85, 1.42 | 0.5 | 0.4471 |
|  | 4 | 36 (7.3) | 215 (8.4) | 0.85 | 0.59, 1.21 | 0.4 | 0.4471 |
|  | 5 | 40 (8.2) | 208 (8.1) | 1.03 | 0.73, 1.46 | 0.8 | 0.4471 |
| hours\_of\_smoke\_early\_life\_total\_dosage\_terciles | >=2-<7h | 16 (3.3) | 112 (4.4) | base | 0-0 |  | 0.4486 |
|  | >=7-72h | 15 (3.1) | 90 (3.5) | 1.02 | 0.50, 2.06 | >0.9 | 0.4486 |
|  | >0-<2h | 8 (1.6) | 70 (2.7) | 0.75 | 0.32, 1.76 | 0.5 | 0.4486 |
|  | no\_smoke | 451 (92.0) | 2282 (89.4) | 1.19 | 0.72, 1.96 | 0.5 | 0.4486 |
| quartile\_anti\_microbials\_5y\_prior\_endpoint | drug\_not\_administered | 112 (22.9) | 630 (24.7) | base | 0-0 |  | 0.4499 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.63 | 0.32, 1.24 | 0.2 | 0.4499 |
|  | Q1 | 98 (20.0) | 455 (17.8) | 1.11 | 0.85, 1.46 | 0.4 | 0.4499 |
|  | Q2 | 124 (25.3) | 583 (22.8) | 1.04 | 0.80, 1.34 | 0.8 | 0.4499 |
|  | Q3 | 67 (13.7) | 326 (12.8) | 0.95 | 0.70, 1.28 | 0.7 | 0.4499 |
|  | Q4 | 80 (16.3) | 414 (16.2) | 0.89 | 0.67, 1.19 | 0.4 | 0.4499 |
| half\_misc\_lifetime | drug\_not\_administered | 338 (69.0) | 1796 (70.3) | base | 0-0 |  | 0.4522 |
|  | lower\_half | 80 (16.3) | 344 (13.5) | 1.01 | 0.79, 1.29 | >0.9 | 0.4522 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.62 | 0.32, 1.20 | 0.2 | 0.4522 |
|  | upper\_half | 63 (12.9) | 268 (10.5) | 0.93 | 0.71, 1.21 | 0.6 | 0.4522 |
| quartile\_dietary\_supplements\_lifetime | drug\_not\_administered | 287 (58.6) | 1560 (61.1) | base | 0-0 |  | 0.4736 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.62 | 0.32, 1.20 | 0.2 | 0.4736 |
|  | Q1 | 80 (16.3) | 358 (14.0) | 1.00 | 0.78, 1.28 | >0.9 | 0.4736 |
|  | Q2 | 35 (7.1) | 186 (7.3) | 0.79 | 0.56, 1.13 | 0.2 | 0.4736 |
|  | Q3 | 41 (8.4) | 156 (6.1) | 1.09 | 0.79, 1.52 | 0.6 | 0.4736 |
|  | Q4 | 38 (7.8) | 148 (5.8) | 1.00 | 0.71, 1.41 | >0.9 | 0.4736 |
| half\_fluid\_metabolites\_lifetime | drug\_not\_administered | 469 (95.7) | 2364 (92.6) | base | 0-0 |  | 0.4737 |
|  | lower\_half | 9 (1.8) | 37 (1.4) | 1.05 | 0.54, 2.03 | 0.9 | 0.4737 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.63 | 0.32, 1.21 | 0.2 | 0.4737 |
|  | upper\_half | 3 (0.6) | 7 (0.3) | 1.32 | 0.43, 4.13 | 0.6 | 0.4737 |
| half\_hormones\_and\_related\_lifetime | drug\_not\_administered | 435 (88.8) | 2197 (86.0) | base | 0-0 |  | 0.4750 |
|  | lower\_half | 25 (5.1) | 120 (4.7) | 0.98 | 0.66, 1.47 | >0.9 | 0.4750 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.62 | 0.32, 1.20 | 0.2 | 0.4750 |
|  | upper\_half | 21 (4.3) | 91 (3.6) | 0.90 | 0.58, 1.40 | 0.6 | 0.4750 |
| quartile\_misc\_lifetime | drug\_not\_administered | 338 (69.0) | 1796 (70.3) | base | 0-0 |  | 0.4775 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.62 | 0.32, 1.20 | 0.2 | 0.4775 |
|  | Q1 | 80 (16.3) | 344 (13.5) | 1.01 | 0.79, 1.29 | >0.9 | 0.4775 |
|  | Q3 | 26 (5.3) | 139 (5.4) | 0.81 | 0.54, 1.21 | 0.3 | 0.4775 |
|  | Q4 | 37 (7.6) | 129 (5.1) | 1.03 | 0.73, 1.44 | 0.9 | 0.4775 |
| use\_air\_cleaner\_study\_years\_early\_life | Not within early life | 410 (83.7) | 2082 (81.5) | base | 0-0 |  | 0.4835 |
|  | Within early life | 80 (16.3) | 472 (18.5) | 0.92 | 0.72, 1.17 | 0.5 | 0.4835 |
| half\_hormones\_and\_related\_5y\_prior\_endpoint | drug\_not\_administered | 439 (89.6) | 2212 (86.6) | base | 0-0 |  | 0.4918 |
|  | lower\_half | 21 (4.3) | 108 (4.2) | 0.95 | 0.62, 1.48 | 0.8 | 0.4918 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.62 | 0.32, 1.20 | 0.2 | 0.4918 |
|  | upper\_half | 21 (4.3) | 88 (3.4) | 0.93 | 0.60, 1.45 | 0.8 | 0.4918 |
| neuter | Entire | 75 (15.3) | 527 (20.6) | base | 0-0 |  | 0.4948 |
|  | Neutered | 415 (84.7) | 2027 (79.4) | 0.92 | 0.72, 1.17 | 0.5 | 0.4948 |
| comorb\_gastrointestinal\_chronic | FALSE | 490 (100.0) | 2553 (100.0) | base | 0-0 |  | 0.5048 |
|  | TRUE | 0 (0.0) | 1 (0.0) | 0.00 | 0.00, Inf | >0.9 | 0.5048 |
| activity\_KC\_2h\_min\_sy1\_2 | below\_KC | 481 (98.2) | 2500 (97.9) | base | 0-0 |  | 0.5197 |
|  | more\_than\_KC | 4 (0.8) | 12 (0.5) | 1.41 | 0.53, 3.76 | 0.5 | 0.5197 |
| in.the.garage\_YN\_study\_years\_rest\_of\_life | Not within rest of life | 479 (97.8) | 2490 (97.5) | base | 0-0 |  | 0.5217 |
|  | Within rest of life | 11 (2.2) | 63 (2.5) | 0.83 | 0.46, 1.50 | 0.5 | 0.5217 |
| comorb\_other\_parasitism\_chronic | FALSE | 490 (100.0) | 2551 (99.9) | base | 0-0 |  | 0.5258 |
|  | FALSE | 490 (100.0) | 2551 (99.9) | base | 0-0 |  | 0.5258 |
|  | TRUE | 0 (0.0) | 3 (0.1) | 0.00 | 0.00, Inf | >0.9 | 0.5258 |
|  | TRUE | 0 (0.0) | 3 (0.1) | 0.00 | 0.00, Inf | >0.9 | 0.5258 |
| number\_comorbs\_present\_no\_min\_year | 0 | 477 (97.3) | 2455 (96.1) | base | 0-0 |  | 0.5361 |
|  | 1 | 13 (2.7) | 97 (3.8) | 0.72 | 0.41, 1.25 | 0.2 | 0.5361 |
|  | 2 | 0 (0.0) | 1 (0.0) | 0.00 | 0.00, Inf | >0.9 | 0.5361 |
|  | 3 | 0 (0.0) | 1 (0.0) | 0.00 | 0.00, Inf | >0.9 | 0.5361 |
| owner\_MDI\_quintile | 1 | 196 (40.0) | 963 (37.7) | base | 0-0 |  | 0.5547 |
|  | 2 | 109 (22.2) | 643 (25.2) | 0.85 | 0.67, 1.08 | 0.2 | 0.5547 |
|  | 3 | 83 (16.9) | 461 (18.1) | 0.96 | 0.74, 1.24 | 0.7 | 0.5547 |
|  | 4 | 45 (9.2) | 221 (8.7) | 1.02 | 0.74, 1.41 | 0.9 | 0.5547 |
|  | 5 | 44 (9.0) | 211 (8.3) | 1.11 | 0.80, 1.55 | 0.5 | 0.5547 |
| smoke\_exposure\_study\_years\_rest\_of\_life | Not within rest of life | 434 (88.6) | 2275 (89.1) | base | 0-0 |  | 0.5612 |
|  | Within rest of life | 56 (11.4) | 279 (10.9) | 0.92 | 0.70, 1.22 | 0.6 | 0.5612 |
| comorb\_inflammatory\_other\_chronic | FALSE | 489 (99.8) | 2542 (99.5) | base | 0-0 |  | 0.5632 |
|  | TRUE | 1 (0.2) | 12 (0.5) | 0.59 | 0.08, 4.20 | 0.6 | 0.5632 |
| intact\_sired\_litters\_natural\_ever | 0 | 482 (98.4) | 2523 (98.8) | base | 0-0 |  | 0.5642 |
|  | 1 | 8 (1.6) | 31 (1.2) | 1.24 | 0.61, 2.49 | 0.6 | 0.5642 |
| neutered\_females\_bred\_with\_count\_ever | 0 | 482 (98.4) | 2523 (98.8) | base | 0-0 |  | 0.5642 |
|  | 1 | 8 (1.6) | 31 (1.2) | 1.24 | 0.61, 2.49 | 0.6 | 0.5642 |
| quartile\_misc\_5y\_prior\_endpoint | drug\_not\_administered | 370 (75.5) | 1931 (75.6) | base | 0-0 |  | 0.5642 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.63 | 0.32, 1.22 | 0.2 | 0.5642 |
|  | Q1 | 58 (11.8) | 281 (11.0) | 0.96 | 0.73, 1.27 | 0.8 | 0.5642 |
|  | Q3 | 27 (5.5) | 109 (4.3) | 1.02 | 0.69, 1.51 | >0.9 | 0.5642 |
|  | Q4 | 26 (5.3) | 87 (3.4) | 1.17 | 0.78, 1.74 | 0.4 | 0.5642 |
| quartile\_dietary\_supplements\_5y\_prior\_endpoint | drug\_not\_administered | 319 (65.1) | 1707 (66.8) | base | 0-0 |  | 0.5652 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.63 | 0.33, 1.23 | 0.2 | 0.5652 |
|  | Q1 | 67 (13.7) | 322 (12.6) | 0.96 | 0.73, 1.24 | 0.7 | 0.5652 |
|  | Q2 | 36 (7.3) | 154 (6.0) | 1.05 | 0.75, 1.49 | 0.8 | 0.5652 |
|  | Q3 | 21 (4.3) | 75 (2.9) | 1.28 | 0.82, 1.99 | 0.3 | 0.5652 |
|  | Q4 | 38 (7.8) | 150 (5.9) | 1.09 | 0.78, 1.53 | 0.6 | 0.5652 |
| any\_treated\_insects\_study\_years\_rest\_of\_life | Not within rest of life | 185 (37.8) | 1215 (47.6) | base | 0-0 |  | 0.5914 |
|  | Within rest of life | 305 (62.2) | 1339 (52.4) | 0.95 | 0.79, 1.14 | 0.6 | 0.5914 |
| any\_treated\_weeds\_study\_years\_rest\_of\_life | Not within rest of life | 159 (32.4) | 1133 (44.4) | base | 0-0 |  | 0.6059 |
|  | Within rest of life | 331 (67.6) | 1421 (55.6) | 1.05 | 0.87, 1.27 | 0.6 | 0.6059 |
| any\_treated\_weeds\_study\_years\_whole\_life | Not within whole life | 159 (32.4) | 1133 (44.4) | base | 0-0 |  | 0.6059 |
|  | Within whole life | 331 (67.6) | 1421 (55.6) | 1.05 | 0.87, 1.27 | 0.6 | 0.6059 |
| avg\_activity\_freq\_sy1\_2\_terciles | ≥20 - <80 | 219 (44.7) | 1197 (46.9) | base | 0-0 |  | 0.6313 |
|  | ≥80 - <93.33 | 121 (24.7) | 541 (21.2) | 1.11 | 0.89, 1.39 | 0.3 | 0.6313 |
|  | ≥93.33 - <100 | 150 (30.6) | 816 (31.9) | 1.03 | 0.83, 1.26 | 0.8 | 0.6313 |
| ever\_bred\_from | 0 | 452 (92.2) | 2393 (93.7) | base | 0-0 |  | 0.6456 |
|  | 1 | 38 (7.8) | 161 (6.3) | 1.08 | 0.78, 1.51 | 0.6 | 0.6456 |
| activity\_1h\_min\_sy1\_2 | below\_1h | 423 (86.3) | 2166 (84.8) | base | 0-0 |  | 0.6734 |
|  | more\_than\_1h | 62 (12.7) | 346 (13.5) | 0.94 | 0.72, 1.23 | 0.7 | 0.6734 |
| quartile\_hormones\_and\_related\_5y\_prior\_endpoint | drug\_not\_administered | 439 (89.6) | 2212 (86.6) | base | 0-0 |  | 0.6931 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.62 | 0.32, 1.20 | 0.2 | 0.6931 |
|  | Q1 | 13 (2.7) | 69 (2.7) | 0.97 | 0.56, 1.68 | >0.9 | 0.6931 |
|  | Q2 | 8 (1.6) | 39 (1.5) | 0.93 | 0.46, 1.87 | 0.8 | 0.6931 |
|  | Q3 | 12 (2.4) | 45 (1.8) | 1.10 | 0.62, 1.95 | 0.7 | 0.6931 |
|  | Q4 | 9 (1.8) | 43 (1.7) | 0.78 | 0.40, 1.51 | 0.5 | 0.6931 |
| quartile\_hormones\_and\_related\_lifetime | drug\_not\_administered | 435 (88.8) | 2197 (86.0) | base | 0-0 |  | 0.7016 |
|  | medication\_use\_not\_recorded | 9 (1.8) | 146 (5.7) | 0.62 | 0.32, 1.20 | 0.2 | 0.7016 |
|  | Q1 | 15 (3.1) | 81 (3.2) | 0.91 | 0.55, 1.53 | 0.7 | 0.7016 |
|  | Q2 | 10 (2.0) | 39 (1.5) | 1.11 | 0.59, 2.07 | 0.8 | 0.7016 |
|  | Q3 | 10 (2.0) | 42 (1.6) | 1.02 | 0.55, 1.92 | >0.9 | 0.7016 |
|  | Q4 | 11 (2.2) | 49 (1.9) | 0.81 | 0.45, 1.48 | 0.5 | 0.7016 |
| heating\_fuel\_secondary\_mode\_5yrs\_prior | electric | 72 (14.7) | 375 (14.7) | 0.91 | 0.70, 1.19 | 0.5 | 0.7476 |
|  | natural gas | 23 (4.7) | 133 (5.2) | 0.84 | 0.55, 1.29 | 0.4 | 0.7476 |
|  | oil | 6 (1.2) | 23 (0.9) | 1.15 | 0.51, 2.58 | 0.7 | 0.7476 |
|  | other | 87 (17.8) | 329 (12.9) | 0.82 | 0.64, 1.05 | 0.11 | 0.7476 |
|  | propane | 13 (2.7) | 68 (2.7) | 1.05 | 0.60, 1.84 | 0.9 | 0.7476 |
|  | renewable | 0 (0.0) | 1 (0.0) | 0.00 | 0.00, Inf | >0.9 | 0.7476 |
|  | wood | 30 (6.1) | 196 (7.7) | 0.79 | 0.54, 1.15 | 0.2 | 0.7476 |
| neutered\_ever\_bred | 0 | 489 (99.8) | 2549 (99.8) | base | 0-0 |  | 0.7505 |
|  | 1 | 1 (0.2) | 5 (0.2) | 0.74 | 0.10, 5.26 | 0.8 | 0.7505 |
| area\_type\_mode\_5yrs\_prior | rural | 141 (28.8) | 728 (28.5) | base | 0-0 |  | 0.7699 |
|  | suburban | 296 (60.4) | 1427 (55.9) | 1.07 | 0.88, 1.31 | 0.5 | 0.7699 |
|  | urban | 41 (8.4) | 198 (7.8) | 1.08 | 0.76, 1.52 | 0.7 | 0.7699 |
| use\_hepa\_filter\_study\_years\_early\_life | Not within early life | 279 (56.9) | 1459 (57.1) | base | 0-0 |  | 0.7744 |
|  | Within early life | 211 (43.1) | 1095 (42.9) | 1.03 | 0.86, 1.23 | 0.8 | 0.7744 |
| pipes\_metal\_any\_mode\_5yrs\_prior | 0 | 220 (44.9) | 1115 (43.7) | base | 0-0 |  | 0.8201 |
|  | 1 | 258 (52.7) | 1238 (48.5) | 1.02 | 0.85, 1.22 | 0.8 | 0.8201 |
| any\_treated\_fertilizer\_exposed\_5yrs\_prior | No | 163 (33.3) | 1148 (44.9) | base | 0-0 |  | 0.8265 |
|  | Yes | 327 (66.7) | 1406 (55.1) | 0.98 | 0.81, 1.18 | 0.8 | 0.8265 |
| study\_year\_first\_chronic\_inflam | 0 | 29 (5.9) | 100 (3.9) | base | 0-0 |  | 0.8361 |
|  | 1 | 9 (1.8) | 38 (1.5) | 0.72 | 0.34, 1.52 | 0.4 | 0.8361 |
|  | 2 | 7 (1.4) | 17 (0.7) | 1.06 | 0.46, 2.41 | 0.9 | 0.8361 |
|  | 3 | 4 (0.8) | 18 (0.7) | 0.87 | 0.31, 2.47 | 0.8 | 0.8361 |
|  | 4 | 3 (0.6) | 21 (0.8) | 0.43 | 0.13, 1.41 | 0.2 | 0.8361 |
|  | 5 | 2 (0.4) | 5 (0.2) | 0.94 | 0.22, 3.96 | >0.9 | 0.8361 |
|  | 6 | 2 (0.4) | 6 (0.2) | 0.86 | 0.20, 3.59 | 0.8 | 0.8361 |
|  | 7 | 0 (0.0) | 1 (0.0) | 0.00 | 0.00, Inf | >0.9 | 0.8361 |
|  | 8 | 0 (0.0) | 2 (0.1) | 0.00 | 0.00, Inf | >0.9 | 0.8361 |
|  | 9 | 0 (0.0) | 1 (0.0) | 0.00 | 0.00, Inf | >0.9 | 0.8361 |
| neutered\_sired\_litters\_natural\_ever | 0 | 489 (99.8) | 2550 (99.8) | base | 0-0 |  | 0.8403 |
|  | 1 | 1 (0.2) | 4 (0.2) | 0.82 | 0.12, 5.85 | 0.8 | 0.8403 |
| use\_aerosol\_exposed\_5yrs\_prior | No | 243 (49.6) | 1288 (50.4) | base | 0-0 |  | 0.8413 |
|  | Yes | 247 (50.4) | 1266 (49.6) | 1.02 | 0.85, 1.22 | 0.8 | 0.8413 |
| hours\_of\_smoke\_rest\_of\_life\_total\_dosage\_terciles | >=2-<9h | 19 (3.9) | 95 (3.7) | base | 0-0 |  | 0.8814 |
|  | >=9-378h | 17 (3.5) | 96 (3.8) | 0.88 | 0.46, 1.70 | 0.7 | 0.8814 |
|  | >0-<2h | 20 (4.1) | 85 (3.3) | 1.09 | 0.58, 2.04 | 0.8 | 0.8814 |
|  | no\_smoke | 434 (88.6) | 2278 (89.2) | 1.06 | 0.67, 1.68 | 0.8 | 0.8814 |
| use\_moth\_balls\_study\_years\_early\_life | Not within early life | 476 (97.1) | 2484 (97.3) | base | 0-0 |  | 0.8858 |
|  | Within early life | 14 (2.9) | 70 (2.7) | 0.96 | 0.57, 1.64 | 0.9 | 0.8858 |
| smoke\_exposure\_exposed\_5yrs\_prior | No | 436 (89.0) | 2263 (88.6) | base | 0-0 |  | 0.8908 |
|  | Yes | 54 (11.0) | 291 (11.4) | 0.98 | 0.74, 1.30 | 0.9 | 0.8908 |
| use\_hepa\_filter\_exposed\_5yrs\_prior | No | 235 (48.0) | 1322 (51.8) | base | 0-0 |  | 0.9142 |
|  | Yes | 255 (52.0) | 1232 (48.2) | 0.99 | 0.83, 1.18 | >0.9 | 0.9142 |
| any\_treated\_insects\_study\_years\_whole\_life | Not within whole life | 162 (33.1) | 1059 (41.5) | base | 0-0 |  | 0.9275 |
|  | Within whole life | 328 (66.9) | 1495 (58.5) | 1.01 | 0.84, 1.22 | >0.9 | 0.9275 |
| hours\_of\_smoke\_exposure\_hours\_5yrs\_prior\_terciles | >=14-368h | 20 (4.1) | 100 (3.9) | base | 0-0 |  | 0.9746 |
|  | >=4-<14h | 18 (3.7) | 91 (3.6) | 1.05 | 0.55, 1.98 | 0.9 | 0.9746 |
|  | >0-<4h | 16 (3.3) | 97 (3.8) | 0.90 | 0.46, 1.73 | 0.7 | 0.9746 |
|  | no\_smoke | 436 (89.0) | 2266 (88.7) | 0.99 | 0.63, 1.55 | >0.9 | 0.9746 |

# Finalfit Regression Results