(xiii) Appendices (also submitted in main text file)

Appendix A: Individual-level demographic and property characteristics and reported tick encounters (2012)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Individual Characteristic †**  N = 4210 | **N (%)** | **Reported tick encounter †**  **N = 483** | **No reported tick encounter**  **N = 3727** | **P-value ‡** |
| **State** |  |  |  |  |
| CT | 1889 (44.9) | 246 (13.0) | 1643 (87.0) | 0.001 |
| MD | 654 (15.5) | 51 (7.8) | 603 (92.2) |
| NY | 1667 (39.6) | 186 (11.2) | 1481 (88.8) |
| **Sex** |  |  |  |  |
| Male | 2046 (48.6) | 263 (12.9) | 1783 (87.1) | <0.0001 |
| Female | 2145 (51.0) | 204 (9.5) | 1941 (90.5) |
| **Age (years)** |  |  |  |  |
| 0-9 | 384 (9.1) | 67 (17.4) | 317 (82.6) | <0.0001 |
| 10-19 | 824 (19.6) | 77 (9.3) | 747 (90.7) |
| 20-29 | 497 (11.8) | 32 (6.4) | 465 (93.6) |
| 30-39 | 231 (5.5) | 32 (13.9) | 199 (86.1) |
| 40-49 | 638 (15.2) | 67 (10.5) | 571 (89.5) |
| 50-59 | 769 (18.3) | 96 (12.5) | 673 (87.5) |
| ≥60 | 545 (12.9) | 76 (13.9) | 469 (86.1) |
| **Race** |  |  |  |  |
| White | 3871 (91.9) | 459 (11.9) | 3412 (88.1) | 0.02 |
| Black/African American | 45 (1.1) | 1 (2.2) | 44 (97.8) |
| Asian | 136 (3.2) | 11 (8.1) | 125 (91.9) |
| Other | 127 (3.0) | 8 (6.3) | 119 (93.7) |
| **Hispanic** |  |  |  |  |
| Yes | 231 (5.5) | 17 (7.4) | 214 (92.6) | 0.06 |
| No | 3967 (94.2) | 465 (11.7) | 3502 (88.3) |
| **Past TBD** |  |  |  |  |
| Yes | 657 (15.6) | 109 (16.6) | 548 (83.4) | <0.0001 |
| No | 3539 (84.1) | 360 (10.2) | 3179 (89.8) |
| **TBD onset in past 5 years**  **(2007 - 2012)** **§** |  |  |  |  |
| Yes | 357 (54.3) | 72 (20.2) | 285 (79.8) | 0.03 |
| No | 186 (28.3) | 23 (12.4) | 163 (87.6) |
| **Owns pet** |  |  |  |  |
| Yes | 2646 (62.9) | 334 (12.6) | 2312 (87.4) | 0.003 |
| No | 1564 (37.1) | 149 (9.5) | 1415 (90.5) |
| **Found tick on pet ¶** |  |  |  |  |
| Yes | 625 (23.6) | 156 (25.0) | 469 (75.0) | <0.0001 |
| No | 1906 (72.0) | 168 (8.8) | 1738 (91.2) |
| **Property size (acres)** |  |  |  |  |
| ≤ 1 | 1814 (43.1) | 160 (8.8) | 1654 (91.2) | <0.0001 |
| 1.1-1.9 | 1565 (37.2) | 177 (11.3) | 1388 (88.7) |
| ≥ 2 | 57 (1.4) | 16 (28.1) | 41 (71.9) |
| **Forested areas on property** |  |  |  |  |
| Yes | 3857 (91.6) | 450 (11.7) | 3407 (88.3) | 0.26 |
| No | 338 (8.0) | 32 (9.5) | 306 (90.5) |

**†** A tick encounter is considered any event where one or more ticks were found crawling, attached, or crawling and attached.

**‡** Evaluated using Pearson’s chi-square test

§ Of those who reported past tickborne disease (N = 357). Data for those who did not provide a date for a past tickborne illness are not shown.

¶ Of those who reported owning a pet (N = 1464).

Appendix B: Self-reported and verified tickborne disease risk by individual-level tick encounters (2012) (N=4158)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Self-reported disease** | | | **Verified disease** | | |
|  | **N (%)** | **Relative RR †**  **(95% CI)** | **Attributable Risk %** | **N (%)** | **Relative RR**  **(95% CI)** | **Attributable Risk %** |
| Any tick encounter | 9 (1.9) | 3.65 (1.66-8.01) | 72.3 | 4 (0.82) | 3.42 (1.06-11.07) | 71.4 |
| Ticks crawling | 9 (2.2) | 4.34 (1.98-9.53) | 76.8 | 4 (0.96) | 4.07 (1.26-13.17) | 76.0 |
| Ticks attached | 3 (1.4) | 2.29 (0.70-7.52) | 56.6 | 1 (0.48) | 1.59 (0.21-12.17) | 37.5 |

**†** RR: risk ratio

Appendix C: Unadjusted and adjusted odds ratios for tick encounters by individual-level demographic and property characteristics (2012)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Individual Characteristic** | **Any tick encounter** | | **Crawling** | | **Attached** | |
| **OR** | **aOR †** | **OR** | **aOR** | **OR** | **aOR** |
| **State** |  |  |  |  |  |  |
| CT | 1.86 (1.37-2.57) | 1.85 (1.22-2.92) | 2.01 (1.44-2.87) | 1.84 (1.18-3.00) | 1.63 (1.03-2.71) | 1.46 (0.79-2.92) |
| MD | reference | reference | reference | reference | reference | reference |
| NY | 1.63 (1.19-2.27) | 1.57 (1.03-2.47) | 1.71 (1.21-2.48) | 1.57 (1.00-2.57) | 1.76 (1.11-2.93) | 1.72 (0.94-3.41) |
| **Sex** |  |  |  |  |  |  |
| Male | 1.40 (1.16-1.70) | 1.32 (1.04-1.67) | 1.44 (1.17-1.77) | 1.36 (1.06-1.75) | 1.29 (0.975-1.72) | 1.20 (0.85-1.71) |
| Female | reference | reference | reference | reference | reference | reference |
| **Age (years)** |  |  |  |  |  |  |
| 0-9 | 3.05 (1.97-4.80) | 4.25 (2.45-7.63) | 2.57 (1.61-4.17) | 3.39 (1.90-6.26) | 4.99 (2.61-10.37) | 9.74 (4.01-29.10) |
| 10-19 | 1.51 (1.00-2.35) | 2.04 (1.21-3.57) | 1.44 (0.93-2.30) | 1.75 (1.02-3.13) | 1.73 (0.89-3.62) | 3.32 (1.36-9.92) |
| 20-29 | reference | reference | reference | reference | reference | reference |
| 30-39 | 2.29 (1.36-3.84) | 3.12 (1.64-5.98) | 2.45 (1.44-4.18) | 3.35 (1.75-6.49) | 1.79 (0.71-4.39) | 3.17 (0.99-10.88) |
| 40-49 | 1.71 (1.11-2.68) | 1.98 (1.15-3.54) | 1.62 (1.03-2.60) | 1.85 (1.05-3.36) | 2.10 (1.07-4.44) | 3.11 (1.23-9.48) |
| 50-59 | 2.08 (1.39-3.20) | 2.78 (1.68-4.81) | 1.96 (1.28-3.09) | 2.49 (1.48-4.39) | 2.11 (1.09-4.39) | 3.69 (1.54-10.94) |
| ≥60 | 2.32 (1.52-3.61) | 3.06 (1.80-5.41) | 2.09 (1.34-3.34) | 2.74 (1.58-4.96) | 3.31 (1.73-6.87) | 4.69 (1.91-14.11) |
| **White race** |  |  |  |  |  |  |
| Yes | 1.94 (1.25-3.18) | 2.33 (1.16-5.38) | 1.71 (1.09-2.84) | 1.94 (0.96-4.50) | 2.33 (1.17-5.52) | 2.28 (0.81-9.57) |
| **Hispanic** |  |  |  |  |  |  |
| Yes | 0.598 (0.35-0.96) | 0.66 (0.33-1.21) | 0.671 (0.38-1.09) | 0.68 (0.33-1.27) | 0.408 (0.14-0.90) | 0.38 (0.09-1.06) |
| **Past TBD** |  |  |  |  |  |  |
| Yes | 1.76 (1.39-2.21) | 1.63 (1.21-2.19) | 1.75 (1.36-2.24) | 1.47 (1.06-2.01) | 1.92 (1.37-2.64) | 1.86 (1.20-2.81) |
| **Owns pet** |  |  |  |  |  |  |
| Yes | 1.37 (1.12-1.69) | 1.46 (1.14-1.90) | 1.41 (1.13-1.76) | 1.59 (1.21-2.12) | 1.25 (0.932-1.69) | 1.21 (0.84-1.77) |
| **Property size** |  |  |  |  |  |  |
| 2≤ 1 acre | reference | reference | reference | reference | reference | reference |
| 1.1-1.9 acre | 1.34 (1.07-1.68) | 1.50 (1.18-1.92) | 1.39 (1.09-1.77) | 1.51 (1.17-1.95) | 1.12 (0.80-1.56) | 1.33 (0.93-1.91) |
| ≥ 2 acre | 4.27 (2.28-7.63) | 4.28 (2.19-8.09) | 3.91 (1.98-7.25) | 3.68 (1.80-7.15) | 5.07 (2.34-10.06) | 5.71 (2.48-12.23) |
| **Forested areas on property** |  |  |  |  |  |  |
| Yes | 1.26 (0.88-1.87) | 0.92 (0.60-1.44) | 1.40 (0.94-2.18) | 1.12 (0.70-1.88) | 1.23 (0.73-2.24) | 0.93 (0.52-1.83) |

**†** aOR: adjusted odds ratio