**Supplementary Tables**

**Supplementary Table 1. Numbers of outpatient and inpatient cases by International Classification of Diseases, 9th Revision (ICD-9) discharge codes used to define food and waterborne disease.**

|  |  |  |  |
| --- | --- | --- | --- |
| **ICD-9 code** | **Description** | **Outpatient**  **n (%)** | **Inpatient**  **n (%)** |
| 003 | Other Salmonella infections | 4 (0.2) | 104 (1.4) |
| 004 | Shigellosis | 6 (0.3) | 18 (0.2) |
| 005 | Other food poisoning (bacterial) | 255 (10.8) | 150 (2.1) |
| 006 | Amebiasis | 2 (0.1) | 7 (0.1) |
| 007 | Other protozoal intestinal diseases | 11 (0.5) | 15 (0.2) |
| 008 | Intestinal infections due to other organisms | 1641 (69.2) | 6275 (86.8) |
| 009 | Ill-defined intestinal infections | 453 (19.1) | 660 (9.1) |

**Supplementary Table 2. Demographics to characterize incident food and waterborne disease inpatient visits among residents of Hurricane Sandy storm and non-storm areas, from 2001-2012. a**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Demographic factor** | **Overall**  **n (%)** | **Storm area**  **n (%)** | **Non-storm area**  **n (%)** | **P-value b** |
| **Total** | 7229 (100.0) | 1977 (27.3) | 5252 (72.7) | - |
| **Age** |  |  |  |  |
| < 5 years | 295 (4.1) | 61 (3.1) | 234 (4.5) | 0.01 |
| 5-19 years | 234 (3.2) | 53 (2.7) | 181 (3.4) |  |
| 20-64 years | 2323 (32.1) | 619 (31.3) | 1704 (32.4) |  |
| 65+ years | 4377 (60.5) | 1244 (62.9) | 3133 (59.7) |  |
| **Sex** |  |  |  |  |
| Male | 3023 (41.8) | 846 (42.8) | 2177 (41.5) | 0.30 |
| Female | 4206 (58.2) | 1131 (57.2) | 3075 (58.5) |  |
| **Race** |  |  |  |  |
| White | 4274 (59.1) | 1126 (57.0) | 3148 (59.9) | <0.01 |
| Black | 1320 (18.3) | 456 (23.1) | 864 (16.5) |  |
| Other/Unknown | 1635 (22.6) | 395 (20.0) | 1240 (23.6) |  |
| **Ethnicity** |  |  |  |  |
| Spanish/Hispanic | 1134 (15.7) | 275 (13.9) | 859 (16.4) | < 0.01 |
| Non-Hispanic | 5672 (78.5) | 1611 (81.5) | 4061 (77.3) |  |
| Unknown | 423 (5.9) | 91 (4.6) | 332 (6.3) |  |
| **County of residence** |  |  |  |  |
| Nassau | 983 (13.6) | 356 (18.0) | 627 (11.9) | < 0.01 |
| Suffolk | 1061 (14.7) | 168 (8.5) | 893 (17.0) |  |
| Westchester | 487 (6.7) | 12 (0.6) | 475 (9.0) |  |
| Bronx | 1034 (14.3) | 177 (9.0) | 857 (16.3) |  |
| Kings (Brooklyn) | 1373 (19.0) | 639 (32.3) | 734 (14.0) |  |
| New York (Manhattan) | 810 (11.2) | 355 (18.0) | 455 (8.7) |  |
| Queens | 1228 (17.0) | 230 (11.6) | 998 (19.0) |  |
| Richmond (Staten Island) | 253 (3.5) | 40 (2.0) | 213 (4.1) |  |
| **Year** |  |  |  |  |
| 2000 | 11 (0.2) | 2 (0.1) | 9 (0.2) | 0.15 |
| 2001 | 339 (4.7) | 89 (4.5) | 250 (4.8) |  |
| 2002 | 376 (5.2) | 105 (5.3) | 271 (5.2) |  |
| 2003 | 447 (6.2) | 138 (7.0) | 309 (5.9) |  |
| 2004 | 473 (6.5) | 114 (5.8) | 359 (6.8) |  |
| 2005 | 516 (7.1) | 140 (7.1) | 376 (7.2) |  |
| 2006 | 628 (8.7) | 151 (7.6) | 477 (9.1) |  |
| 2007 | 660 (9.1) | 186 (9.4) | 474 (9.0) |  |
| 2008 | 737 (10.2) | 187 (9.5) | 550 (10.5) |  |
| 2009 | 720 (10.0) | 194 (9.8) | 526 (10.0) |  |
| 2010 | 772 (10.7) | 225 (11.4) | 547 (10.4) |  |
| 2011 | 782 (10.8) | 210 (10.6) | 572 (10.9) |  |
| 2012 | 768 (10.6) | 236 (11.9) | 532 (10.1) |  |
| **Source of payment** |  |  |  |  |
| Self-Pay | 206 (2.8) | 31 (1.6) | 175 (3.3) | < 0.01 |
| Medicare | 3913 (54.1) | 1152 (58.3) | 2761 (52.6) |  |
| Medicaid | 796 (11.0) | 193 (9.8) | 603 (11.5) |  |
| Insurance Company | 2298 (31.8) | 598 (30.2) | 1700 (32.4) |  |
| Other/Unknown | 16 (0.2) | 3 (0.2) | 13 (0.2) |  |

a Storm areas defined as New York City Evacuation Zones (Bronx, Queens, New York, Kings, and Richmond Counties) or as Hurricane Storm Surge Zones in Nassau, Suffolk, and Westchester Counties; b P-value for difference between storm and non-storm areas using Χ2-test.

**Supplementary Table 3. Risk ratios (95% confidence intervals) for incident food and waterborne disease outpatient diagnoses, from October 28th-November 24h, 2012 relative to October 28th-November 24th, 2005-2011, among residents of Hurricane Sandy storm areas and non-storm areas. a**

|  |  |  |
| --- | --- | --- |
| **Demographic factor** | **Storm area b** | **Non-storm area c** |
| **Overall** | **0.63 (0.44, 0.92)** | **0.62 (0.40, 0.96)** |
| **County** |  |  |
| Nassau | 0.72 (0.27, 1.91) | 1.44 (0.81, 2.54) |
| Suffolk | 0.97 (0.46, 2.03) | **0.67 (0.45, 0.99)** |
| Bronx | 1.04 (0.58, 1.89) | 1.06 (0.82, 1.38) |
| Kings (Brooklyn) | 0.91 (0.68, 1.23) | **0.69 (0.54, 0.88)** |
| New York (Manhattan) | **0.50 (0.35, 0.70)** | **0.36 (0.25, 0.52)** |
| Queens | **0.35 (0.22, 0.54)** | **0.31 (0.24, 0.39)** |
| Richmond (Staten Island) | 0.77 (0.20, 2.97) | 1.62 (0.77, 3.42) |

NOTE: Statistically significant results (P < 0.05) in boldface; time-trend effects in storm and non-storm areas not statistically different (P > 0.05).

a Poisson or negative binomial regression models adjusted for day of the week (short-term trend), year (long-term trend), including a cross-product term a cross product term between pre-/post-Sandy interval and study area, and offset by the 2010 U.S. Census population total; b Storm area includes those categorized as evacuation zones A, B, and C in Bronx, Kings, New York, Queens, and Richmond counties, and areas categorized as storm surge zones categories 1, 2, 3, and 4 in Nassau and Suffolk Counties; c Non-storm areas include those not categorized as storm areas.

**Supplementary Figures**

**Supplementary Figure 1. Study catchment area, including storm (shaded) and non-storm (unshaded) affected areas.**

