**CSU Testing of Mosquito Pools for West Nile Virus, 2019 – Final Report**

**Summary for 2019 WNV testing season**

* During the 2019 season, CSU tested a total of 1229 mosquito pools (see section A below). Of these, 1021 came from Fort Collins, 122 came from Loveland, and 86 came from Berthoud. Of the Fort Collins mosquito pools, 665 were *Cx. tarsalis* and 356 were *Cx. pipiens*.
* All tested pools in Fort Collins were negative in weeks 24-29. WNV-positive pools were recorded in Fort Collins in weeks 30-37.
* All tested pools in Loveland were negative in weeks 24-29, 31, & 33. WNV-positive pools were recorded in Loveland in weeks 30, 32, and 34-35. (Note that no pools were tested from Loveland in weeks 36-37.)
* All tested pools in Berthoud were negative in weeks 24-37. There were no WNV-positive pools recorded in Berthoud in the 2019 season. (Note that no pools were tested from Berthoud in weeks 36-37.)
* The overall numbers of WNV-positive pools were 42 from Fort Collins, 6 from Loveland, and 0 from Berthoud. The greatest number of WNV-positive pools for a single week was recorded in week 35 (n=12 positive pools, 10 from Fort Collins and 2 from Loveland).
* Compared to historical 2006-2018 averages for Fort Collins (see section B below), the citywide Vector Index in 2019 was above the historical average in weeks 35-36. The Vector Index was at or below the historical average in weeks 24-34 and week 37.
* Compared to historical 2006-2018 averages for Fort Collins, the citywide *Culex* abundance in 2019 was at or below the historical average in weeks 24-30. The citywide *Culex* abundance was above the historical average in weeks 31-37. (An average *Culex* abundance of >100 per trap night was recorded for the NE zone in weeks 31-32 and in the SE zone in weeks 31 and 33.)
* Compared to historical 2006-2018 averages for Fort Collins, the citywide WNV infection rate in 2019 was at or below the historical average in weeks 24-35 and week 37. The citywide WNV infection rate was above the historical average in week 36.
* Among the four Fort Collins zones, the Vector Index exceeded 0.5 once this season, in the NE zone in week 35. Peak weekly VIs were 0.25 for the SE zone (week 33), 0.70 for the NE zone (week 35), 0.20 for the NW zone (week 35), and 0.15 for the SW zone (week 32).
* The Vector Index in Loveland exceeded 0.5 once this season, in week 35. Peak weekly VI in Loveland was 0.51 (week 35).
* The Vector Index in Berthoud did not exceed 0.5 in any of the weeks tested. The weekly VI in Berthoud never exceeded 0.00.
* Detailed weekly data for Vector Index, *Culex* abundance and WNV infection rate are shown in section C below.

**A. Summary of tested mosquito pools - 2019**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week | **Fort Collins** | | | | **Loveland** | | | | **Berthoud** | | | |
| *Culex pipiens* pools | | *Culex tarsalis* pools | | *Culex pipiens* pools | | *Culex tarsalis* pools | | *Culex pipiens* pools | | *Culex tarsalis* pools | |
| No. tested | No. WNV positive | No. tested | No. WNV positive | No. tested | No. WNV positive | No. tested | No. WNV positive | No. tested | No. WNV positive | No. tested | No. WNV positive |
| 24 | 1 | 0 | 9 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 1 | 0 |
| 25 | 5 | 0 | 7 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 |
| 26 | 8 | 0 | 18 | 0 | 0 | 0 | 4 | 0 | 1 | 0 | 2 | 0 |
| 27 | 7 | 0 | 35 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 6 | 0 |
| 28 | 18 | 0 | 62 | 0 | 1 | 0 | 10 | 0 | 0 | 0 | 10 | 0 |
| 29 | 22 | 0 | 56 | 0 | 1 | 0 | 9 | 0 | 1 | 0 | 9 | 0 |
| 30 | 21 | 0 | 56 | 2 | 1 | 0 | 14 | 2 | 3 | 0 | 8 | 0 |
| 31 | 37 | 0 | 91 | 2 | 2 | 0 | 18 | 0 | 2 | 0 | 11 | 0 |
| 32 | 36 | 2 | 73 | 4 | 2 | 0 | 16 | 1 | 1 | 0 | 10 | 0 |
| 33 | 38 | 3 | 82 | 3 | 2 | 0 | 8 | 0 | 2 | 0 | 7 | 0 |
| 34 | 42 | 6 | 46 | 2 | 5 | 0 | 7 | 1 | 1 | 0 | 3 | 0 |
| 35 | 44 | 4 | 50 | 6 | 2 | 0 | 6 | 2 | 2 | 0 | 5 | 0 |
| 36 | 44 | 6 | 46 | 1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 37 | 33 | 1 | 34 | 0 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| **TOTAL** | **356** | **22** | **665** | **20** | **16** | **0** | **106** | **6** | **13** | **0** | **73** | **0** |

|  |  |  |  |
| --- | --- | --- | --- |
| **Total mosquito pools:** | | | **1229** |
| Total from Fort Collins: | | | 1021 |
| Total from Loveland: | | | 122 |
| Total from Berthoud: | | | 86 |
|  |  |  |  |
| **Total WNV+ pools:** | |  | **48** |
| Total WNV+ from Fort Collins: | | | 42 |
| Total WNV+ from Loveland: | | | 6 |
| Total WNV+ from Berthoud: | | | 0 |

**B. Weekly data for 2019 in relation to historical averages**

**Table 1b. Vector Index for all *Culex* by week from June-September**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week | FC – Zone NW | | FC – Zone NE | | FC – Zone SE | | FC – Zone SW | | FC – Citywide | | LV | BE |
| Current year | Historical average1 | Current year | Historical average1 | Current year | Historical average1 | Current year | Historical average1 | Current year | Historical average1 |
| 24 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 25 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 26 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 |
| 27 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 |
| 28 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.11 | 0.00 | 0.01 | 0.00 | 0.05 | 0.00 | 0.00 |
| 29 | 0.00 | 0.10 | 0.00 | 0.12 | 0.00 | 0.29 | 0.00 | 0.04 | 0.00 | 0.15 | 0.00 | 0.00 |
| 30 | 0.00 | 0.11 | 0.10 | 0.16 | 0.07 | 0.29 | 0.00 | 0.07 | 0.05 | 0.17 | 0.16 | 0.00 |
| 31 | 0.00 | 0.18 | 0.20 | 0.18 | 0.00 | 0.23 | 0.00 | 0.08 | 0.05 | 0.20 | 0.00 | 0.00 |
| 32 | 0.13 | 0.15 | 0.09 | 0.30 | 0.14 | 0.35 | 0.15 | 0.10 | 0.12 | 0.25 | 0.10 | 0.00 |
| 33 | 0.00 | 0.17 | 0.10 | 0.40 | 0.25 | 0.27 | 0.00 | 0.10 | 0.11 | 0.25 | 0.00 | 0.00 |
| 34 | 0.12 | 0.14 | 0.12 | 0.15 | 0.12 | 0.28 | 0.00 | 0.04 | 0.10 | 0.17 | 0.11 | 0.00 |
| 35 | 0.20 | 0.05 | 0.70 | 0.15 | 0.09 | 0.22 | 0.00 | 0.11 | 0.22 | 0.15 | 0.51 | 0.00 |
| 362 | 0.03 | 0.03 | 0.27 | 0.07 | 0.05 | 0.01 | 0.00 | 0.02 | 0.09 | 0.03 | N/A | N/A |
| 373 | 0.00 | 0.05 | 0.00 | 0.06 | 0.04 | 0.01 | 0.00 | 0.00 | 0.02 | 0.03 | N/A | N/A |

1 Historical averages for weeks 24-35 were calculated from 2006-2018 data (2003-2005 surveillance data were excluded due to changes in trap locations from 2006 onwards).

2 Historical averages for week 36 were calculated from 2015-2018 data only (2015 was the first year to have surveillance data collected past week 35).

3 Historical averages for week 37 were calculated from 2015, 2016, and 2018 data only (surveillance data for week 37 were not collected in 2017).

**Table 2b. Vector abundance for All *Culex* by week from June-September**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week | FC – Zone NW | | FC – Zone NE | | FC – Zone SE | | FC – Zone SW | | FC – Citywide | | LV | BE |
| Current year | Historical average1 | Current year | Historical average1 | Current year | Historical average1 | Current year | Historical average1 | Current year | Historical average1 |
| 24 | 0.00 | 2.71 | 3.20 | 7.48 | 5.75 | 10.04 | 5.00 | 1.37 | 4.40 | 6.04 | 5.47 | 5.00 |
| 25 | 1.50 | 6.58 | 3.00 | 19.15 | 3.33 | 23.54 | 6.00 | 3.36 | 3.13 | 14.54 | 2.23 | 4.00 |
| 26 | 3.33 | 13.34 | 4.50 | 34.82 | 16.60 | 36.73 | 5.50 | 8.13 | 11.53 | 25.15 | 3.27 | 4.67 |
| 27 | 8.50 | 26.42 | 30.67 | 61.77 | 29.25 | 44.94 | 6.20 | 10.62 | 23.07 | 39.54 | 17.69 | 42.00 |
| 28 | 15.29 | 44.21 | 41.20 | 81.97 | 81.73 | 85.17 | 17.00 | 13.32 | 47.03 | 60.82 | 43.56 | 72.80 |
| 29 | 20.00 | 50.94 | 70.90 | 80.55 | 62.07 | 70.72 | 14.00 | 21.42 | 48.00 | 59.13 | 37.11 | 61.80 |
| 30 | 33.25 | 50.04 | 38.00 | 114.76 | 62.07 | 76.93 | 16.44 | 17.89 | 41.07 | 68.17 | 41.74 | 70.80 |
| 31 | 70.67 | 60.78 | 142.90 | 90.92 | 108.33 | 59.53 | 27.63 | 18.69 | 93.12 | 61.80 | 72.95 | 90.40 |
| 32 | 51.00 | 42.76 | 105.30 | 66.42 | 82.33 | 50.01 | 37.14 | 14.61 | 73.90 | 45.23 | 59.03 | 85.40 |
| 33 | 47.11 | 28.94 | 73.40 | 62.05 | 112.73 | 35.16 | 33.67 | 10.26 | 73.30 | 36.34 | 40.08 | 55.40 |
| 34 | 30.67 | 18.95 | 49.30 | 39.26 | 35.80 | 24.17 | 14.56 | 6.87 | 33.42 | 24.05 | 42.05 | 29.67 |
| 35 | 20.25 | 9.17 | 63.10 | 21.50 | 37.07 | 12.61 | 29.00 | 3.48 | 38.37 | 12.17 | 29.32 | 18.00 |
| 36 | 30.11 | 9.97 | 49.60 | 26.00 | 30.67 | 6.08 | 17.89 | 2.89 | 32.28 | 10.86 | N/A | N/A |
| 37 | 6.33 | 9.89 | 9.67 | 13.80 | 15.47 | 3.67 | 4.17 | 1.37 | 10.28 | 6.84 | N/A | N/A |

1 Historical averages for weeks 24-35 were calculated from 2006-2018 data (2003-2005 surveillance data were excluded due to changes in trap locations from 2006 onwards).

2 Historical averages for week 36 were calculated from 2015-2018 data only (2015 was the first year to have surveillance data collected past week 35).

3 Historical averages for week 37 were calculated from 2015, 2016, and 2018 data only (surveillance data for week 37 were not collected in 2017).

**Table 3b. WNV infection rate per 1,000 females for all *Culex* by week from June-September**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week | FC – Zone NW | | FC – Zone NE | | FC – Zone SE | | FC – Zone SW | | FC – Citywide | | LV | BE |
| Current year | Historical average1 | Current year | Historical average1 | Current year | Historical average1 | Current year | Historical average1 | Current year | Historical average1 |
| 24 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.06 | 0.00 | 0.00 | 0.00 | 0.40 | 0.00 | 0.00 |
| 25 | 0.00 | 0.00 | 0.00 | 0.48 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.06 | 0.00 | 0.00 |
| 26 | 0.00 | 0.00 | 0.00 | 0.08 | 0.00 | 0.36 | 0.00 | 0.37 | 0.00 | 0.23 | 0.00 | 0.00 |
| 27 | 0.00 | 0.00 | 0.00 | 0.19 | 0.00 | 0.37 | 0.00 | 0.00 | 0.00 | 0.27 | 0.00 | 0.00 |
| 28 | 0.00 | 0.00 | 0.00 | 0.55 | 0.00 | 0.80 | 0.00 | 0.63 | 0.00 | 0.56 | 0.00 | 0.00 |
| 29 | 0.00 | 1.67 | 0.00 | 1.12 | 0.00 | 2.52 | 0.00 | 1.10 | 0.00 | 1.70 | 0.00 | 0.00 |
| 30 | 0.00 | 2.58 | 2.62 | 1.78 | 1.03 | 4.04 | 0.00 | 2.49 | 1.11 | 2.81 | 4.04 | 0.00 |
| 31 | 0.00 | 3.85 | 1.36 | 2.20 | 0.00 | 5.16 | 0.00 | 3.40 | 0.48 | 3.69 | 0.00 | 0.00 |
| 32 | 1.87 | 3.80 | 1.75 | 5.50 | 1.30 | 7.74 | 3.36 | 10.21 | 1.74 | 5.89 | 1.76 | 0.00 |
| 33 | 0.00 | 7.44 | 1.23 | 6.92 | 2.84 | 10.39 | 0.00 | 6.83 | 1.78 | 8.09 | 0.00 | 0.00 |
| 34 | 2.52 | 8.24 | 3.46 | 4.15 | 4.90 | 10.90 | 5.69 | 10.19 | 4.17 | 7.69 | 3.39 | 0.00 |
| 35 | 10.87 | 9.44 | 10.01 | 5.77 | 3.25 | 16.34 | 0.00 | 44.22 | 5.92 | 10.74 | 21.39 | 0.00 |
| 362 | 2.41 | 6.62 | 6.33 | 2.02 | 3.30 | 3.34 | 0.00 | 7.04 | 3.87 | 2.74 | N/A | N/A |
| 373 | 0.00 | 5.89 | 0.00 | 4.04 | 3.21 | 4.17 | 0.00 | 0.00 | 1.81 | 5.13 | N/A | N/A |

1 Historical averages for weeks 24-35 were calculated from 2006-2018 data (2003-2005 surveillance data were excluded due to changes in trap locations from 2006 onwards).

2 Historical averages for week 36 were calculated from 2015-2018 data only (2015 was the first year to have surveillance data collected past week 35).

3 Historical averages for week 37 were calculated from 2015, 2016, and 2018 data only (surveillance data for week 37 were not collected in 2017).

**C. Detailed weekly data for Vector Index, *Culex* abundance and WNV infection rate**

***Week 24***

**Table 1a. Vector Index for current week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **24** | Mean abundance of females per trap night1 | | Estimate for proportion of  females infected with WNV2 | | **Vector Index** | | |
| *Cx. pipiens* | *Cx. tarsalis* | *Cx.*  *pipiens* | *Cx.*  *tarsalis* | ***Cx. pipiens3*** | ***Cx. tarsalis4*** | **All**  ***Culex5*** |
| FC – Zone NW | 0.00 | 0.00 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Zone NE | 0.00 | 3.20 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Zone SE | 0.00 | 5.75 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Zone SW | 5.00 | 0.00 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Citywide | 0.50 | 3.90 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
|  |  |  |  |  |  |  |  |
| LV | 0.8 | 4.6 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| BE | 0.0 | 5.0 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |

1From Table 2a (CDC light trap catches only).

2Derived from the data presented in Table 3a for estimated infection rate per 1,000 females (CDC light trap and gravid trap catches combined).

3Vector Index for *Cx. pipiens*= (Mean abundance of *Cx. pipiens*females per trap night) x (Estimate for proportion of all *Cx. pipiens*females infected with WNV).

4Vector Index for *Cx. tarsalis*= (Mean abundance of *Cx. tarsalis*females per trap night) x (Estimate for proportion of all *Cx. tarsalis*females infected with WNV).

5Vector Index for All *Culex*= (Vector Index for *Cx. pipiens*) *+* (Vector Index for *Cx. tarsalis*).

**Table 2a. Vector abundance for current week (CDC light trap catches only)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **24** | Total number  females collected | | | Number CDC light trap nights | Mean abundance of females per CDC light trap night | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens1* | *Cx. tarsalis2* | All  *Culex3* |
| FC – Zone NW | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Zone NE | 0 | 16 | 16 | 5 | 0.00 | 3.20 | 3.20 |
| FC – Zone SE | 0 | 23 | 23 | 4 | 0.00 | 5.75 | 5.75 |
| FC – Zone SW | 5 | 0 | 5 | 1 | 5.00 | 0.00 | 5.00 |
| FC – Citywide | 5 | 39 | 44 | 10 | 0.50 | 3.90 | 4.40 |
|  |  |  |  |  |  |  |  |
| LV | 16 | 88 | 104 | 19 | 0.84 | 4.63 | 5.47 |
| BE | 0 | 5 | 5 | 1 | 0.00 | 5.00 | 5.00 |

1Mean abundance of *Cx. pipiens*females per CDC light trap night = (Total number *Cx. pipiens*females collected) / (Number CDC light trap nights).

2Mean abundance of *Cx. tarsalis*females per CDC light trap night = (Total number *Cx. tarsalis* females collected) / (Number CDC light trap nights).

3Mean abundance of All *Culex*females per CDC light trap night = (Total number All *Culex*females collected) / (Number CDC light trap nights).

**Table 3a. WNV infection rate per 1,000 females for current week (CDC light trap and gravid trap catches combined)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **24** | Total number individuals examined | | | Total number pools examined | | | Total number  WNV-infected pools | | | Estimate for WNV infection rate per 1,000 females1 | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* |
| FC – Zone NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Zone NE | 0 | 16 | 16 | 0 | 5 | 5 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Zone SE | 0 | 23 | 23 | 0 | 4 | 4 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Zone SW | 5 | 0 | 5 | 1 | 0 | 1 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Citywide | 5 | 39 | 44 | 1 | 9 | 10 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| LV | 0 | 27 | 27 | 0 | 3 | 3 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| BE | 0 | 5 | 5 | 0 | 1 | 1 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |

1Maximum likelihood estimate (MLE) for WNV infection rate per 1,000 females calculated using the CDC PooledInfRate 4.0 plug-in for Excel.

***Week 25***

**Table 1a. Vector Index for current week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **25** | Mean abundance of females per trap night1 | | Estimate for proportion of  females infected with WNV2 | | **Vector Index** | | |
| *Cx. pipiens* | *Cx. tarsalis* | *Cx.*  *pipiens* | *Cx.*  *tarsalis* | ***Cx. pipiens3*** | ***Cx. tarsalis4*** | **All**  ***Culex5*** |
| FC – Zone NW | 0.50 | 1.00 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Zone NE | 0.00 | 3.00 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Zone SE | 0.00 | 3.33 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Zone SW | 0.00 | 6.00 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Citywide | 0.13 | 3.00 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
|  |  |  |  |  |  |  |  |
| LV | 0.2 | 2.0 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| BE | 0.0 | 4.0 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |

1From Table 2a (CDC light trap catches only).

2Derived from the data presented in Table 3a for estimated infection rate per 1,000 females (CDC light trap and gravid trap catches combined).

3Vector Index for *Cx. pipiens*= (Mean abundance of *Cx. pipiens*females per trap night) x (Estimate for proportion of all *Cx. pipiens*females infected with WNV).

4Vector Index for *Cx. tarsalis*= (Mean abundance of *Cx. tarsalis*females per trap night) x (Estimate for proportion of all *Cx. tarsalis*females infected with WNV).

5Vector Index for All *Culex*= (Vector Index for *Cx. pipiens*) *+* (Vector Index for *Cx. tarsalis*).

**Table 2a. Vector abundance for current week (CDC light trap catches only)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **25** | Total number  females collected | | | Number CDC light trap nights | Mean abundance of females per CDC light trap night | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens1* | *Cx. tarsalis2* | All  *Culex3* |
| FC – Zone NW | 1 | 2 | 3 | 2 | 0.50 | 1.00 | 1.50 |
| FC – Zone NE | 0 | 6 | 6 | 2 | 0.00 | 3.00 | 3.00 |
| FC – Zone SE | 0 | 10 | 10 | 3 | 0.00 | 3.33 | 3.33 |
| FC – Zone SW | 0 | 6 | 6 | 1 | 0.00 | 6.00 | 6.00 |
| FC – Citywide | 1 | 24 | 25 | 8 | 0.13 | 3.00 | 3.13 |
|  |  |  |  |  |  |  |  |
| LV | 3 | 26 | 29 | 13 | 0.23 | 2.00 | 2.23 |
| BE | 0 | 4 | 4 | 1 | 0.00 | 4.00 | 4.00 |

1Mean abundance of *Cx. pipiens*females per CDC light trap night = (Total number *Cx. pipiens*females collected) / (Number CDC light trap nights).

2Mean abundance of *Cx. tarsalis*females per CDC light trap night = (Total number *Cx. tarsalis* females collected) / (Number CDC light trap nights).

3Mean abundance of All *Culex*females per CDC light trap night = (Total number All *Culex*females collected) / (Number CDC light trap nights).

**Table 3a. WNV infection rate per 1,000 females for current week (CDC light trap and gravid trap catches combined)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **25** | Total number individuals examined | | | Total number pools examined | | | Total number  WNV-infected pools | | | Estimate for WNV infection rate per 1,000 females1 | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* |
| FC – Zone NW | 1 | 2 | 3 | 1 | 1 | 2 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Zone NE | 3 | 6 | 9 | 1 | 2 | 3 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Zone SE | 13 | 10 | 23 | 2 | 3 | 5 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Zone SW | 6 | 6 | 12 | 1 | 1 | 2 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Citywide | 23 | 24 | 47 | 5 | 7 | 12 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| LV | 0 | 12 | 12 | 0 | 2 | 2 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| BE | 0 | 4 | 4 | 0 | 1 | 1 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |

1Maximum likelihood estimate (MLE) for WNV infection rate per 1,000 females calculated using the CDC PooledInfRate 4.0 plug-in for Excel.

***Week 26***

**Table 1a. Vector Index for current week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **26** | Mean abundance of females per trap night1 | | Estimate for proportion of  females infected with WNV2 | | **Vector Index** | | |
| *Cx. pipiens* | *Cx. tarsalis* | *Cx.*  *pipiens* | *Cx.*  *tarsalis* | ***Cx. pipiens3*** | ***Cx. tarsalis4*** | **All**  ***Culex5*** |
| FC – Zone NW | 0.67 | 2.67 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Zone NE | 0.00 | 4.50 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Zone SE | 0.50 | 16.10 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Zone SW | 0.00 | 5.50 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Citywide | 0.41 | 11.12 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
|  |  |  |  |  |  |  |  |
| LV | 0.4 | 2.9 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| BE | 0.3 | 4.3 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |

1From Table 2a (CDC light trap catches only).

2Derived from the data presented in Table 3a for estimated infection rate per 1,000 females (CDC light trap and gravid trap catches combined).

3Vector Index for *Cx. pipiens*= (Mean abundance of *Cx. pipiens*females per trap night) x (Estimate for proportion of all *Cx. pipiens*females infected with WNV).

4Vector Index for *Cx. tarsalis*= (Mean abundance of *Cx. tarsalis*females per trap night) x (Estimate for proportion of all *Cx. tarsalis*females infected with WNV).

5Vector Index for All *Culex*= (Vector Index for *Cx. pipiens*) *+* (Vector Index for *Cx. tarsalis*).

**Table 2a. Vector abundance for current week (CDC light trap catches only)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **26** | Total number  females collected | | | Number CDC light trap nights | Mean abundance of females per CDC light trap night | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens1* | *Cx. tarsalis2* | All  *Culex3* |
| FC – Zone NW | 2 | 8 | 10 | 3 | 0.67 | 2.67 | 3.33 |
| FC – Zone NE | 0 | 9 | 9 | 2 | 0.00 | 4.50 | 4.50 |
| FC – Zone SE | 5 | 161 | 166 | 10 | 0.50 | 16.10 | 16.60 |
| FC – Zone SW | 0 | 11 | 11 | 2 | 0.00 | 5.50 | 5.50 |
| FC – Citywide | 7 | 189 | 196 | 17 | 0.41 | 11.12 | 11.53 |
|  |  |  |  |  |  |  |  |
| LV | 8 | 64 | 72 | 22 | 0.36 | 2.91 | 3.27 |
| BE | 1 | 13 | 14 | 3 | 0.33 | 4.33 | 4.67 |

1Mean abundance of *Cx. pipiens*females per CDC light trap night = (Total number *Cx. pipiens*females collected) / (Number CDC light trap nights).

2Mean abundance of *Cx. tarsalis*females per CDC light trap night = (Total number *Cx. tarsalis* females collected) / (Number CDC light trap nights).

3Mean abundance of All *Culex*females per CDC light trap night = (Total number All *Culex*females collected) / (Number CDC light trap nights).

**Table 3a. WNV infection rate per 1,000 females for current week (CDC light trap and gravid trap catches combined)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **26** | Total number individuals examined | | | Total number pools examined | | | Total number  WNV-infected pools | | | Estimate for WNV infection rate per 1,000 females1 | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* |
| FC – Zone NW | 6 | 8 | 14 | 3 | 3 | 6 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Zone NE | 3 | 9 | 12 | 2 | 2 | 4 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Zone SE | 9 | 161 | 170 | 3 | 11 | 14 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Zone SW | 0 | 11 | 11 | 0 | 2 | 2 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Citywide | 18 | 189 | 207 | 8 | 18 | 26 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| LV | 0 | 15 | 15 | 0 | 4 | 4 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| BE | 1 | 13 | 14 | 1 | 2 | 3 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |

1Maximum likelihood estimate (MLE) for WNV infection rate per 1,000 females calculated using the CDC PooledInfRate 4.0 plug-in for Excel.

***Week 27***

**Table 1a. Vector Index for current week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **27** | Mean abundance of females per trap night1 | | Estimate for proportion of  females infected with WNV2 | | **Vector Index** | | |
| *Cx. pipiens* | *Cx. tarsalis* | *Cx.*  *pipiens* | *Cx.*  *tarsalis* | ***Cx. pipiens3*** | ***Cx. tarsalis4*** | **All**  ***Culex5*** |
| FC – Zone NW | 0.00 | 8.50 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Zone NE | 0.44 | 30.22 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Zone SE | 0.17 | 29.08 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Zone SW | 0.20 | 6.00 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Citywide | 0.23 | 22.83 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
|  |  |  |  |  |  |  |  |
| LV | 0.6 | 17.1 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| BE | 0.0 | 42.0 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |

1From Table 2a (CDC light trap catches only).

2Derived from the data presented in Table 3a for estimated infection rate per 1,000 females (CDC light trap and gravid trap catches combined).

3Vector Index for *Cx. pipiens*= (Mean abundance of *Cx. pipiens*females per trap night) x (Estimate for proportion of all *Cx. pipiens*females infected with WNV).

4Vector Index for *Cx. tarsalis*= (Mean abundance of *Cx. tarsalis*females per trap night) x (Estimate for proportion of all *Cx. tarsalis*females infected with WNV).

5Vector Index for All *Culex*= (Vector Index for *Cx. pipiens*) *+* (Vector Index for *Cx. tarsalis*).

**Table 2a. Vector abundance for current week (CDC light trap catches only)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **27** | Total number  females collected | | | Number CDC light trap nights | Mean abundance of females per CDC light trap night | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens1* | *Cx. tarsalis2* | All  *Culex3* |
| FC – Zone NW | 0 | 34 | 34 | 4 | 0.00 | 8.50 | 8.50 |
| FC – Zone NE | 4 | 272 | 276 | 9 | 0.44 | 30.22 | 30.67 |
| FC – Zone SE | 2 | 349 | 351 | 12 | 0.17 | 29.08 | 29.25 |
| FC – Zone SW | 1 | 30 | 31 | 5 | 0.20 | 6.00 | 6.20 |
| FC – Citywide | 7 | 685 | 692 | 30 | 0.23 | 22.83 | 23.07 |
|  |  |  |  |  |  |  |  |
| LV | 20 | 617 | 637 | 36 | 0.56 | 17.14 | 17.69 |
| BE | 0 | 168 | 168 | 4 | 0.00 | 42.00 | 42.00 |

1Mean abundance of *Cx. pipiens*females per CDC light trap night = (Total number *Cx. pipiens*females collected) / (Number CDC light trap nights).

2Mean abundance of *Cx. tarsalis*females per CDC light trap night = (Total number *Cx. tarsalis* females collected) / (Number CDC light trap nights).

3Mean abundance of All *Culex*females per CDC light trap night = (Total number All *Culex*females collected) / (Number CDC light trap nights).

**Table 3a. WNV infection rate per 1,000 females for current week (CDC light trap and gravid trap catches combined)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **27** | Total number individuals examined | | | Total number pools examined | | | Total number  WNV-infected pools | | | Estimate for WNV infection rate per 1,000 females1 | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* |
| FC – Zone NW | 5 | 34 | 39 | 1 | 4 | 5 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Zone NE | 14 | 272 | 286 | 3 | 11 | 14 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Zone SE | 45 | 349 | 394 | 2 | 16 | 18 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Zone SW | 1 | 30 | 31 | 1 | 4 | 5 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Citywide | 65 | 685 | 750 | 7 | 35 | 42 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| LV | 0 | 277 | 277 | 0 | 9 | 9 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| BE | 0 | 168 | 168 | 0 | 6 | 6 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |

1Maximum likelihood estimate (MLE) for WNV infection rate per 1,000 females calculated using the CDC PooledInfRate 4.0 plug-in for Excel.

***Week 28***

**Table 1a. Vector Index for current week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **28** | Mean abundance of females per trap night1 | | Estimate for proportion of  females infected with WNV2 | | **Vector Index** | | |
| *Cx. pipiens* | *Cx. tarsalis* | *Cx.*  *pipiens* | *Cx.*  *tarsalis* | ***Cx. pipiens3*** | ***Cx. tarsalis4*** | **All**  ***Culex5*** |
| FC – Zone NW | 0.86 | 14.43 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Zone NE | 1.60 | 39.60 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Zone SE | 1.73 | 80.00 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Zone SW | 0.00 | 17.00 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Citywide | 1.20 | 45.83 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
|  |  |  |  |  |  |  |  |
| LV | 2.4 | 41.2 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| BE | 0.0 | 72.8 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |

1From Table 2a (CDC light trap catches only).

2Derived from the data presented in Table 3a for estimated infection rate per 1,000 females (CDC light trap and gravid trap catches combined).

3Vector Index for *Cx. pipiens*= (Mean abundance of *Cx. pipiens*females per trap night) x (Estimate for proportion of all *Cx. pipiens*females infected with WNV).

4Vector Index for *Cx. tarsalis*= (Mean abundance of *Cx. tarsalis*females per trap night) x (Estimate for proportion of all *Cx. tarsalis*females infected with WNV).

5Vector Index for All *Culex*= (Vector Index for *Cx. pipiens*) *+* (Vector Index for *Cx. tarsalis*).

**Table 2a. Vector abundance for current week (CDC light trap catches only)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **28** | Total number  females collected | | | Number CDC light trap nights | Mean abundance of females per CDC light trap night | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens1* | *Cx. tarsalis2* | All  *Culex3* |
| FC – Zone NW | 6 | 101 | 107 | 7 | 0.86 | 14.43 | 15.29 |
| FC – Zone NE | 16 | 396 | 412 | 10 | 1.60 | 39.60 | 41.20 |
| FC – Zone SE | 26 | 1200 | 1226 | 15 | 1.73 | 80.00 | 81.73 |
| FC – Zone SW | 0 | 136 | 136 | 8 | 0.00 | 17.00 | 17.00 |
| FC – Citywide | 48 | 1833 | 1881 | 40 | 1.20 | 45.83 | 47.03 |
|  |  |  |  |  |  |  |  |
| LV | 80 | 1401 | 1481 | 34 | 2.35 | 41.21 | 43.56 |
| BE | 0 | 364 | 364 | 5 | 0.00 | 72.80 | 72.80 |

1Mean abundance of *Cx. pipiens*females per CDC light trap night = (Total number *Cx. pipiens*females collected) / (Number CDC light trap nights).

2Mean abundance of *Cx. tarsalis*females per CDC light trap night = (Total number *Cx. tarsalis* females collected) / (Number CDC light trap nights).

3Mean abundance of All *Culex*females per CDC light trap night = (Total number All *Culex*females collected) / (Number CDC light trap nights).

**Table 3a. WNV infection rate per 1,000 females for current week (CDC light trap and gravid trap catches combined)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **28** | Total number individuals examined | | | Total number pools examined | | | Total number  WNV-infected pools | | | Estimate for WNV infection rate per 1,000 females1 | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* |
| FC – Zone NW | 18 | 101 | 119 | 3 | 8 | 11 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Zone NE | 20 | 396 | 416 | 5 | 13 | 18 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Zone SE | 53 | 1200 | 1253 | 9 | 32 | 41 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Zone SW | 3 | 136 | 139 | 1 | 9 | 10 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Citywide | 94 | 1833 | 1927 | 18 | 62 | 80 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| LV | 5 | 426 | 431 | 1 | 10 | 11 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| BE | 0 | 364 | 364 | 0 | 10 | 10 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |

1Maximum likelihood estimate (MLE) for WNV infection rate per 1,000 females calculated using the CDC PooledInfRate 4.0 plug-in for Excel.

***Week 29***

**Table 1a. Vector Index for current week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **29** | Mean abundance of females per trap night1 | | Estimate for proportion of  females infected with WNV2 | | **Vector Index** | | |
| *Cx. pipiens* | *Cx. tarsalis* | *Cx.*  *pipiens* | *Cx.*  *tarsalis* | ***Cx. pipiens3*** | ***Cx. tarsalis4*** | **All**  ***Culex5*** |
| FC – Zone NW | 2.67 | 17.33 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Zone NE | 4.40 | 66.50 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Zone SE | 1.93 | 60.13 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Zone SW | 0.25 | 13.75 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Citywide | 2.33 | 45.67 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
|  |  |  |  |  |  |  |  |
| LV | 4.7 | 32.4 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| BE | 1.4 | 60.4 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |

1From Table 2a (CDC light trap catches only).

2Derived from the data presented in Table 3a for estimated infection rate per 1,000 females (CDC light trap and gravid trap catches combined).

3Vector Index for *Cx. pipiens*= (Mean abundance of *Cx. pipiens*females per trap night) x (Estimate for proportion of all *Cx. pipiens*females infected with WNV).

4Vector Index for *Cx. tarsalis*= (Mean abundance of *Cx. tarsalis*females per trap night) x (Estimate for proportion of all *Cx. tarsalis*females infected with WNV).

5Vector Index for All *Culex*= (Vector Index for *Cx. pipiens*) *+* (Vector Index for *Cx. tarsalis*).

**Table 2a. Vector abundance for current week (CDC light trap catches only)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **29** | Total number  females collected | | | Number CDC light trap nights | Mean abundance of females per CDC light trap night | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens1* | *Cx. tarsalis2* | All  *Culex3* |
| FC – Zone NW | 16 | 104 | 120 | 6 | 2.67 | 17.33 | 20.00 |
| FC – Zone NE | 44 | 665 | 709 | 10 | 4.40 | 66.50 | 70.90 |
| FC – Zone SE | 29 | 902 | 931 | 15 | 1.93 | 60.13 | 62.07 |
| FC – Zone SW | 2 | 110 | 112 | 8 | 0.25 | 13.75 | 14.00 |
| FC – Citywide | 91 | 1781 | 1872 | 39 | 2.33 | 45.67 | 48.00 |
|  |  |  |  |  |  |  |  |
| LV | 132 | 907 | 1039 | 28 | 4.71 | 32.39 | 37.11 |
| BE | 7 | 302 | 309 | 5 | 1.40 | 60.40 | 61.80 |

1Mean abundance of *Cx. pipiens*females per CDC light trap night = (Total number *Cx. pipiens*females collected) / (Number CDC light trap nights).

2Mean abundance of *Cx. tarsalis*females per CDC light trap night = (Total number *Cx. tarsalis* females collected) / (Number CDC light trap nights).

3Mean abundance of All *Culex*females per CDC light trap night = (Total number All *Culex*females collected) / (Number CDC light trap nights).

**Table 3a. WNV infection rate per 1,000 females for current week (CDC light trap and gravid trap catches combined)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **29** | Total number individuals examined | | | Total number pools examined | | | Total number  WNV-infected pools | | | Estimate for WNV infection rate per 1,000 females1 | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* |
| FC – Zone NW | 27 | 104 | 131 | 4 | 7 | 11 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Zone NE | 50 | 665 | 715 | 7 | 17 | 24 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Zone SE | 132 | 906 | 1038 | 9 | 25 | 34 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Zone SW | 8 | 110 | 118 | 2 | 7 | 9 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Citywide | 217 | 1785 | 2002 | 22 | 56 | 78 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| LV | 3 | 316 | 319 | 1 | 9 | 10 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| BE | 7 | 302 | 309 | 1 | 9 | 10 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |

1Maximum likelihood estimate (MLE) for WNV infection rate per 1,000 females calculated using the CDC PooledInfRate 4.0 plug-in for Excel

***Week 30***

**Table 1a. Vector Index for current week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **30** | Mean abundance of females per trap night1 | | Estimate for proportion of  females infected with WNV2 | | **Vector Index** | | |
| *Cx. pipiens* | *Cx. tarsalis* | *Cx.*  *pipiens* | *Cx.*  *tarsalis* | ***Cx. pipiens3*** | ***Cx. tarsalis4*** | **All**  ***Culex5*** |
| FC – Zone NW | 8.50 | 24.75 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Zone NE | 2.40 | 35.60 | 0.0000 | 0.0029 | **0.000** | **0.102** | **0.102** |
| FC – Zone SE | 3.20 | 58.87 | 0.0000 | 0.0011 | **0.000** | **0.066** | **0.066** |
| FC – Zone SW | 0.44 | 16.00 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Citywide | 3.43 | 37.64 | 0.0000 | 0.0013 | **0.000** | **0.048** | **0.048** |
|  |  |  |  |  |  |  |  |
| LV | 3.3 | 38.5 | 0.0000 | 0.0041 | **0.000** | **0.157** | **0.157** |
| BE | 6.6 | 64.2 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |

1From Table 2a (CDC light trap catches only).

2Derived from the data presented in Table 3a for estimated infection rate per 1,000 females (CDC light trap and gravid trap catches combined).

3Vector Index for *Cx. pipiens*= (Mean abundance of *Cx. pipiens*females per trap night) x (Estimate for proportion of all *Cx. pipiens*females infected with WNV).

4Vector Index for *Cx. tarsalis*= (Mean abundance of *Cx. tarsalis*females per trap night) x (Estimate for proportion of all *Cx. tarsalis*females infected with WNV).

5Vector Index for All *Culex*= (Vector Index for *Cx. pipiens*) *+* (Vector Index for *Cx. tarsalis*).

**Table 2a. Vector abundance for current week (CDC light trap catches only)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **30** | Total number  females collected | | | Number CDC light trap nights | Mean abundance of females per CDC light trap night | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens1* | *Cx. tarsalis2* | All  *Culex3* |
| FC – Zone NW | 68 | 198 | 266 | 8 | 8.50 | 24.75 | 33.25 |
| FC – Zone NE | 24 | 356 | 380 | 10 | 2.40 | 35.60 | 38.00 |
| FC – Zone SE | 48 | 883 | 931 | 15 | 3.20 | 58.87 | 62.07 |
| FC – Zone SW | 4 | 144 | 148 | 9 | 0.44 | 16.00 | 16.44 |
| FC – Citywide | 144 | 1581 | 1725 | 42 | 3.43 | 37.64 | 41.07 |
|  |  |  |  |  |  |  |  |
| LV | 114 | 1347 | 1461 | 35 | 3.26 | 38.49 | 41.74 |
| BE | 33 | 321 | 354 | 5 | 6.60 | 64.20 | 70.80 |

1Mean abundance of *Cx. pipiens*females per CDC light trap night = (Total number *Cx. pipiens*females collected) / (Number CDC light trap nights).

2Mean abundance of *Cx. tarsalis*females per CDC light trap night = (Total number *Cx. tarsalis* females collected) / (Number CDC light trap nights).

3Mean abundance of All *Culex*females per CDC light trap night = (Total number All *Culex*females collected) / (Number CDC light trap nights).

**Table 3a. WNV infection rate per 1,000 females for current week (CDC light trap and gravid trap catches combined)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **30** | Total number individuals examined | | | Total number pools examined | | | Total number  WNV-infected pools | | | Estimate for WNV infection rate per 1,000 females1 | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* |
| FC – Zone NW | 102 | 198 | 300 | 5 | 9 | 14 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Zone NE | 33 | 356 | 389 | 5 | 12 | 17 | 0 | 1 | 1 | 0.00 | 2.85 | 2.62 |
| FC – Zone SE | 81 | 883 | 964 | 9 | 25 | 34 | 0 | 1 | 1 | 0.00 | 1.12 | 1.03 |
| FC – Zone SW | 28 | 144 | 172 | 2 | 10 | 12 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Citywide | 244 | 1581 | 1825 | 21 | 56 | 77 | 0 | 2 | 2 | 0.00 | 1.28 | 1.11 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| LV | 5 | 519 | 524 | 1 | 14 | 15 | 0 | 2 | 2 | 0.00 | 4.08 | 4.04 |
| BE | 33 | 321 | 354 | 3 | 8 | 11 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |

1Maximum likelihood estimate (MLE) for WNV infection rate per 1,000 females calculated using the CDC PooledInfRate 4.0 plug-in for Excel.

***Week 31***

**Table 1a. Vector Index for current week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **31** | Mean abundance of females per trap night1 | | Estimate for proportion of  females infected with WNV2 | | **Vector Index** | | |
| *Cx. pipiens* | *Cx. tarsalis* | *Cx.*  *pipiens* | *Cx.*  *tarsalis* | ***Cx. pipiens3*** | ***Cx. tarsalis4*** | **All**  ***Culex5*** |
| FC – Zone NW | 10.44 | 60.22 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Zone NE | 12.50 | 130.40 | 0.0000 | 0.0016 | **0.000** | **0.203** | **0.203** |
| FC – Zone SE | 7.93 | 100.40 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Zone SW | 0.88 | 26.75 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Citywide | 8.21 | 84.90 | 0.0000 | 0.0006 | **0.000** | **0.048** | **0.048** |
|  |  |  |  |  |  |  |  |
| LV | 3.5 | 69.4 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| BE | 7.6 | 82.8 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |

1From Table 2a (CDC light trap catches only).

2Derived from the data presented in Table 3a for estimated infection rate per 1,000 females (CDC light trap and gravid trap catches combined).

3Vector Index for *Cx. pipiens*= (Mean abundance of *Cx. pipiens*females per trap night) x (Estimate for proportion of all *Cx. pipiens*females infected with WNV).

4Vector Index for *Cx. tarsalis*= (Mean abundance of *Cx. tarsalis*females per trap night) x (Estimate for proportion of all *Cx. tarsalis*females infected with WNV).

5Vector Index for All *Culex*= (Vector Index for *Cx. pipiens*) *+* (Vector Index for *Cx. tarsalis*).

**Table 2a. Vector abundance for current week (CDC light trap catches only)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **31** | Total number  females collected | | | Number CDC light trap nights | Mean abundance of females per CDC light trap night | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens1* | *Cx. tarsalis2* | All  *Culex3* |
| FC – Zone NW | 94 | 542 | 636 | 9 | 10.44 | 60.22 | 70.67 |
| FC – Zone NE | 125 | 1304 | 1429 | 10 | 12.50 | 130.40 | 142.90 |
| FC – Zone SE | 119 | 1506 | 1625 | 15 | 7.93 | 100.40 | 108.33 |
| FC – Zone SW | 7 | 214 | 221 | 8 | 0.88 | 26.75 | 27.63 |
| FC – Citywide | 345 | 3566 | 3911 | 42 | 8.21 | 84.90 | 93.12 |
|  |  |  |  |  |  |  |  |
| LV | 131 | 2568 | 2699 | 37 | 3.54 | 69.41 | 72.95 |
| BE | 38 | 414 | 452 | 5 | 7.60 | 82.80 | 90.40 |

1Mean abundance of *Cx. pipiens*females per CDC light trap night = (Total number *Cx. pipiens*females collected) / (Number CDC light trap nights).

2Mean abundance of *Cx. tarsalis*females per CDC light trap night = (Total number *Cx. tarsalis* females collected) / (Number CDC light trap nights).

3Mean abundance of All *Culex*females per CDC light trap night = (Total number All *Culex*females collected) / (Number CDC light trap nights).

**Table 3a. WNV infection rate per 1,000 females for current week (CDC light trap and gravid trap catches combined)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **31** | Total number individuals examined | | | Total number pools examined | | | Total number  WNV-infected pools | | | Estimate for WNV infection rate per 1,000 females1 | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* |
| FC – Zone NW | 118 | 542 | 660 | 8 | 15 | 23 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Zone NE | 182 | 1308 | 1490 | 12 | 31 | 43 | 0 | 2 | 2 | 0.00 | 1.56 | 1.36 |
| FC – Zone SE | 243 | 1506 | 1749 | 14 | 37 | 51 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Zone SW | 41 | 214 | 255 | 3 | 8 | 11 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Citywide | 584 | 3570 | 4154 | 37 | 91 | 128 | 0 | 2 | 2 | 0.00 | 0.56 | 0.48 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| LV | 8 | 743 | 751 | 2 | 18 | 20 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| BE | 38 | 414 | 452 | 2 | 11 | 13 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |

1Maximum likelihood estimate (MLE) for WNV infection rate per 1,000 females calculated using the CDC PooledInfRate 4.0 plug-in for Excel.

***Week 32***

**Table 1a. Vector Index for current week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **32** | Mean abundance of females per trap night1 | | Estimate for proportion of  females infected with WNV2 | | **Vector Index** | | |
| *Cx. pipiens* | *Cx. tarsalis* | *Cx.*  *pipiens* | *Cx.*  *tarsalis* | ***Cx. pipiens3*** | ***Cx. tarsalis4*** | **All**  ***Culex5*** |
| FC – Zone NW | 8.00 | 43.00 | 0.0000 | 0.0030 | **0.000** | **0.127** | **0.127** |
| FC – Zone NE | 6.10 | 99.20 | 0.0140 | 0.0000 | **0.086** | **0.000** | **0.086** |
| FC – Zone SE | 8.93 | 73.40 | 0.0000 | 0.0019 | **0.000** | **0.137** | **0.137** |
| FC – Zone SW | 3.29 | 33.86 | 0.0000 | 0.0044 | **0.000** | **0.148** | **0.148** |
| FC – Citywide | 7.05 | 66.85 | 0.0023 | 0.0015 | **0.016** | **0.103** | **0.119** |
|  |  |  |  |  |  |  |  |
| LV | 3.4 | 55.7 | 0.0000 | 0.0018 | **0.000** | **0.099** | **0.099** |
| BE | 4.8 | 80.6 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |

1From Table 2a (CDC light trap catches only).

2Derived from the data presented in Table 3a for estimated infection rate per 1,000 females (CDC light trap and gravid trap catches combined).

3Vector Index for *Cx. pipiens*= (Mean abundance of *Cx. pipiens*females per trap night) x (Estimate for proportion of all *Cx. pipiens*females infected with WNV).

4Vector Index for *Cx. tarsalis*= (Mean abundance of *Cx. tarsalis*females per trap night) x (Estimate for proportion of all *Cx. tarsalis*females infected with WNV).

5Vector Index for All *Culex*= (Vector Index for *Cx. pipiens*) *+* (Vector Index for *Cx. tarsalis*).

**Table 2a. Vector abundance for current week (CDC light trap catches only)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **32** | Total number  females collected | | | Number CDC light trap nights | Mean abundance of females per CDC light trap night | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens1* | *Cx. tarsalis2* | All  *Culex3* |
| FC – Zone NW | 64 | 344 | 408 | 8 | 8.00 | 43.00 | 51.00 |
| FC – Zone NE | 61 | 992 | 1053 | 10 | 6.10 | 99.20 | 105.30 |
| FC – Zone SE | 134 | 1101 | 1235 | 15 | 8.93 | 73.40 | 82.33 |
| FC – Zone SW | 23 | 237 | 260 | 7 | 3.29 | 33.86 | 37.14 |
| FC – Citywide | 282 | 2674 | 2956 | 40 | 7.05 | 66.85 | 73.90 |
|  |  |  |  |  |  |  |  |
| LV | 121 | 2004 | 2125 | 36 | 3.36 | 55.67 | 59.03 |
| BE | 24 | 403 | 427 | 5 | 4.80 | 80.60 | 85.40 |

1Mean abundance of *Cx. pipiens*females per CDC light trap night = (Total number *Cx. pipiens*females collected) / (Number CDC light trap nights).

2Mean abundance of *Cx. tarsalis*females per CDC light trap night = (Total number *Cx. tarsalis* females collected) / (Number CDC light trap nights).

3Mean abundance of All *Culex*females per CDC light trap night = (Total number All *Culex*females collected) / (Number CDC light trap nights).

**Table 3a. WNV infection rate per 1,000 females for current week (CDC light trap and gravid trap catches combined)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **32** | Total number individuals examined | | | Total number pools examined | | | Total number  WNV-infected pools | | | Estimate for WNV infection rate per 1,000 females1 | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* |
| FC – Zone NW | 198 | 344 | 542 | 9 | 11 | 20 | 0 | 1 | 1 | 0.00 | 2.96 | 1.87 |
| FC – Zone NE | 141 | 992 | 1133 | 8 | 25 | 33 | 2 | 0 | 2 | 14.02 | 0.00 | 1.75 |
| FC – Zone SE | 461 | 1101 | 1562 | 15 | 28 | 43 | 0 | 2 | 2 | 0.00 | 1.86 | 1.30 |
| FC – Zone SW | 69 | 237 | 306 | 4 | 9 | 13 | 0 | 1 | 1 | 0.00 | 4.37 | 3.36 |
| FC – Citywide | 869 | 2674 | 3543 | 36 | 73 | 109 | 2 | 4 | 6 | 2.28 | 1.54 | 1.74 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| LV | 7 | 552 | 559 | 2 | 16 | 18 | 0 | 1 | 1 | 0.00 | 1.79 | 1.76 |
| BE | 24 | 403 | 427 | 1 | 10 | 11 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |

1Maximum likelihood estimate (MLE) for WNV infection rate per 1,000 females calculated using the CDC PooledInfRate 4.0 plug-in for Excel.

***Week 33***

**Table 1a. Vector Index for current week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **33** | Mean abundance of females per trap night1 | | Estimate for proportion of  females infected with WNV2 | | **Vector Index** | | |
| *Cx. pipiens* | *Cx. tarsalis* | *Cx.*  *pipiens* | *Cx.*  *tarsalis* | ***Cx. pipiens3*** | ***Cx. tarsalis4*** | **All**  ***Culex5*** |
| FC – Zone NW | 9.11 | 38.00 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Zone NE | 11.00 | 62.40 | 0.0000 | 0.0016 | **0.000** | **0.100** | **0.100** |
| FC – Zone SE | 9.67 | 103.07 | 0.0116 | 0.0013 | **0.112** | **0.136** | **0.248** |
| FC – Zone SW | 0.67 | 33.00 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Citywide | 7.98 | 65.33 | 0.0050 | 0.0011 | **0.040** | **0.070** | **0.110** |
|  |  |  |  |  |  |  |  |
| LV | 7.1 | 32.9 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| BE | 5.0 | 50.4 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |

1From Table 2a (CDC light trap catches only).

2Derived from the data presented in Table 3a for estimated infection rate per 1,000 females (CDC light trap and gravid trap catches combined).

3Vector Index for *Cx. pipiens*= (Mean abundance of *Cx. pipiens*females per trap night) x (Estimate for proportion of all *Cx. pipiens*females infected with WNV).

4Vector Index for *Cx. tarsalis*= (Mean abundance of *Cx. tarsalis*females per trap night) x (Estimate for proportion of all *Cx. tarsalis*females infected with WNV).

5Vector Index for All *Culex*= (Vector Index for *Cx. pipiens*) *+* (Vector Index for *Cx. tarsalis*).

**Table 2a. Vector abundance for current week (CDC light trap catches only)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **33** | Total number  females collected | | | Number CDC light trap nights | Mean abundance of females per CDC light trap night | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens1* | *Cx. tarsalis2* | All  *Culex3* |
| FC – Zone NW | 82 | 342 | 424 | 9 | 9.11 | 38.00 | 47.11 |
| FC – Zone NE | 110 | 624 | 734 | 10 | 11.00 | 62.40 | 73.40 |
| FC – Zone SE | 145 | 1546 | 1691 | 15 | 9.67 | 103.07 | 112.73 |
| FC – Zone SW | 6 | 297 | 303 | 9 | 0.67 | 33.00 | 33.67 |
| FC – Citywide | 343 | 2809 | 3152 | 43 | 7.98 | 65.33 | 73.30 |
|  |  |  |  |  |  |  |  |
| LV | 257 | 1186 | 1443 | 36 | 7.14 | 32.94 | 40.08 |
| BE | 25 | 252 | 277 | 5 | 5.00 | 50.40 | 55.40 |

1Mean abundance of *Cx. pipiens*females per CDC light trap night = (Total number *Cx. pipiens*females collected) / (Number CDC light trap nights).

2Mean abundance of *Cx. tarsalis*females per CDC light trap night = (Total number *Cx. tarsalis* females collected) / (Number CDC light trap nights).

3Mean abundance of All *Culex*females per CDC light trap night = (Total number All *Culex*females collected) / (Number CDC light trap nights).

**Table 3a. WNV infection rate per 1,000 females for current week (CDC light trap and gravid trap catches combined)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **33** | Total number individuals examined | | | Total number pools examined | | | Total number  WNV-infected pools | | | Estimate for WNV infection rate per 1,000 females1 | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* |
| FC – Zone NW | 114 | 369 | 483 | 9 | 12 | 21 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Zone NE | 195 | 627 | 822 | 11 | 20 | 31 | 0 | 1 | 1 | 0.00 | 1.60 | 1.23 |
| FC – Zone SE | 285 | 1546 | 1831 | 15 | 39 | 54 | 3 | 2 | 5 | 11.61 | 1.32 | 2.84 |
| FC – Zone SW | 33 | 297 | 330 | 3 | 11 | 14 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Citywide | 627 | 2839 | 3466 | 38 | 82 | 120 | 3 | 3 | 6 | 5.01 | 1.08 | 1.78 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| LV | 12 | 256 | 268 | 2 | 8 | 10 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| BE | 25 | 252 | 277 | 2 | 7 | 9 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |

1Maximum likelihood estimate (MLE) for WNV infection rate per 1,000 females calculated using the CDC PooledInfRate 4.0 plug-in for Excel.

***Week 34***

**Table 1a. Vector Index for current week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **34** | Mean abundance of females per trap night1 | | Estimate for proportion of  females infected with WNV2 | | **Vector Index** | | |
| *Cx. pipiens* | *Cx. tarsalis* | *Cx.*  *pipiens* | *Cx.*  *tarsalis* | ***Cx. pipiens3*** | ***Cx. tarsalis4*** | **All**  ***Culex5*** |
| FC – Zone NW | 7.11 | 23.56 | 0.0000 | 0.0049 | **0.000** | **0.116** | **0.116** |
| FC – Zone NE | 13.20 | 36.10 | 0.0095 | 0.0000 | **0.125** | **0.000** | **0.125** |
| FC – Zone SE | 7.40 | 28.40 | 0.0072 | 0.0024 | **0.053** | **0.068** | **0.121** |
| FC – Zone SW | 0.00 | 14.56 | 0.0056 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Citywide | 7.14 | 26.28 | 0.0072 | 0.0018 | **0.051** | **0.048** | **0.099** |
|  |  |  |  |  |  |  |  |
| LV | 15.0 | 27.0 | 0.0000 | 0.0040 | **0.000** | **0.107** | **0.107** |
| BE | 4.0 | 25.7 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |

1From Table 2a (CDC light trap catches only).

2Derived from the data presented in Table 3a for estimated infection rate per 1,000 females (CDC light trap and gravid trap catches combined).

3Vector Index for *Cx. pipiens*= (Mean abundance of *Cx. pipiens*females per trap night) x (Estimate for proportion of all *Cx. pipiens*females infected with WNV).

4Vector Index for *Cx. tarsalis*= (Mean abundance of *Cx. tarsalis*females per trap night) x (Estimate for proportion of all *Cx. tarsalis*females infected with WNV).

5Vector Index for All *Culex*= (Vector Index for *Cx. pipiens*) *+* (Vector Index for *Cx. tarsalis*).

**Table 2a. Vector abundance for current week (CDC light trap catches only)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **34** | Total number  females collected | | | Number CDC light trap nights | Mean abundance of females per CDC light trap night | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens1* | *Cx. tarsalis2* | All  *Culex3* |
| FC – Zone NW | 64 | 212 | 276 | 9 | 7.11 | 23.56 | 30.67 |
| FC – Zone NE | 132 | 361 | 493 | 10 | 13.20 | 36.10 | 49.30 |
| FC – Zone SE | 111 | 426 | 537 | 15 | 7.40 | 28.40 | 35.80 |
| FC – Zone SW | 0 | 131 | 131 | 9 | 0.00 | 14.56 | 14.56 |
| FC – Citywide | 307 | 1130 | 1437 | 43 | 7.14 | 26.28 | 33.42 |
|  |  |  |  |  |  |  |  |
| LV | 556 | 1000 | 1556 | 37 | 15.03 | 27.03 | 42.05 |
| BE | 12 | 77 | 89 | 3 | 4.00 | 25.67 | 29.67 |

1Mean abundance of *Cx. pipiens*females per CDC light trap night = (Total number *Cx. pipiens*females collected) / (Number CDC light trap nights).

2Mean abundance of *Cx. tarsalis*females per CDC light trap night = (Total number *Cx. tarsalis* females collected) / (Number CDC light trap nights).

3Mean abundance of All *Culex*females per CDC light trap night = (Total number All *Culex*females collected) / (Number CDC light trap nights).

**Table 3a. WNV infection rate per 1,000 females for current week (CDC light trap and gravid trap catches combined)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **34** | Total number individuals examined | | | Total number pools examined | | | Total number  WNV-infected pools | | | Estimate for WNV infection rate per 1,000 females1 | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* |
| FC – Zone NW | 193 | 212 | 405 | 10 | 10 | 20 | 0 | 1 | 1 | 0.00 | 4.93 | 2.52 |
| FC – Zone NE | 234 | 361 | 595 | 13 | 11 | 24 | 2 | 0 | 2 | 9.46 | 0.00 | 3.46 |
| FC – Zone SE | 468 | 426 | 894 | 17 | 16 | 33 | 3 | 1 | 4 | 7.20 | 2.38 | 4.90 |
| FC – Zone SW | 57 | 131 | 188 | 2 | 9 | 11 | 1 | 0 | 1 | 5.63 | 0.00 | 5.69 |
| FC – Citywide | 952 | 1130 | 2082 | 42 | 46 | 88 | 6 | 2 | 8 | 7.17 | 1.82 | 4.17 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| LV | 45 | 249 | 294 | 5 | 7 | 12 | 0 | 1 | 1 | 0.00 | 3.96 | 3.39 |
| BE | 12 | 77 | 89 | 1 | 3 | 4 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |

1Maximum likelihood estimate (MLE) for WNV infection rate per 1,000 females calculated using the CDC PooledInfRate 4.0 plug-in for Excel.

***Week 35***

**Table 1a. Vector Index for current week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **35** | Mean abundance of females per trap night1 | | Estimate for proportion of  females infected with WNV2 | | **Vector Index** | | |
| *Cx. pipiens* | *Cx. tarsalis* | *Cx.*  *pipiens* | *Cx.*  *tarsalis* | ***Cx. pipiens3*** | ***Cx. tarsalis4*** | **All**  ***Culex5*** |
| FC – Zone NW | 5.00 | 15.25 | 0.0140 | 0.0083 | **0.070** | **0.126** | **0.197** |
| FC – Zone NE | 12.90 | 50.20 | 0.0045 | 0.0127 | **0.059** | **0.638** | **0.696** |
| FC – Zone SE | 11.29 | 25.79 | 0.0078 | 0.0000 | **0.089** | **0.000** | **0.089** |
| FC – Zone SW | 2.33 | 26.67 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Citywide | 8.49 | 29.88 | 0.0067 | 0.0054 | **0.057** | **0.162** | **0.219** |
|  |  |  |  |  |  |  |  |
| LV | 9.2 | 20.1 | 0.0000 | 0.0255 | **0.000** | **0.513** | **0.513** |
| BE | 2.6 | 15.4 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |

1From Table 2a (CDC light trap catches only).

2Derived from the data presented in Table 3a for estimated infection rate per 1,000 females (CDC light trap and gravid trap catches combined).

3Vector Index for *Cx. pipiens*= (Mean abundance of *Cx. pipiens*females per trap night) x (Estimate for proportion of all *Cx. pipiens*females infected with WNV).

4Vector Index for *Cx. tarsalis*= (Mean abundance of *Cx. tarsalis*females per trap night) x (Estimate for proportion of all *Cx. tarsalis*females infected with WNV).

5Vector Index for All *Culex*= (Vector Index for *Cx. pipiens*) *+* (Vector Index for *Cx. tarsalis*).

**Table 2a. Vector abundance for current week (CDC light trap catches only)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **35** | Total number  females collected | | | Number CDC light trap nights | Mean abundance of females per CDC light trap night | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens1* | *Cx. tarsalis2* | All  *Culex3* |
| FC – Zone NW | 40 | 122 | 162 | 8 | 5.00 | 15.25 | 20.25 |
| FC – Zone NE | 129 | 502 | 631 | 10 | 12.90 | 50.20 | 63.10 |
| FC – Zone SE | 158 | 361 | 519 | 14 | 11.29 | 25.79 | 37.07 |
| FC – Zone SW | 21 | 240 | 261 | 9 | 2.33 | 26.67 | 29.00 |
| FC – Citywide | 348 | 1225 | 1573 | 41 | 8.49 | 29.88 | 38.37 |
|  |  |  |  |  |  |  |  |
| LV | 340 | 745 | 1085 | 37 | 9.19 | 20.14 | 29.32 |
| BE | 13 | 77 | 90 | 5 | 2.60 | 15.40 | 18.00 |

1Mean abundance of *Cx. pipiens*females per CDC light trap night = (Total number *Cx. pipiens*females collected) / (Number CDC light trap nights).

2Mean abundance of *Cx. tarsalis*females per CDC light trap night = (Total number *Cx. tarsalis* females collected) / (Number CDC light trap nights).

3Mean abundance of All *Culex*females per CDC light trap night = (Total number All *Culex*females collected) / (Number CDC light trap nights).

**Table 3a. WNV infection rate per 1,000 females for current week (CDC light trap and gravid trap catches combined)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **35** | Total number individuals examined | | | Total number pools examined | | | Total number  WNV-infected pools | | | Estimate for WNV infection rate per 1,000 females1 | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* |
| FC – Zone NW | 75 | 122 | 197 | 8 | 7 | 15 | 1 | 1 | 2 | 14.04 | 8.29 | 10.87 |
| FC – Zone NE | 213 | 502 | 715 | 13 | 16 | 29 | 1 | 5 | 6 | 4.55 | 12.70 | 10.01 |
| FC – Zone SE | 269 | 361 | 630 | 16 | 16 | 32 | 2 | 0 | 2 | 7.85 | 0.00 | 3.25 |
| FC – Zone SW | 75 | 240 | 315 | 7 | 11 | 18 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Citywide | 632 | 1225 | 1857 | 44 | 50 | 94 | 4 | 6 | 10 | 6.70 | 5.41 | 5.92 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| LV | 16 | 94 | 110 | 2 | 6 | 8 | 0 | 2 | 2 | 0.00 | 25.46 | 21.39 |
| BE | 13 | 77 | 90 | 2 | 5 | 7 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |

1Maximum likelihood estimate (MLE) for WNV infection rate per 1,000 females calculated using the CDC PooledInfRate 4.0 plug-in for Excel.

***Week 36***

**Table 1a. Vector Index for current week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **36** | Mean abundance of females per trap night1 | | Estimate for proportion of  females infected with WNV2 | | **Vector Index** | | |
| *Cx. pipiens* | *Cx. tarsalis* | *Cx.*  *pipiens* | *Cx.*  *tarsalis* | ***Cx. pipiens3*** | ***Cx. tarsalis4*** | **All**  ***Culex5*** |
| FC – Zone NW | 6.22 | 23.89 | 0.0050 | 0.0000 | **0.031** | **0.000** | **0.031** |
| FC – Zone NE | 18.70 | 30.90 | 0.0090 | 0.0032 | **0.168** | **0.098** | **0.266** |
| FC – Zone SE | 5.67 | 25.00 | 0.0088 | 0.0000 | **0.050** | **0.000** | **0.050** |
| FC – Zone SW | 2.44 | 15.44 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Citywide | 8.14 | 24.14 | 0.0077 | 0.0010 | **0.063** | **0.023** | **0.086** |
|  |  |  |  |  |  |  |  |
| LV | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| BE | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

1From Table 2a (CDC light trap catches only).

2Derived from the data presented in Table 3a for estimated infection rate per 1,000 females (CDC light trap and gravid trap catches combined).

3Vector Index for *Cx. pipiens*= (Mean abundance of *Cx. pipiens*females per trap night) x (Estimate for proportion of all *Cx. pipiens*females infected with WNV).

4Vector Index for *Cx. tarsalis*= (Mean abundance of *Cx. tarsalis*females per trap night) x (Estimate for proportion of all *Cx. tarsalis*females infected with WNV).

5Vector Index for All *Culex*= (Vector Index for *Cx. pipiens*) *+* (Vector Index for *Cx. tarsalis*).

**Table 2a. Vector abundance for current week (CDC light trap catches only)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **36** | Total number  females collected | | | Number CDC light trap nights | Mean abundance of females per CDC light trap night | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens1* | *Cx. tarsalis2* | All  *Culex3* |
| FC – Zone NW | 56 | 215 | 271 | 9 | 6.22 | 23.89 | 30.11 |
| FC – Zone NE | 187 | 309 | 496 | 10 | 18.70 | 30.90 | 49.60 |
| FC – Zone SE | 85 | 375 | 460 | 15 | 5.67 | 25.00 | 30.67 |
| FC – Zone SW | 22 | 139 | 161 | 9 | 2.44 | 15.44 | 17.89 |
| FC – Citywide | 350 | 1038 | 1388 | 43 | 8.14 | 24.14 | 32.28 |
|  |  |  |  |  |  |  |  |
| LV | 0 | 0 | 0 | 0 | N/A | N/A | N/A |
| BE | 0 | 0 | 0 | 0 | N/A | N/A | N/A |

1Mean abundance of *Cx. pipiens*females per CDC light trap night = (Total number *Cx. pipiens*females collected) / (Number CDC light trap nights).

2Mean abundance of *Cx. tarsalis*females per CDC light trap night = (Total number *Cx. tarsalis* females collected) / (Number CDC light trap nights).

3Mean abundance of All *Culex*females per CDC light trap night = (Total number All *Culex*females collected) / (Number CDC light trap nights).

**Table 3a. WNV infection rate per 1,000 females for current week (CDC light trap and gravid trap catches combined)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **36** | Total number individuals examined | | | Total number pools examined | | | Total number  WNV-infected pools | | | Estimate for WNV infection rate per 1,000 females1 | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* |
| FC – Zone NW | 207 | 215 | 422 | 10 | 9 | 19 | 1 | 0 | 1 | 5.00 | 0.00 | 2.41 |
| FC – Zone NE | 381 | 309 | 690 | 16 | 11 | 27 | 3 | 1 | 4 | 9.00 | 3.17 | 6.33 |
| FC – Zone SE | 266 | 375 | 641 | 14 | 16 | 30 | 2 | 0 | 2 | 8.77 | 0.00 | 3.30 |
| FC – Zone SW | 53 | 139 | 192 | 4 | 10 | 14 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Citywide | 907 | 1038 | 1945 | 44 | 46 | 90 | 6 | 1 | 7 | 7.68 | 0.96 | 3.87 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| LV | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A | N/A | N/A |
| BE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A | N/A | N/A |

1Maximum likelihood estimate (MLE) for WNV infection rate per 1,000 females calculated using the CDC PooledInfRate 4.0 plug-in for Excel.

***Week 37***

**Table 1a. Vector Index for current week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **37** | Mean abundance of females per trap night1 | | Estimate for proportion of  females infected with WNV2 | | **Vector Index** | | |
| *Cx. pipiens* | *Cx. tarsalis* | *Cx.*  *pipiens* | *Cx.*  *tarsalis* | ***Cx. pipiens3*** | ***Cx. tarsalis4*** | **All**  ***Culex5*** |
| FC – Zone NW | 3.56 | 2.78 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Zone NE | 8.22 | 1.44 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Zone SE | 8.53 | 6.93 | 0.0047 | 0.0000 | **0.040** | **0.000** | **0.040** |
| FC – Zone SW | 2.17 | 2.00 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Citywide | 6.33 | 3.95 | 0.0025 | 0.0000 | **0.016** | **0.000** | **0.016** |
|  |  |  |  |  |  |  |  |
| LV | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| BE | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

1From Table 2a (CDC light trap catches only).

2Derived from the data presented in Table 3a for estimated infection rate per 1,000 females (CDC light trap and gravid trap catches combined).

3Vector Index for *Cx. pipiens*= (Mean abundance of *Cx. pipiens*females per trap night) x (Estimate for proportion of all *Cx. pipiens*females infected with WNV).

4Vector Index for *Cx. tarsalis*= (Mean abundance of *Cx. tarsalis*females per trap night) x (Estimate for proportion of all *Cx. tarsalis*females infected with WNV).

5Vector Index for All *Culex*= (Vector Index for *Cx. pipiens*) *+* (Vector Index for *Cx. tarsalis*).

**Table 2a. Vector abundance for current week (CDC light trap catches only)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **37** | Total number  females collected | | | Number CDC light trap nights | Mean abundance of females per CDC light trap night | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens1* | *Cx. tarsalis2* | All  *Culex3* |
| FC – Zone NW | 32 | 25 | 57 | 9 | 3.56 | 2.78 | 6.33 |
| FC – Zone NE | 74 | 13 | 87 | 9 | 8.22 | 1.44 | 9.67 |
| FC – Zone SE | 128 | 104 | 232 | 15 | 8.53 | 6.93 | 15.47 |
| FC – Zone SW | 13 | 12 | 25 | 6 | 2.17 | 2.00 | 4.17 |
| FC – Citywide | 247 | 154 | 401 | 39 | 6.33 | 3.95 | 10.28 |
|  |  |  |  |  |  |  |  |
| LV | 0 | 0 | 0 | 0 | N/A | N/A | N/A |
| BE | 0 | 0 | 0 | 0 | N/A | N/A | N/A |

1Mean abundance of *Cx. pipiens*females per CDC light trap night = (Total number *Cx. pipiens*females collected) / (Number CDC light trap nights).

2Mean abundance of *Cx. tarsalis*females per CDC light trap night = (Total number *Cx. tarsalis* females collected) / (Number CDC light trap nights).

3Mean abundance of All *Culex*females per CDC light trap night = (Total number All *Culex*females collected) / (Number CDC light trap nights).

**Table 3a. WNV infection rate per 1,000 females for current week (CDC light trap and gravid trap catches combined)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **37** | Total number individuals examined | | | Total number pools examined | | | Total number  WNV-infected pools | | | Estimate for WNV infection rate per 1,000 females1 | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* |
| FC – Zone NW | 81 | 25 | 106 | 8 | 6 | 14 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Zone NE | 86 | 13 | 99 | 8 | 7 | 15 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Zone SE | 208 | 104 | 312 | 12 | 15 | 27 | 1 | 0 | 1 | 4.75 | 0.00 | 3.21 |
| FC – Zone SW | 24 | 12 | 36 | 5 | 6 | 11 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Citywide | 399 | 154 | 553 | 33 | 34 | 67 | 1 | 0 | 1 | 2.49 | 0.00 | 1.81 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| LV | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A | N/A | N/A |
| BE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A | N/A | N/A |

1Maximum likelihood estimate (MLE) for WNV infection rate per 1,000 females calculated using the CDC PooledInfRate 4.0 plug-in for Excel.