## Analysis of Sacramento County WNV Human Case Data with Onset of Illness

## During Time Periods Relative to the Aerial Spraying Conducted in 2005

Analysis done by the California Department of Health Services

|            |                          | humans (w/ onset) - NUMBER |              |               |       |   | humans (w/ onset) - PERCENTAGES |                 |            |       |
|------------|--------------------------|----------------------------|--------------|---------------|-------|---|---------------------------------|-----------------|------------|-------|
|            |                          | up to 8/10                 | 8/11 to 8/25 | after<br>8/25 | TOTAL |   | up to<br>8/10                   | 8/11 to<br>8/25 | after 8/25 | TOTAL |
| CA         | all                      | 421                        | 159          | 185           | 765   |   | 55%                             | 21%             | 24%        | 765   |
|            | CA (minus Sac Co.)       | 324                        | 121          | 166           | 611   |   | 53%                             | 20%             | 27%        | 611   |
| Sac<br>Co. | Sac Co., all             | 97                         | 38           | 19            | 154   |   | 63%                             | 25%             | 12%        | 154   |
|            | North spray              | 25                         | 4            | 0             | 29    |   | 86%                             | 14%             | 0%         | 29    |
|            | Control areas (combined) | 33                         | 15           | 12            | 60    |   | 55%                             | 25%             | 20%        | 60    |
|            | [ North control ]        | 16                         | 7            | 5             | 28    |   |                                 |                 |            |       |
|            | [ Central control ]      | 17                         | 8            | 7             | 32    |   |                                 |                 |            |       |
|            |                          | _                          |              |               |       | 1 |                                 |                 |            |       |
|            |                          | up to 8/22                 | 8/23 to 9/6  | after 9/6     | TOTAL |   | up to<br>8/22                   | 8/23 to<br>9/6  | after 9/6  | TOTAL |
|            | South spray              | 20                         | 1            | 0             | 21    |   | 95%                             | 5%              | 0%         | 21    |

Note that 0% of the total cases in the north spray zone occurred >2 weeks post spray relative to 27% for the rest of the state (minus Sac county). All the numbers indicate that the spraying was effective in reducing WNV cases. The incubation time of West Nile Virus can be as long as two weeks, this is why the time period of two weeks was used to determine the number of new cases in the spray zones.