Recommendations

The CDC currently shows a risk category 3-4 (Moderate to High Probability of Human Outbreak). Continue response in as in level 3 (Moderate) including the following: Increase larval control, source reduction, and public education emphasizing personal protection measures, particularly among the elderly, initiate visible activities to increase attention to WNV Transmission. Intensify adult mosquito control in areas where surveillance indicates human risk, initiate adult mosquito control if not already in progress, initiate visible activities in community to increase attention to WNV transmission risk, repeating applications in areas of high risk of human cases.

Operation and Surveillance Reports

Below is a report outlining all services performed in the month of July. These services could include the following:

- **1252 Complete Site Larval Inspection Service:** *Inspection service of all potential mosquito larvae development sites.*
- **1302 Targeted Site Larval Inspection:** *Inspection of all targeted larval development sites.*
- **1754 Hand Larviciding:** *Hand equipment larviciding for biological control of mosquito larvae.*
- **2018 Vectolex WSP CB (30-day):** *Treatment of catch basins with Vectolex WSP for larval control.*
- **2202 Helicopter Prehatch Appl:** *Helicopter prehatch application for larval control.*
- **2786 ULV Festival Touch-Up Appl:** *Truck ULV "touch-up" application with Anvil for community festival mosquito control.*

Services Performed July 2012

Service Item	Start Date
ROS1252 - Complete Site Larval Insp Serv	07/09/2012
ROS1302 - Targeted Site Larval Insp Serv	07/18/2012
ROS1754 – Hand Larviciding	07/18/2012
ROS1302 – Targeted Site Larval Insp Serv	07/25/2012
ROS1754 – Hand Larviciding	07/25/2012
ROS2018 – Vectolex WSP CB Bike – 30 day	07/26/2012
ROS2202 – 5% Abate Heli Prehatch	07/23/2012
ROS2786 – Anvil ULV Festival Touch-Up	07/03/2012
ROS1754 – Hand Larviciding	07/25/2012

As of July 27th, the Illinois Department of Public Health has reported 25 birds and 1,175 mosquito samples positive for WNV, as well as 2 human cases in Cook County.

Illinois Department of Public Health West Nile virus data summary (as of 8-2-2012)

County	American Crow	Blue Jay	Other Birds	Mosquito Batches	Horse	Human Cases
Cook	5	0	0	798	0	2
DeKalb	2	0	0	0	0	0
DuPage	3	0	2	196	0	0
Kane	0	0	0	23	0	0
Kendall	0	0	0	3	0	0
Lake	0	0	0	17	0	0
Stephenson	1	0	0	0	0	0
Will	0	1	1	23	0	0
Winnebago	3	0	0	0	0	0
IL TOTAL (30 Counties)	**20**	**2**	**3**	**1175**	**0**	**2**

Brood Prediction

The floodwater mosquito (*Aedes vexans*) is the key nuisance species in the Chicagoland area. Distinct hatches of floodwater mosquito populations, or broods, are triggered by significant rainfall events. The Clarke Brood Prediction Model calculates peak annoyance periods based on rainfall and temperature data collected from weather stations in your area.

Weather Station Name	Rainfall Date	Amount (Inches)	Brood Prediction Date
Du Page Co.	06/16/2012	0.41	07/02/2012
Du Page Co.	07/01/2012	1.19	07/16/2012
Du Page Co.	07/13/2012	0.53	07/27/2012
Du Page Co.	07/18/2012	0.57	08/03/2012
Du Page Co.	07/23/2012	0.43	08/06/2012

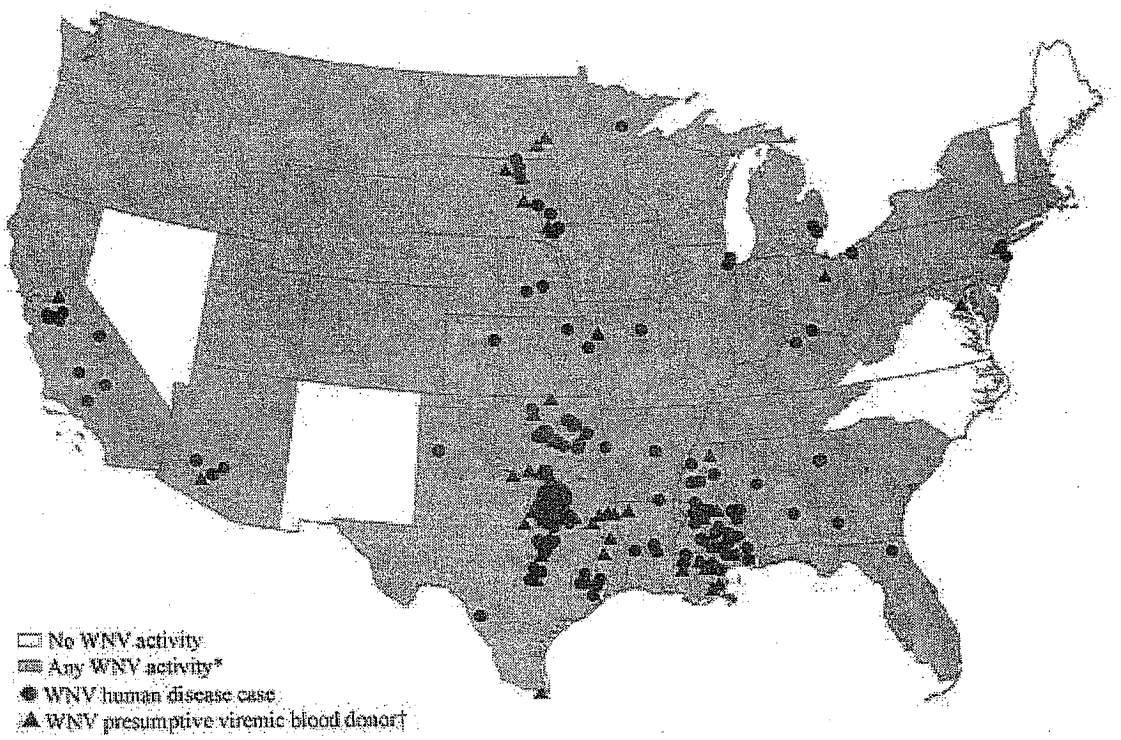
Upcoming August Operations

1 Complete Inspection
1 Targeted Inspection
1 Backpack Application
1 Culex Treatment

noticeable as the swarms of floodwater mosquitoes we see during rainy summers. Even if it does not look like there are a lot of mosquitoes out, [Culex] mosquitoes are stealthy biters and their infection rate is increasing rapidly, so make sure to use insect repellent." To date, IDPH has reported 1,175 WNV-positive mosquito samples that has surpassed the 1,147 WNV-positive mosquito sample level reported in 2002, the year in which Illinois suffered 884 human WNV cases, including 67 deaths. WNV activity is expected to intensify under the drought conditions. Larval control efforts should be focused on the *Culex* population.

Based on the Centers for Disease Control & Prevention West Nile Virus guidelines communities under moderate/high risk should implement truck ultra-low volume (ULV) applications, if not already in progress, to interrupt West Nile Virus amplification. See recommendations below for complete list of control activities.

As of July 31st, 334 human WNV cases have been reported to CDC from 24 states, as shown by the following map:



To date, Texas has reported 145 WNV human cases and Mississippi has reported 28.

Village of Lombard
July 2012 - Status Report

Season Perspective

The Chicago area is in the worst drought in over 50 years. July 2012 officially ranked as the 3rd warmest on record in Chicago with an average daily temperature being 7 degrees above normal, the warmest in 57 years. July was the 10th consecutive month with above normal temperatures. To date, O'Hare has recorded 35 days with the temperatures exceeding 90 degrees. In 142 years of weather records, there have never been so many days over 90 degrees recorded so early in the year. The excessive heat and only scattered precipitation has entrenched northern Illinois in a severe drought condition. No significant rains are expected in the near future.

As a result of the persistent hot and dry weather conditions, the dominant annoyance species, the floodwater mosquito (*Aedes vexans*), has been at very low levels. Clarke operates a network of light traps to monitor the adult mosquito population. For perspective, the following chart compares the percentage of floodwater and northern house (*Culex pipiens*) mosquitoes collected in the trap network between 2009 and 2012:

ALL TRAPS YTD	2009	2010	2011	2012
Aedes vexans	126,384 **(70%)**	208,183 **(75%)**	151,355 **(78%)**	26,578 **(58%)**
Culex spp	20,967 **(12%)**	20,850 **(7%)**	14,242 **(7%)**	9,450 **(21%)**
Total females	**179,659**	**276,851**	**192,031**	**45,644**

Floodwater mosquito eggs can remain dormant on dry ground for four to six years. However, unless a major rain event occurs, the floodwater mosquito population is expected to remain at an unusually low level through August.

While the floodwater mosquito population is extremely low, the northern house mosquito (*Culex pipiens*) is flourishing and raising the risk of mosquito-borne disease transmission. This species develops in stagnant water conditions. There have been enough periodic rainfalls, along with lawn-watering, to keep container habitats, such as street catch basins, bird baths, roof gutters, etc. charged with water to produce *Culex* mosquitoes.

Mosquito-Borne Disease Update

2012 has exhibited the classic weather pattern for an increased prevalence West Nile virus (WNV). Since the arrival of WNV in the United States in 1999, most human disease outbreaks have been associated with hot, dry drought conditions. On July 24th, the Illinois Department of Public Health (IDPH) confirmed the first human WNV in Cook County female in her 60s. IDPH Director, Dr. LaMar Hasbrouck stated: "The mosquitoes that typically carry WNV . . . are not as