

## **GUIDELINES FOR CONDUCTING LANDING RATE COUNTS**

The Landing Rate, expressed as number of mosquitoes landing per minute, is used as an adult mosquito surveillance measure that utilizes human volunteers as bait.

- Divide the city, precinct, or county into four geographical zones and conduct landing rate counts at 4 to 5 locations within each zone.
- Counts should not be taken during the heat of the day because most mosquitoes are inactive.
- Landing rate counts should be taken the same time each day. Recommended Time Period:
   Early in the day (between 7:30 AM and 10:00 AM) or late in the day (between 5:00 PM and dark)
- Wear solid light-colored long sleeves and pants. Mosquitoes are more easily seen on solid light-colored material versus a dark-patterned background.
- If possible, the same person should perform the counts to maintain consistency of before- and after-spray data.
- No repellents, after-shave lotions, or perfumes should be used.

## **PROTOCOL**

- **1.** Do not stand in direct sunlight. Choose a shaded site near bushes or trees.
- **2.** Disturb surrounding vegetation before starting the counts.
- **3.** Stand still for three minutes before beginning the count. In high density situations, this step may not be necessary as mosquitoes will start landing immediately.
- **4.** Take all landing rate counts from a standing position.
- **5.** Count (aspirate) only those mosquitoes that land in one minute on the front of one leg from the waist to the foot.
- **6.** Complete the "Mosquito Landing Rate Data Sheet", using real numbers for the mosquito landing counts. For example, 25 or 75 are much more meaningful numbers than 50+ or 100+.
- **7.** Label the collection vial with the location information, collection date, and collector's name.





## **Mosquito Landing Rate Data Sheet**

County County		Zone		Da	te	(DD/MM/YYYY)			
		ZIP Code	Technician I	Performing Counti	ng				
	Human Subject								
No.	Collection Site	X; Longitu	-	Time	Count	Weather Conditions			

No.	Collection Site	X; Longitude -78.50 to -83.37	Y; Latitude 32.00 to 35.30	Time	Count	Weather Conditions (temperature °F, wind, overcast, clear, etc.)
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

If not a physical street address, provide detailed directions with distances from nearby road intersections. If necessary, draw a map.