1. Could you please provide input on the key assumptions around State/Local staffing costs associated with the local malaria outbreak?

Dates for primary response (not including publications)?

17-May-23
30-Oct-23

2. Number of individuals involved in the response? Note that the baseline minimum numbers here are those mentioned in publications. A range is acceptable.

	Minimum	Maximum
# DoH employees	6	10
# Manatee employees		
# Sarasota employees	10	14

3. What would you estimate the average level of effort (% of total time worked) dedicated to the malaria outbreak during the time period in #1 amongst the total employees involved?

	Min	Max
% of LOE - DoH	10%	25%
% of LOE - Manatee		
% of LOE - Sarasota	90%	90%

4.Does Sarasota County have a contracted costs for mosquito adulticide and larvacide spraying? Yes

4a. If yes, what is the cost per acre?

Aerial applied Dibrom	$1.95 per acre
Aerial applied Anvil	$1.25 per acre
Truck applied Permethrin	$24.56 per mile

5. How many acres were covered for adulticide/larvacide and how many applications were conducted?

	Min	Max	Total	Adulticide Truck	Adulticide Aerial	Larvicide
Acres covered				12485	36232	200 acres
Number of applications				15	5	Daily efforts contributed to this total

County staff treated Acres of standing water

Larvicides cost >$32,000

6. Where traps used funded by the CDC or through the state? No, efforts were County Funded

6a. How many county funded traps were used?

	Min	Max	Traps set
# traps used for surveillance			213

7. How many malaria laboratory tests were conducted by the state?

	Min	Max	Mosq Pools
# state lab tests	7	10	172

8. Are there any other county level costs that should be considered regarding the 2023 outbreak?

Outreach efforts to help stop the problem from spreading, 133 hours were spent on these efforts, >$3,700. Expanding those effortst to networking with homeless service organizations and milage. In addition to the cost of material for fact sheets. Drone applications of larvicides which will occur with this new Sarasota County service for future threats. The estimate cost for this same occurence would be $10,000. Providing Repellant to citizens, over 1,000 cans, $1,900. Also providing Mosquito bed netting to at risk people. Use of Mosquito Fish which we deployed over 21,500. Cost

1. **Number 8 answer:**

   Outreach efforts to help stop the problem from spreading, 133 hours were spent on these efforts, >$3,700. Expanding those efforts to networking with homeless service organizations and milage. In addition to the cost of material for fact sheets. Drone applications of larvicides which will occur with this new Sarasota County service for future threats. The estimate cost for this same occurrence would be $10,000. Providing Repellant to citizens, over 1,250 cans, $9,650. Also providing Mosquito bed netting to at risk people. Use of Mosquito Fish which we deployed over 21,500. Cost of the software for data collection/communication, mapping, ESRI, Public alert notification. Daily larval inspections of every source of standing water.

2. **Are there any estimates on the costs associated with providing bednets and utilizing mosquito fish?**

   We already had a large aquaculture rearing the mosquito fish so the only cost pertaining to them really is the labor cost of applying them to many bodies of water. The labor cost associated with that was $1,240

   The cost for the bed nets was approximately $1,500. If staff time for field visits is factored in, you could add an additional $250.

3. **The adulticide truck is priced per mile and reportedly covered 12,485 acres. Is there an estimate of the number of miles covered? For example, if the truck swath width is 300ft, would this translate to around 1,800 miles? Any estimates on mileage would be helpful.**

   686 linear miles were treated during that outbreak in the areas of transmission.

4. **Can you tell us the name of the test used for testing the mosquito pools?**

   According to the CDC, "A sporozoite bead immune-assay was conducted on each mosquito and then DNA extraction, PCA and sequencing on the positives. *Specific tests include screening for Plasmodium circumsporozoite proteins in heads and thoraces (referred to as "sporozoite-positive") via bead immunoassay and DNA extractions from abdomens to detect Plasmodium cytochrome c oxidase subunit I via PCR."*

Provided the requested information in blue font.

1.For the adulticide truck spraying, Sarasota County reported 686 linear miles covered over 15 applications. Is the 686 miles figure the total distance covered across all 15 applications, or is it the distance covered per application?

- That is the total miles for all 15 applications combined, not for each application.

2. In other words, for costing purposes, should we calculate 686 miles × $cost/mile, or 686 miles × 15 applications × $cost/mile?

- The correct calculation should be calculating 686 miles × $cost/mile

3. Similarly, for aerial spraying, Sarasota County reported 36,232 acres over 5 applications. Should we interpret the 36,232 acres as the total area treated across all applications, or as the area treated in each application?

- That is the total acres for all 5 applications combined, not for each application.

4. The reported LOE range for the employees responding during the response period was given as 90% minimum to 90% maximum. This is fine for us to use – we just wanted to verify it was not an error and there intended to be a lower minimum.

- The estimated 90% answer provided is correct and not a miss typing.