**BACKGROUND**

In response to Yellow Fever outbreak in Kogi State, NAVRC deployed a team of Entomologists to the state. The Team carried out entomological surveillance between 27 January and 5 February, 2019 to: establish presence of Yellow Fever vectors in the four LGAs affected; identify breeding sites of these vectors in the areas; determine the risk status of *Aedes* mosquitoes in the affected areas and incriminate vectors that harbour the Yellow Fever virus in the areas.

**Methods**

Four Entomological Techniques:

Ovitrap setting;

Larval survey;

Adult Mosquito Collection and

Trap sand Modified Human Landing Catch (HLC)) were deployed for the collection of different stages of the life cycle of the vectors (eggs, larvae, pupae and adults).

Twenty ovitraps were set in each community visited and retrieved within three days. Water containers in and around homes were surveyed. Larvae collected were put in potable plastic containers and transported to the mobile laboratory for rearing. Traps were set between 6am and 6pm and HLC was carried out between 7am and 9am and between 5pm and 8pm.

**Results**

After a thorough investigation it was discovered that the commonest breeding sites were plastic and earthenware containers. Only ovitraps and larval survey yielded positive results, three (3) out of three hundred and fifty-six (356) households harboured the larval stage of the vectors*.*2.5% of ovitraps set in two communities were positive for *Aedes* eggs while 0.8% of water containers around and in homes were positive for the larvae. *Aedes aegypti* was the only species collected from the survey. Larval indices were low in communities in which larvae were collected (Mopa/Eba and Ayokomi/Effere) – House Index ˂ 5% and/or Breteau Index ˂ 20.

**Conclusion**

The investigation consisted of carrying out intensive larval survey in 356 households; setting CDC UV light traps and Biogent traps in 10 households; setting ovitraps in strategic locations and carrying out Human Landing Catch in various suitable spots. Though the larval index is considered low (House Index ˂ 5% and/or Breteau Index ˂ 20), the risk of transmission of Yellow Fever in the LGAs surveyed is very high. This is because *Aedes* mosquitoes have been demonstrated to possess between 88% and 100% capacity to transmit the yellow fever virus (Andrew F. van den Hurk*et al.* 2011) and can as well transovarially transmit the virus.