

# Malaria Situation in Nigeria

Edward S. Horvath, MPH

Three Rivers Mosquito & Vector Control

651 Market Street, Klamath Falls, Oregon 97601-USA

[WWW.TRMVC.COM](http://WWW.TRMVC.COM)

+1-541-238-2272

eshorvath@trmvc.com





# Facts of Malaria in Nigeria

- Malaria Remains a major cause of illnesses and deaths around the world.
  - Major cause of death and illness in Nigeria
- Citizens are becoming desensitized to malaria and mosquitoes
- Lack of public education
  - Some citizens still do not know mosquitoes transmit malaria
  - or that mosquitoes need water to develop



# Facts of Malaria in Nigeria

- Malaria requires a mosquito to be transferred from a host to a victim
- Mosquitoes require water to develop from egg to biting adult
- No current scientific methods to eliminate malaria if the host mosquito survives
  - Endless hosts with malaria
- Sanitation within communities is directly creating mosquito habitats and increasing the risk of malaria
- **Eliminating the mosquito would ultimately eliminate malaria transmission**



# What is being done?

- In Nigeria, the *National Malaria Elimination Programme (NMEP)* has created a Strategic Plan for the control of Malaria, and currently operating with a Plan updated for 2017-2020.
  - While not complete, the Plan provides the building blocks for implementation of malaria control activities in Nigeria.
  - Distribution of the Plan is unknown, however most students of the workshop have not seen it until recently
  - The NMEP's Strategic Plan states that they intend to transition from **Malaria Control** to **Malaria Elimination** during the years **2017-2020**
  - The current Plan does not provide for a means or funding to accomplish malaria eradication in Nigeria or River State.



# What is being done?

- ▶ Nationwide, there is no Federal or State funds distributed for community-wide, Vector Control efforts.
  - ▶ Distribution channel of Insecticide Treated Bed Nets
  - ▶ Limited Indoor Residual Spraying
  - ▶ No current public education or educational campaigning for malaria control, mosquito abatement or how to prevent either
- ▶ Some households conduct their own fumigation services
- ▶ Locally or nationally, there are no known public education programs for malaria or mosquito control

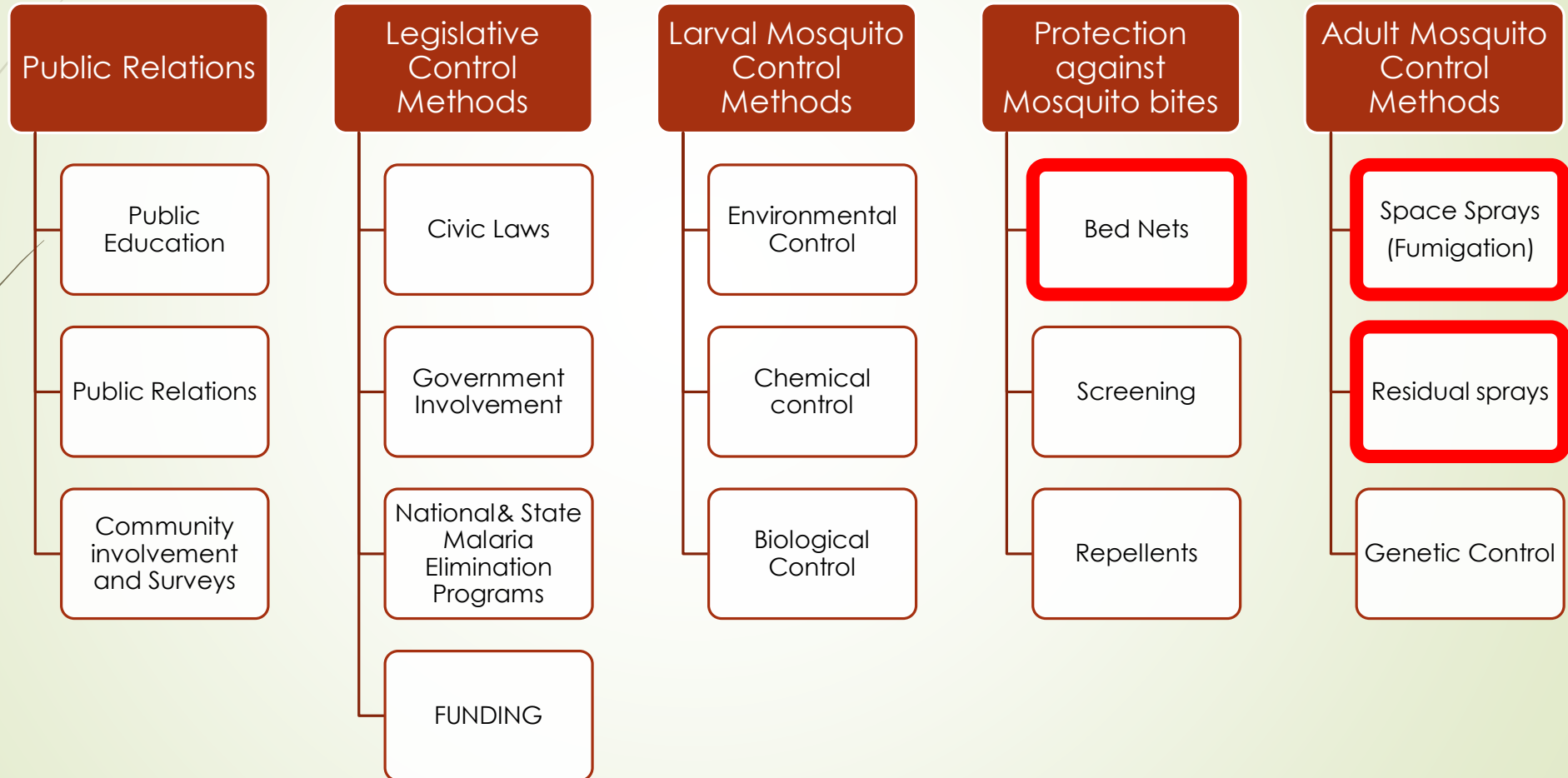


# Current Results



- Insecticide Treated Bed Nets are contributing to pesticide resistance.
- Indoor Residual Spray is contributing to pesticide Resistance
- General pesticides in communities may also be contributing to Pesticide Resistance
- Malaria is not under control
  - People continue to miss work due to sickness
  - Deaths due to malaria are not decreasing
- The general consensus from the workshop this week identified
  - a lack of an appropriate, Integrated Vector Control (IVCP) Plan even at the State and National levels

# Malaria/Mosquito Control Measures





# Recommendations for obtaining Malaria Control in Nigeria

By: Edward S. Horvath, MPH





# Integrated Vector Control Plan

- ▶ Adopt an interagency cooperative agreement with Federal, State and Local governments and the *State and National Malaria Elimination Programs* to publish an effective IVCP.
  - ▶ Gain the support and involvement of State and National representatives involved in Malaria Control.
    - ▶ Representatives are already discussing how to get the State and National agencies involved in order to improve training and create a Nationwide Integrated Vector Control Plan
    - ▶ Similar training to what we have started here at Port Harcourt are already being sought by staff of the NMEP, to spread the ideas to other States in Nigeria.
  - ▶ The interagency agreement **must identify** mutually beneficial **avenues for funding** the program.



# Integrated Vector Control Plan

- ▶ Create an Integrated Vector Control Plan (IVCP), utilizing the Strategic Plan of the *National Malaria Elimination Programme*, with a common sense approach of an Integrated Mosquito Management plan, in order to control mosquitoes and thus reducing the incidence of malaria.
  - ▶ An IVCP can **be successful** if managed properly
  - ▶ The IVCP **must be adopted**, agreed upon and implemented at all levels **to be most effective**



# Integrated Vector Management Plan

- ▶ **Source Reduction is imperative**
- ▶ **Public Education** remains the **most important part** of the IVMP
  - ▶ students have volunteered to investigate and create the first part of a public education program to educate the public about mosquitoes and malaria.
  - ▶ This will help educate the public about malaria and mosquitoes and hopefully help influence sanitation around homes and communities

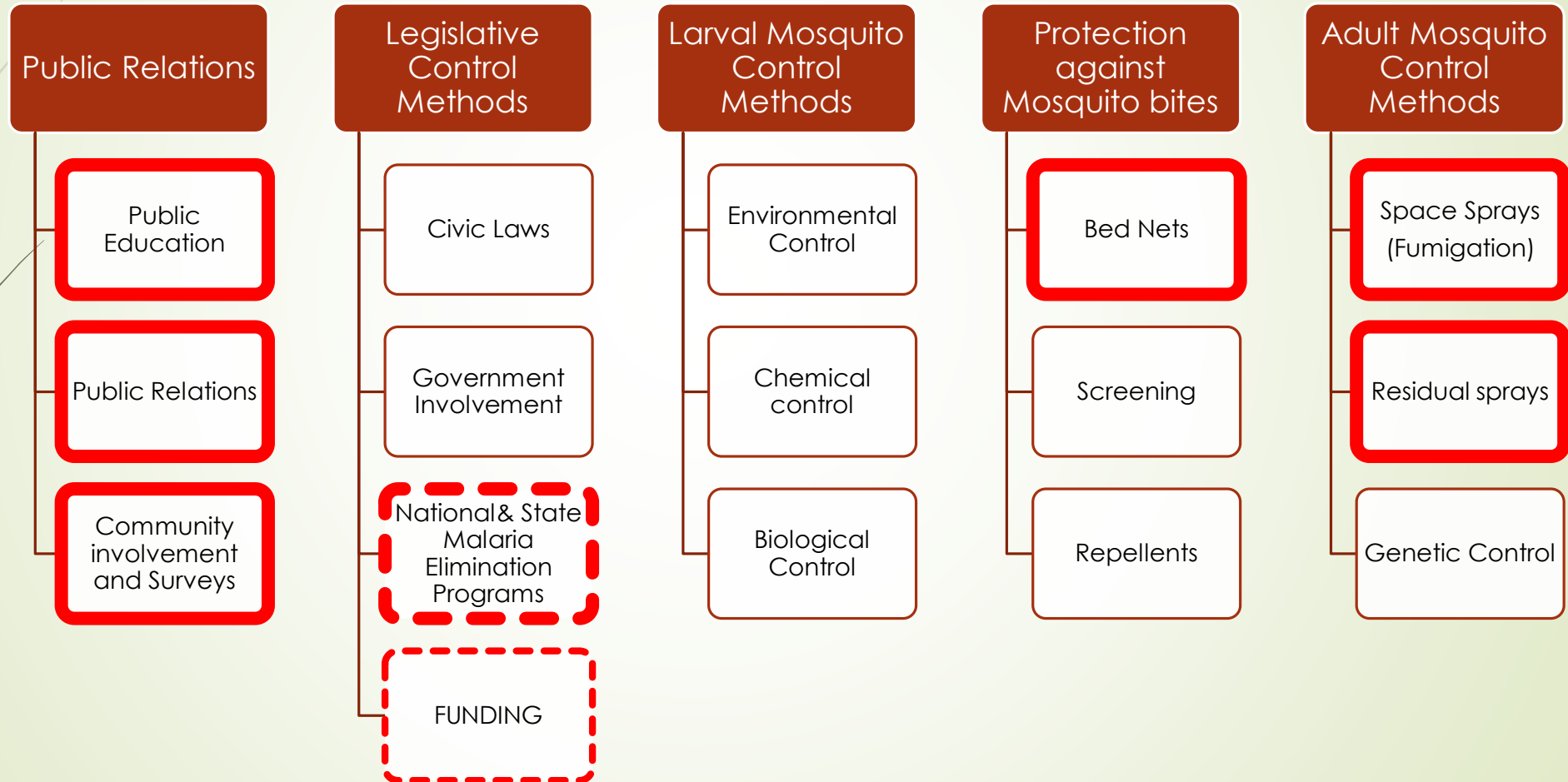


# Integrated Vector Management Plan



- ▶ Community-wide control will require support and funding from the Local, State and National governments and agencies.
- ▶ The local community can and should be involved with source reduction and sanitation, even before funding is available for a more complex control program.
- ▶ Student and faculty of the UNIPORT should be involved in:
  - ▶ producing Public Education materials and educating the communities
  - ▶ Establishing a Surveillance Program
  - ▶ Investigate and conduct research for native solutions such as
    - ▶ Mosquito predators
    - ▶ Soil or other bacteria effective as larval pesticides
    - ▶ These can be potential revenue generators for the University and mosquito control operations

# Malaria/Mosquito Control Measures






# Is Malaria Eradication possible

- ▶ **If Nigeria remains on the same path** as it has been over the last several decades, **malaria control or eradication will not be possible.**

## HOWEVER

- ▶ Malaria control and eradications IS POSSIBLE if:
  - ▶ Citizens, local, state and National agencies take ownership in the mosquito breeding issues
  - ▶ We maintain a positive attitude and open mind to new techniques
  - ▶ Educate the local, State and National agencies and stakeholder about malaria and the control of the mosquito.
  - ▶ Local, State and National agencies work together to provide support, training and guidance at all levels.
  - ▶ Funding is made available



Thank you for inviting me to the University of Port Harcourt. It has been my pleasure working with everyone here and look forward to a successful partnership while working to eliminate malaria in Nigeria.

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