WHO convened a consultation of its Vector Control Advisory Group (VCAG) on 14-15 March 2016 to review existing tools and **5 potential tools to effectively control the *Aedes* mosquito populations capable of transmitting Zika virus**
.

The Group concluded that well-implemented vector control programmes using existing tools are effective in reducing the transmission of Zika virus by *Aedes* mosquitoes and should be promoted.

The Group further concluded that full-scale deployment is not recommended currently for any of the 5 new tools reviewed. However, 2 of the new tools warrant time-limited pilot deployment, accompanied by rigorous monitoring and evaluation, to reinforce the arsenal of available tools.

Mosquito control works if implemented well

Vector control is the most effective way to stop the transmission of Zika virus, chikungunya, dengue and yellow fever which are transmitted by *Aedes* mosquitoes. If current methods are implemented well—i.e. in an expedient, comprehensive and sustained way—they are effective.
Current tools include:

- targeted residual spraying of adult *Aedes* mosquitoes in and around houses;
- indoor space spraying/indoor fogging where *Aedes* mosquitoes rest and bite (effective) and outside spraying (less effective);
- elimination of *Aedes* mosquito breeding sites to control the larval stage;
- personal protection measures (foremost wearing clothes—preferably light-coloured—that cover as much of the body as possible and using insect repellents that contain DEET, IR 3535 or Icaridin).

WHO recommends approaches that tackle all life stages of the *Aedes* mosquitoÂÂ (egg, larva/pupa and the adult) with full community participation.

New methods to control mosquito populations transmitting Zika virus in the pipeline

The VCAG recommended the carefully-planned pilot deployment of 2 new tools, accompanied by rigorous independent monitoring and evaluation.
These include:

- the release of mosquitoes carrying Wolbachia bacteria which propagates itself in the population (symbiotic bacteria suppress the development of the virus in the mosquito and control transmission);
- OX513A transgenic male mosquitoes which should be released periodically to suppress the wild population (*Aedes* larvae carrying the OX513A gene develop normally, but die before becoming an adult).

The Group further concluded that more evidence is required before pilot deployment of the other 3 tools could be considered. These include sterile insect technique, vector traps and attractive toxic sugar baits (to attract and kill mosquitoes).

Note:
WHO convened the consultation of the WHO Vector Control Advisory Group (VCAG) following the Second meeting of the International Health Regulations (IHR) Emergency Committee on Zika virus held on 8 March, which recommended to: 1) enhance the surveillance of *Aedes* mosquito populations; 2) promote control measures and personal protective measures; and 3) strengthen vector control measures in the long term.

WHO has established the VCAG, which comprises independent senior experts in entomology (the study of insects) and vector control, in 2013.

Report on the 14-15 March 2016 meeting of the Vector Control Advisory Group:
http://www.who.int/neglected_diseases/news/mosquito_vector_control_response/en/

More on the Vector Control Advisory Group:
http://www.who.int/malaria/areas/vector_control/policy_advisory_groups/en/