

Terms of reference for the External Evaluation Group on New Technologies for Controlling *Aedes spp*

Background and conceptual framework

Entomology and vector control are specialized areas of expertise, essential for building an integrated approach for effectively preventing and controlling vector-borne diseases, particularly those transmitted by *Aedes spp*. The magnitude and severity of recent cases and outbreaks of dengue, Zika, chikungunya and yellow fever in the Americas, coupled with the long-term negative socioeconomic impact of endemic transmission of these arboviral diseases, highlights the urgent need to improve vector control in terms of actions taken, quality, and speed. There is also an urgent need to explore new solutions (tools, methodologies, strategies, etc.) that ensure effective control of the vectors that transmit these diseases, at a reasonable cost for the countries that use them, while maintaining capacity for sustainable, high-quality implementation and maintenance.

As part of this effort, PAHO/WHO created the Technical Advisory Group on Public Health Entomology and Vector Control (TAG-PHEVC), which advises the Director of the Organization on all related technical and policy considerations. In its first meeting (March 2016), the TAG-PHEVC prepared the following recommendation to PAHO on new technologies for controlling *Aedes spp*: **Promote rapid, robust, and accelerated evaluation of new and complementary tools for controlling *Aedes*, with particular attention to the use of *Wolbachia*-infected mosquitoes and genetically modified insects, backed by partnerships that ensure the appropriate technical cooperation and financial support for this purpose.** PAHO is also adopting the recommendations of the WHO Vector Control Advisory Group (VCAG), which has consistently recommended larger-scale, independent pilot studies with continuous external evaluation of these two technologies.

PAHO/WHO, through its Public Health Entomology and Vector Control Program, with the support of TAG-PHEVC and under continuous external evaluation, is tasked with independently advising and providing technical support to the countries for the planning and implementation of these pilot tests and studies.

Accordingly, we propose that a PAHO/WHO independent external evaluation group be created, comprised of experts in various disciplines related to the assessment of new technologies for entomological surveillance and vector control, such as entomology, vector control, insecticides for public health, study monitoring and evaluation, epidemiology, and others deemed necessary. This technical group would be tasked with collaborating with PAHO/WHO on epidemiological and entomological evaluations and assessing the impact on work processes resulting from the use of new technologies in the pilot areas. The findings will serve as the basis for PAHO's technical support to countries planning to implement new technologies. The basic components of this technical support include coordinating strategic actions and preparing technical recommendations based on the best scientific evidence available, to support implementation of pilot studies in the countries.

Purpose: To contribute actively to the efforts of the countries in the Region to advance knowledge and better control the vectors responsible for transmitting the main arboviral diseases.

Objectives:

- 1) Document more and better evidence supporting the use of new vector control technologies;
- 2) Determine the benefits and challenges of potential large-scale use of the technologies being studied and pilot tested.

- 3) Determine the benefits and challenges of using new technologies alongside existing ones for controlling “traditional” vectors, such as *Aedes spp.*

The foregoing objectives should be based on the capacity of each technology studied to reduce the abundance of mosquito populations, contribute to the swift control and interruption of transmission of one or more arboviral disease and reduce transmission capacity in urban environments.

Expected Results

1. Studies and pilot tests are in various phases of implementation and assessment to document the effectiveness of new technologies proposed for controlling vectors of arboviral diseases in the Americas.
2. Progress or final reports are published, with findings on the pilot use of new technologies for controlling *Aedes spp.*, evaluated from a technical, operational, and cost-benefit standpoint, in keeping with PAHO/WHO guidelines, through the TAG-PHEVC and VCAG.

Duties and responsibilities

The external evaluation group for new technologies will have the following duties and responsibilities:

1. Advise PAHO, by making recommendations on technical, scientific, and operational aspects of the assessments of new vector control and surveillance technologies, as tools to support the prevention, control, and elimination of vector-borne diseases in the Americas, in accordance with PAHO/WHO mandates and recommendations.
2. Help conduct independent, impartial evaluations on technical, operational, and strategic aspects of the new technologies for entomological surveillance and vector control in the Americas, including their progress and challenges.
3. Establish special working groups to analyze and make recommendations or implement actions on specific subjects related to each new entomological surveillance and vector control technology, in coordination with the regional programs and/or other PAHO/WHO technical groups.
4. Advise on setting priorities for technical and operational research on new entomological surveillance and vector control technologies, according to the priorities identified in the Region.

Members of the external evaluation group on new technologies

1. The evaluation group (the “EG” or “group”) will have seven members serving in a personal capacity on a volunteer basis, who will provide technical know-how in a broad range of areas of expertise that encompass or are related to new entomological surveillance and vector control technologies (biology, ecology, and vector management, insecticides and insecticide resistance, epidemiology of vector-borne diseases, statistics, vector control program coordination, chemistry and biochemistry, toxicology, sanitation, agriculture, and economics, among others). Candidates should be recognized in their fields or professional specialties.
2. Whenever possible in the selection of members, efforts will be made to ensure an adequate balance among areas of expertise, representation of the regions and subregions in the Hemisphere, and gender balance. Candidates for the EG will be selected by PAHO/WHO’s Neglected, Tropical and Vector-borne Diseases Unit, which will present a list of at least nine professionals for initial selection and subsequent confirmation by the Director of the Communicable Diseases and Health Analysis Department for the first year. This group will have the initial task of reviewing and nominating other professionals for the

evaluation group for a total period of two years, including the possibility of four of the members selected for the first year being confirmed for a second year.

3. EG members, including the Coordinator, will be appointed for an initial term of two years and may be renewed/re-elected for one additional two-year term.
4. The Coordinator will be elected by the group's members and his/her functions will be to: chair EG meetings and provide technical coordination for missions to the countries; monitor jointly with PAHO the adequate fulfillment of the activities assigned to the group and compliance with the rules governing its operation; and serve as the liaison with PAHO's Executive Secretariat between meetings. Furthermore, the Coordinator and EG members may be invited as observers to attend meetings of other areas that have shared interests or that support the prevention, control, and elimination of vector-borne diseases in the Region of the Americas.
5. EG members must respect PAHO's necessary impartiality and independence and, in the course of their work with the group, may not request or accept instructions from any government or institution. EG members must also be free from any real, potential, or apparent conflicts of interests and, to this end, will be asked to fill out and sign the following documents: Declaration of Interest Form (Annex 1) and Confidentiality Agreement (Annex 2). This request will be made when a member is appointed or his/her appointment is extended.
6. EG members, depending on their specialties, may be invited to advise PAHO on its technical cooperation activities with member countries.
7. EG members will not be remunerated for their participation in the group or for executing the activities requested by PAHO. However, as described below (under "procedures"), PAHO will cover the travel expenses (tickets and per diem) of each EG member, in accordance with applicable PAHO rules and policies.

Procedures:

1. As part of its activities, the group will conduct technical visits to countries that intend to develop or are developing pilot projects. The evaluations will use a standardized guide prepared for that purpose and approved by consensus by the members of the group.
2. During the evaluation process, the group can hold meetings regularly, either as open and/or closed sessions, as defined below:
 - Open sessions: these sessions will be called with the sole objective of sharing non-confidential information. Accordingly, guests who are not members of the evaluation group or of PAHO CAN attend.
 - Closed sessions: these sessions will be called to discuss, analyze, and prepare recommendations and/or technical assistance for PAHO and/or countries. As a result, ONLY group members or duly invited and authorized guests may attend.

PAHO may convene additional meetings as needed, including by teleconference and video conference; members may also be asked to conduct activities between EG meetings, for example, prepare for the meetings, review documents, request analyses and opinions, etc.

3. PAHO may invite additional experts, as Ad Hoc advisors, to participate in open sessions of the evaluation group, to provide additional support on specific matters under the purview of the group. The EG Coordinator can also send a request to PAHO for external advisors to be invited for the technical visits and/or open sessions of meetings. Furthermore, PAHO may invite prestigious organizations in the are-

as of public health entomology, integrated vector management, and other pertinent technical areas and academic or research institutions to attend the open sessions of the evaluation group, always as observers.

4. The EG external advisors are subject to the same rules as group members. As a result, they must respect PAHO's necessary impartiality and independence and, in the course of their work with the EG, may not request or accept instructions from any government, institution, or authority. The advisors must also be free from any real, potential, or apparent conflicts of interests and, to this end, will be asked to fill out and sign the following documents: Declaration of Interest Form (Annex 1) and Confidentiality Agreement (Annex 2).
5. Observers may express or present only their institution's opinions and policies on any issue, when invited to do so by the Coordinator, and strictly for the purpose of sharing their institution's experiences and/or knowledge with the group. Observers may also participate by providing technical material to the evaluation group before meetings and through PAHO's Technical and Executive Secretariat.
6. The quorum for EG meetings will be five members.
7. The evaluation group will always try to make its decisions and recommendations by consensus. If in exceptional cases this is not possible, the majority decision should be taken, but the opinion of the minority should be stated in the meeting report. Only group members may vote.
8. Evaluation group members and advisors invited by PAHO may, before country visits and/or group meetings, receive requests to review documentation on new technologies and provide their views for the group's consideration. Confidentiality statements must be included in documents that require these.
9. PAHO will organize all logistics and infrastructure aspects of the country visits and meetings and will pay for the tickets and per diems of group members and guest advisors, in accordance with applicable PAHO rules and policies.
10. Observers will be responsible for making their own arrangements for attending EG meetings.
11. Evaluation group meetings will have a work agenda prepared by PAHO, in consensus with group members.
12. Since the evaluation group is an internal PAHO/WHO advisory body, for reasons of confidentiality, its members, advisors, and observers are not authorized under any circumstances to speak to outside parties on behalf of the EG and/or PAHO.

13. The Coordinator will present the reports produced in each country visit and/or EG meeting to the Director of the Communicable Diseases and Health Analysis Department and the Chief of the Neglected, Tropical, and Vector Borne Diseases Unit of PAHO for their appraisals and the corresponding actions. All comments, suggestions, and recommendations made by the EG in its reports are strictly technical advice for PAHO, which according to its rules must evaluate the best decision or action to be adopted with respect to the group's proposals. PAHO also maintains all rights to the ownership and use of the content of EG reports.

Technical and Executive Secretariat

PAHO, through the Neglected, Tropical, and Vector Borne Diseases Unit (CHA/VT), will be the Technical and Executive Secretariat of the EG and will provide all technical, scientific, logistical support and infrastructure necessary for the seamless operation of the evaluation group. In this regard, before each meeting, the Technical and Executive Secretariat of the EG will provide group members with the meeting agenda and all working documents (technical and scientific), and any other necessary information. Distribution of the aforementioned documents and information to the external advisors and observers will depend on whether or not it is confidential, under the responsibility of the Technical and Executive Secretariat of the EG.

Thus, in keeping with the need to ensure the confidentiality of these documents, EG members and external advisors will be asked to sign a confidentiality commitment, as appropriate.

EG members, external advisors, and observers agree not to disclose or use any information or document provided by the EG, regardless of the format (including oral, printed, magnetic, or electronic), in strict fulfillment of their responsibilities as outlined in these terms of reference.