

EU HEALTHY GATEWAYS JOINT ACTION
GRANT AGREEMENT NUMBER: 801493
PREPAREDNESS AND ACTION AT POINTS OF ENTRY
(PORTS, AIRPORTS, GROUND CROSSINGS)

RECOMMENDATIONS FOR STANDARD OPERATING PROCEDURES (SOPs) DEVELOPMENT FOR VECTOR (MOSQUITO) SURVEILLANCE AND CONTROL ACTIVITIES AT PORTS AND AIRPORTS

SUMMARY VERSION

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Abbreviations

ECDC	European Centre for Disease Prevention and Control
EMS	Exotic Mosquito Species
EU	European Union
IVM	Integrated Vector Management
MoU	Memorandum of Understanding
PCO	Pest Control Operators (subcontractors)
PoE	Points of Entry
SOPs	Standard Operating Procedures
VBD	Vector-Borne Disease
WHO	World Health Organization

1 BACKGROUND

The general objective of the EU HEALTHY GATEWAYS Joint Action (Grant Agreement Nr. 801493) is to support cooperation and coordination between EU Member States in order to improve their capacities at points of entry (PoE), in preventing and combating cross-border health threats affecting or inherently coming from the transport sector. This document was produced to provide support in the development/maintenance of capacities at international ports and airports to keep them free of both invasive and native mosquito vectors as required by the International Health Regulations (IHR 2005).

According to the Grant Agreement, EU HEALTHY GATEWAYS has developed this document incorporating recommendations to support development of Standard Operating Procedures (SOPs) for specific vector surveillance and control activities at airports and ports for implementation of an integrated vector control programme, and based on World Health Organization (WHO) and European Centre for Disease Prevention and Control (ECDC) existing guidelines for the control of native and invasive mosquitoes in Europe. Moreover, recommendations for development of SOPs for inspections of ships and aircrafts for vectors have been incorporated in the document.

Exotic mosquito species (EMS) carrying pathogens or not, can be introduced in the EU through airplanes, ships, means of ground transport or freight. Mosquitoes can be introduced as adults or at immature stages (eggs, larvae, pupae). Vector-Borne Disease (VBD) can be introduced in the EU via the introduction of human cases of VBD travelling with airplanes, ships or means of ground transportation.

The current document is referring to information to be considered when developing procedures to prevent or control mosquito populations at airports and sea ports, and is focused on the European Union countries including islands (e.g. Madeira, Canary Islands), but not for areas outside geographic Europe (e.g. Reunion, French Guiana etc). Vector control activities at ground crossings, as well as vectors other than mosquitoes, are not covered in this document.

2 METHODS

Materials and methods used to develop these recommendations included:

- a) literature review with the aim to identify guidelines, reports, practices and research articles describing vector surveillance and control activities at PoE and/ or inspection of conveyances for vectors;*
- b) conducting site visits at ports and on ships to review practices for vector surveillance and control;*
- c) expert group consultations and;*
- d) review of survey results for best practices implementation under work packages 6 and 7 of the EU HEALTHY GATEWAYS Joint Action.*

3 CONCLUSIONS-RECOMMENDATIONS

The current document provides recommendations for developing SOPs considering the ECDC and WHO existing guidelines in regards to: i) risk-analysis of the possibility of introduction of EMS at specific ports/airports; ii) recommendation for development of SOPs for implementing surveillance of EMS at the port/airport facilities; iii) recommendation for development of SOPs for implementing immediate control measures in case of detection of introduction of EMS.

The entomological surveillance will be a useful tool to inform national authorities regarding the risk for introduction of vector species through airports and ports. The document also provides examples/case studies on surveillance/control at port/airports.

The decision-making process is based on the rapid-risk assessment. The framework of activities can be categorised into three phases: preparatory, prevention and emergency.

In the first “preparatory phase”, the risk for introduction of EMS is identified. If the assessment indicates no risk then only passive surveillance will be implemented, consisting of a notification system for possible interception of EMS at the airport or port, and complemented by EMS information campaigns and awareness for airport or port personnel. If a risk is identified, then actions in the “prevention phase” may be considered for implementation. During the “prevention phase”, it may be considered to conduct vector surveillance on a routine basis. The results from the EMS surveillance are necessary to decide on

the adequate vector control activities, and also to evaluate the effectiveness of control activities (e.g. mosquito density before and after larvicidal activity). The presence of local mosquitoes is inevitable; therefore, routine vector control is suggested to keep the native mosquitoes at a low level (as recommended by IHR). If there is detection of EMS, then the “Emergency phase” follows where implementation of strengthening vector surveillance and control is implemented, in order to avoid proliferation at the airport or the port.

The full text of this document can be found at: <https://www.healthygateways.eu/>

For further information or questions please send an email to: EU HEALTHY GATEWAYS Joint Action - info@healthygateways.eu