



EUROPEAN COMMISSION  
DIRECTORATE-GENERAL FOR HEALTH AND FOOD SAFETY

Public health  
**Health Security**

## General Working Group of the Health Security Committee Meeting

**Wednesday 05 June 2024 - 10:30-12:30**

**Flash Report**

**Chair:** Deputy Head of Unit, European Commission, DG SANTE B2

**Participants:** AT, BE, CY, DE, DK, EE, EL, FI, FR, HR, HU, IE, IT, LI, LT, MT, NL, PT, SE, SI, SK, IS, NO, LIE, DG SANTE, RTD, DG ECHO, DG HERA, DG CLIMA, EMA, ECDC, WHO, JRC

**\*EU/EEA only\***

### Agenda points

1. Introduction
2. Epidemiological update
3. EU Reference Laboratoires (EURLs) on vector-borne viral pathogens
4. MediLabSecure: One Health Network for the Prevention of Vector-Borne Diseases
5. Mosquito control approaches
  - a. Use and limitations of larvicides and adulticides as vector control methods
  - b. Pilot project on using Sterile Insect Techniques to eliminate *Aedes aegypti* in Cyprus
  - c. Sterile Insect Techniques application against *Aedes albopictus*
6. Public health measures by EU countries ahead of summer events/touristic season
7. Outcomes on questions to EU/EEA countries and discussion

### Key messages:

#### 1. Introduction

DG SANTE welcomed the participants to this second GWG HSC meeting dedicated to mosquito-transmitted diseases. The first meeting was held ahead of summer 2023. Since then, there has been progress including a pilot project based on Sterile Insect technique (SIT) in Cyprus and the establishment of EU reference laboratories for several groups of diseases, to support diagnostic activities for emerging diseases including those caused by arboviruses.

#### 2. Epidemiological update

The European Centre for Disease Control and Prevention (ECDC) gave an epidemiological update on the notifications and vector surveillance, focusing specifically on dengue and West Nile Virus. Dengue is transmitted among humans by *Aedes* mosquitoes, and in Europe, there are on average 2,300 cases per year. While autochthonous outbreaks are occurring within continental Europe, most of the cases are imported from endemic areas outside Europe. Most outbreaks have been reported in France, Italy and Spain and the trend is expected to continue. The World Health Organization has been monitoring cases globally, and in the first four months of 2024, there have been over 7 million cases of dengue in endemic countries in Latin America, this is a massive increase, and the situation remains alarming given that there has been an increase in the number of travelers coming to Europe from these regions. The ECDC explained that given that the summer season is approaching, there is a high chance to detect locally acquired dengue in the EU/EEA. ECDC will continue to monitor (globally and in the EU/EEA

countries) cases of dengue and chikungunya and map the countries of infection of travel-related cases of dengue, chikungunya, zika and malaria. ECDC will continue to provide public health guidance on surveillance, prevention, and control of aedes-borne diseases.

ECDC gave an overview on the epidemiological situation related to the West Nile virus, which is transmitted by the *Culex pipiens* mosquito. On average, per year there are about 460 reported human cases of West Nile disease in the EU/EEA. There has been an increase in cases related to the virus moving and spreading to new places. ECDC will enhance its surveillance of West Nile virus from June to November 2024 and produce weekly reports and monthly enhanced analysis of human and animal cases. For mosquito-borne diseases, ECDC recommends several actions, including providing information on the importance of individual protection against mosquito bites, vector-control measures, early detection of infection and enhanced surveillance.

### **3. EU Reference Laboratories (EURLs) on vector-borne viral pathogens**

DG SANTE gave an update on the state of play on the EU Reference Laboratories on vector-borne viral pathogens. In accordance with Article 15(4) of the Regulation (EU) 2022/2371, the European Commission launched in October 2023, calls for applications for EU Reference Laboratories in six areas of public health, one which included vector-borne viral pathogens. On 22 March 2024, the Commission adopted the designation of the labs, for seven years. The EURL for vector-borne viral pathogens consortium is led by Rijksinstituut voor Volksgezondheid en Milieu (RIVM), in the Netherlands. Under its responsibilities it will provide support to the members of the relevant laboratory networks of the ECDC, including tasks on reference diagnostics, reference material resources, external quality assessment, scientific and technical advice, monitoring, training, alert notifications, and support in outbreak response.

### **4. MediLabSecure: One Health Network for the Prevention of Vector-Borne Diseases**

The project officer of MediLabSecure was invited to present this initiative funded by the European Commission and coordinated by Institut Pasteur under the Chemical, Biological, Radiological and Nuclear Material Centres of Excellence Initiative. The initiative works with 64 partner countries across eight regions globally. The project established a One Health network aiming to prevent emerging biological risks increased by environmental and climate change in the Mediterranean, Black Sea, and Sahel regions. The initiative has three workplans, which include One Health preparedness and response; One Health surveillance, risk assessment and early warning; and One Health awareness. The aim of the initiative is to collect data on virus circulation and transfer knowledge to decision makers highlighting the added value of the One Health approach; to empower its members by promoting national initiatives; and to integrate communities in surveillance and control of vector-borne diseases.

### **5. Mosquito control approaches:**

#### **a. Use and limitations of larvicides and adulticides as vector control methods**

The Food and Consumer Product Safety Authority's Centre for Monitoring of Vectors (NVWA) in the Netherlands gave an overview on how they have been dealing with the establishment of *Aedes albopictus*. The national policy in the Netherlands is to prevent the establishment of invasive exotic mosquitoes or to delay it as long as possible. The Public Health Act contains the rules for the control of invasive exotic mosquitoes. In the Netherlands, the foci for mosquito surveillance and control have mostly been points of entry (harbours, and airports) and urban areas. To control the spread of mosquitoes, the Netherlands has been carrying out several activities including information campaigns, citizen participation and local involvement of municipalities and local public health services. On the use of biocides, the Ministry of Health organises the availability of green and effective biocides in close collaboration with the Ministry of Infrastructure and Water management, and there are four biocides

used for the control of mosquitoes. The Netherlands recommends facilitating the availability of biocides.

**b. Pilot project on using Sterile Insect Techniques to eliminate *Aedes aegypti* in Cyprus**

The Environmental Health Service in Cyprus gave an overview of the pilot project on the use of Sterile Insect Techniques (SIT) with the technical support of the International Atomic Energy Agency (IAEA). *Aedes aegypti* was first discovered in Cyprus in November 2021 and *Aedes albopictus* in September 2022. In May 2022, the IAEA organized expert missions to Cyprus and proposed contingency Plans in December 2022. The contingency plan to eradicate *Aedes aegypti* includes public information campaigns, door to door inspections and treatment of public areas. It also includes surveillance actions including detection (at national level); delimitation of the boundaries of infested areas; monitoring (of seasonality, control efficacy, Points of Entry and Points of Interest). The SIT pilot project trial started with the release of over 100,00 sterile *Aedes aegypti* males from June to October 2023. The results of the pilot project indicate that there was an impact on the mosquito egg densities in the pilot regions, with a positive detrimental effect in wild populations.

**c. Sterile Insect Techniques application against *Aedes albopictus***

The Centro Agricoltura Ambiente (CAA) (Center for Agriculture and Environment) in Italy gave an overview on SIT application on *Aedes albopictus*. Italy began to use SIT as method to mosquito control approach given that it had unsatisfactory results with other methods. The SIT research in Italy started in the 2000s with the collaboration of the International Atomic Energy Agency (IAEA), working in different regions and municipalities in Italy, and several pilot field trials with other institutions across the EU. What CAA has found through these studies is that SIT is a completely safe method without side effects and is used mainly for prevention rather than for epidemic control. The public perception for SIT is high, however, the main barrier that remains on SIT use is the cost.

Some Member States asked to have more guidance and share experiences on the methods to be used nationally and at EU level, as well as to have further discussion on how to develop plans to respond to possible importation/introduction of *Aedes aegypti*.

**6. Public health measures by EU counties ahead of summer events/touristic season**

The Italian Ministry of Health gave an update on the recommendations on prevention and control of vector importation at points of entry and their actions on preparedness for the 2024 summer season. To prevent the importation of *Aedes aegypti*, the measures undertaken are defined under the National Plan for Prevention, Surveillance and Response of Arboviruses, and other documents issued by the Italian Ministry of Health. Italy has put in place vector control measures at points of entries, including at harbors and airports, and for the importation of goods at risk. For the 2024 summer season, the Italian Ministry of Health has recommended regional authorities strengthen surveillance; implement planned environmental clean-up actions; provide for the preparation of local vector monitoring and control measures; identify potential sites at risk of introduction and spread of invasive mosquito species; train health care personnel and cleanup workers; and provide communication activities to increase awareness (in schools, urban areas, recreational-sport venues, etc.). The Italian Ministry of Health is also working on evaluating the case definition of a new "possible case" to promptly identify autochthonous dengue cases.

The Greek Ministry of Health gave an overview of their action plan for West Nile virus infection and enhanced vector surveillance in Greece. Vector management in Greece is the responsibility of local authorities but there are nationwide recommendations on preventive measures. Some of these recommendations include breeding site management, application of larvicides and adulticides, and the personal use of mosquitos' repellents. Greece has active mosquito surveillance, with bimonthly sampling from May to November in 222 sites nationwide. Given that the West Nile Virus and *Aedes albopictus* are well established in Greece there are public health measures in place such as enhanced

surveillance in humans and animals; enhanced laboratory diagnosis capacity; communication campaigns; case management blood safety measures; vector surveillance and control; and multi-sectoral collaboration. On *Aedes aegypti*, Greece has recommendations for Standard Operating Procedures for vector surveillance and control activities at ports and airports and measures for high-risk goods coming from countries with established *Aedes aegypti* populations.

#### **7. Outcomes on questions to EU/EEA countries and discussion**

DG SANTE shared the results of a survey sent to the GWG HSC members to guide the discussion as well as to plan support activities from the European Commission in the coming workplans. The outcomes show how several countries have either a national plan in place or guidelines for mosquito control. Some countries reported challenges in procuring some biocides and that having more options available would be important. None of the countries who replied to the survey (21), performs systematically resistance testing. From the survey, the main areas for which there would be need for support are human surveillance and practices related to safety of substances of human origin (SoHO).