

LOVCEN

Surveillance of invasive and native mosquito vectors
and pathogen they transmit in Montenegro



How
much
does
mosquito
bite cost?

www.project-lovcen.me



Just one bite is all it takes!
Mosquitoes are the most dangerous animals on Earth because they can pass on deadly and debilitating diseases:

Malaria - fever, fatigue, vomiting, headaches, seizures, coma, death

West Nile virus - fever, headaches, fatigue, muscle pain, nausea, vomiting, death

Chikungunya - fever, joint pain, rash, headache, fatigue, conjunctivitis

Dengue fever - high fever, headache, vomiting, joint pains, skin rash, death

Zika virus - microcephaly, other severe brain problems

No cure!



\$47 Mil.

The estimated cost of the West Nile virus outbreak in Texas in 2012 exceeded \$47 million, with average cost of \$25,000 per patient (with hospitalization costs and absence from work included) and outpatient treatment cost of \$1,200 per patient.

The average yearly economic cost caused by dengue in Puerto Rico is over \$38 million, average per patient cost for non-hospitalized versus hospitalized patients was estimated at \$1.610 versus \$17.803, respectively.

\$38 Mil.

€6.16 Mil.

The benefit-cost ratio of 8.64, indicates that each \$1 spent on control of Asian tiger mosquito in New Jersey provides opportunity to earn more than \$8 in outdoor activities. In Rhine Valley Germany, with 2.000.000 inhabitants, it is assessed that appropriate mosquito control, creates estimated surplus of €6.165 million, gained through tourism and related activities.

We are working on:

- identification of mosquito species present in Montenegro and their distribution
- identification of mosquito vector species
- detection of pathogens carried by mosquito vector species
- application of SIT in invasive mosquito control
- modelling of climate changes influence on MV and MBD
- implementation of the "Guidelines for the surveillance of invasive mosquitoes in Europe" by European Centre for Diseases Prevention and Control (ECDC)
- creation and implementation of mobile phone application for surveillance of invasive and indigenous mosquito species
- evaluation of novel non-pesticide, biodegradable materials for control of mosquito larvae
- survey of stakeholder's opinion, social impact and policz recommendation for National program of vector mosquito surveillance and control

