

Identification of disease vectors from foreign deployment sites of the Belgian armed forces using DNA-based technologies

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Mosquito-borne diseases impact humans in almost every part of the world. Besides arboviruses, mosquitoes are also vectors of other pathogens of significant public health concern. Mosquito prevention/control measures help reduce the impact and spread of these diseases. In this framework, the Medical Component of the Belgian Armed Forces has launched a pilot project to investigate the Culicidae biodiversity at foreign sites where the Belgian Army is deployed, in order to minimize mosquito-borne disease threats

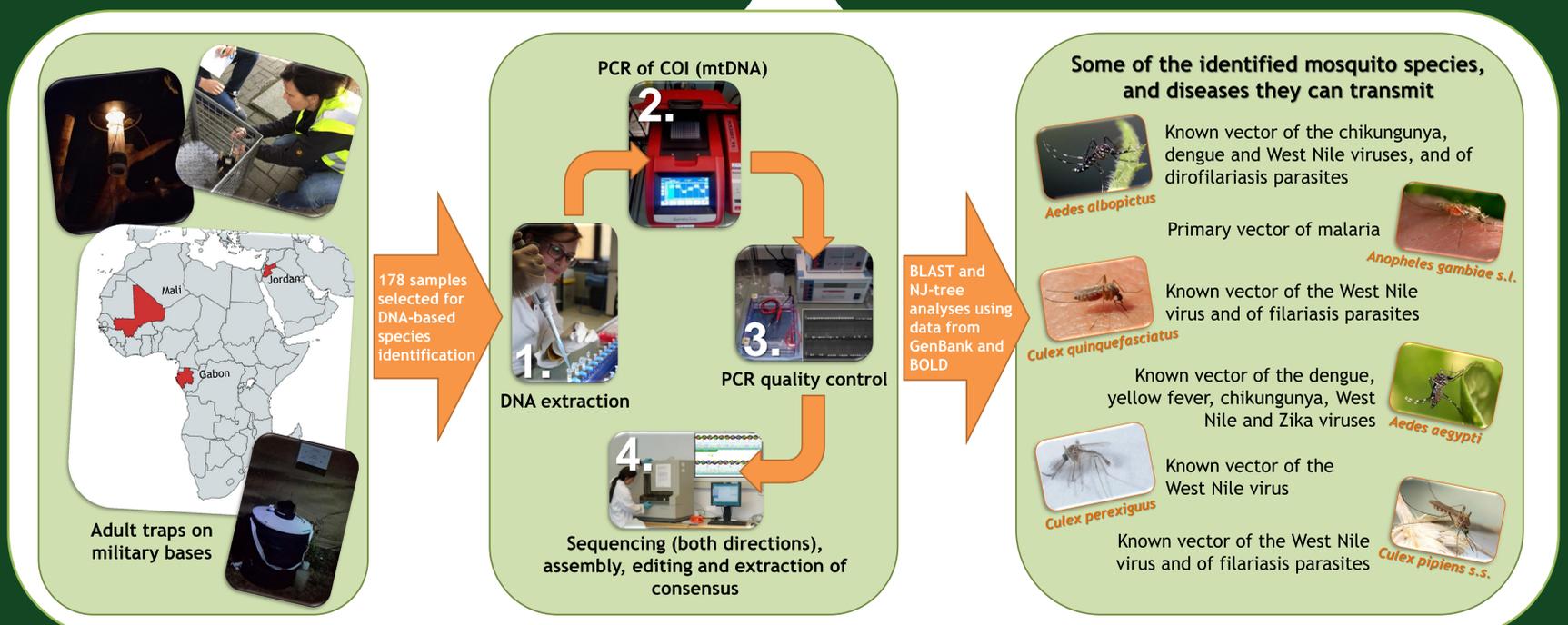
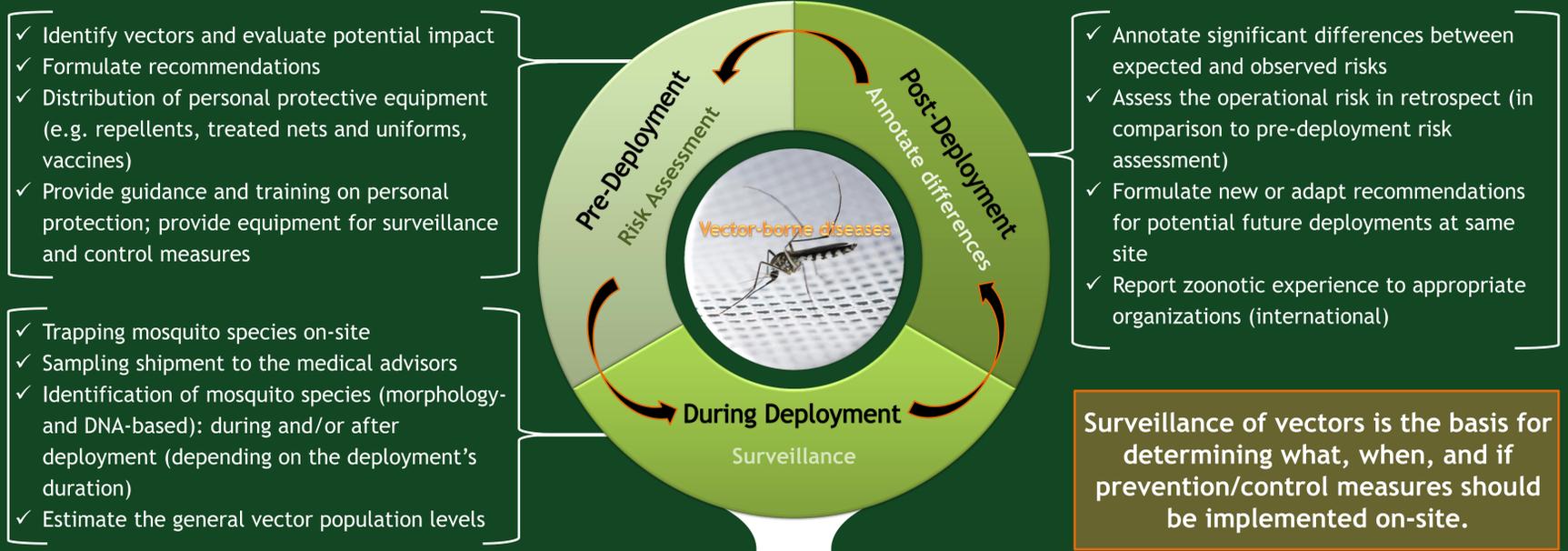
during deployments. Indeed, besides potentially affecting the soldiers' health, diseases can compromise the mission. Medical advisors are assessing the risks and supporting the commander by providing technical advice and training with regard to the prevention and control of mosquito-borne diseases. As support, BopCo provides DNA-based species identifications of mosquitoes to the Laboratory for Vector-Borne Diseases of the Queen Astrid Military Hospital, collected during the on-site surveillance phase.

INTRODUCTION

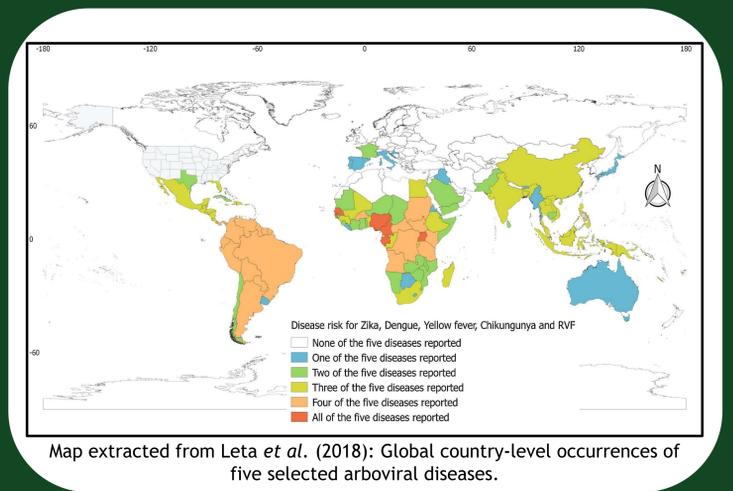
MATERIAL, METHODS AND RESULTS

CONCLUSION

Deployment Vector Management Strategy



➔ Besides providing essential information to set up mosquito prevention and/or control measures at deployment sites, the present results also support the importance of treating army equipment appropriately when returning to Belgium in order to avoid unintentional introductions of exotic mosquito disease vectors.



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