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### P35. Malaria surveillance in Italy: a public health topic of relevance

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**INTRODUCTION.** The re-emergence of malaria transmission chains in Greece has aroused concern in other Mediterranean Countries, such as Italy where the local vector *Anopheles labranchiae* is still recorded in Central-Southern regions and in the major islands. In those areas, the presence and abundance of the competent vector combined with the occurrence of gametocyte carriers, as possible reservoirs of infection, in a climatically favorable environment could induce the onset of introduced autochthonous cases. For this reason, in Italy imported malaria is a mandatory reportable disease, and a reliable National Surveillance System has been implemented by Istituto Superiore di Sanità (ISS) and Ministero della Salute to prevent malaria re-emergence by monitoring imported cases, promptly responding in autochthonous events, and providing guidance to travelers to endemic areas.

**MATERIALS AND METHODS.** At the ISS all notified cases were confirmed microscopically; demographic and epidemiological data were included in a dedicated database; molecular and genotypic analyses were also carried out for specific cases.

**RESULTS AND CONCLUSIONS.** The analysis of provisional 2013-2017 data showed 3,805 imported cases (677-888/year), 17% of which among Italians, while the most significant group was represented by settled immigrants. Twelve cases were autochthonous, 4 induced and 8 cryptic, with a peak of 7 cases occurred in summer 2017 that created a great concern for public health. Eight deaths were reported. *Plasmodium falciparum* was the most frequent diagnosis, mainly acquired in sub-Saharan Africa, although an increase in *P.vivax* cases was observed. Out of 517 *P. vivax* cases, 395 (76%) were potentially infecting and 304 (77%) occurred in a period favorable to malaria transmission (May-October). In Italy the potential occurrence of local malaria cases would be mainly associated to *P. vivax*, an early gametocyte-production species for which *An. labranchiae* is highly competent. Massive arrivals of migrants from endemic areas could introduce reserves of infection and local factors could place migrants and communities residing in the same way, in vulnerable situations, but migration is not a definitive risk for malaria. (Malaria and Migration, Southeast Asian J. Trop. Med. Public. Health, 2013, 44(Supp.1), chapter 4:166-200). Efforts should be paid to monitor migrants' health and to promptly respond in case of autochthonous malaria events.