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Poster Abstracts**



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**Malaria in Canadian VFRs and Migrants: Surveillance Report from CanTravNet, April 2013 — March 2018**

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**Background:** Malaria continues to be a top travel-acquired cause of morbidity among ill returning VFRs and migrants to Canada. We examined the demographic and travel correlates of Canadian VFRs and migrants with malaria over a 5-year period to illuminate the characteristics of this disease in our traveling population.

**Methods:** Data on returned VFR travelers and migrants presenting to a Canadian GeoSentinel Surveillance network (CanTravNet) site between April 2013 and March 2018 who were diagnosed with malaria were analyzed.

**Results:** Of 4434 VFR travelers and migrants in the CanTravNet database over the enrolment period, 308 (6.9%) were diagnosed with malaria, representing 3.4% of migrants (84/2478) and 11.5% of VFR travelers (224/1956), and, collectively, 64% (308/484) of all malaria cases reported. Median age of VFR travelers and migrants was 32 years (range 1 - 83 years; IQR 19-47 years), with males accounting for 57.8% of cases (n=178), and females 42.2% (n=130). Among VFR travelers and migrants with malaria, 27% (n=84) traveled for migration while 73% (n=224) traveled to VFR. Nigeria was the most common source country, accounting for 57 cases (18.5%), followed by Cameroon (n=32, 10.4%), DRC (n=23, 7.5%), Cote d'Ivoire (n=22, 7.1%), Ghana (n=19, 6.2%), and India (n=19, 6.2%). *Plasmodium falciparum* was the most well represented species amongst malaria cases in migrants (n=45, 54%) and VFRs (n=169, 75%), followed by *P. vivax* (n=17 [20%] in migrants, and n=19 [8%] in VFRs). *P. ovale* accounted for 8% of total cases (n=26), with 12 cases (14%) in migrants, and 14 (6%) in VFRs. Thirty-five cases (11.4%) of malaria in the cohort of returned VFRs and migrants were severe or complicated.

**Conclusions:** VFR travelers and migrants account for the majority of malaria cases in travelers presenting to CanTravNet sites over 5 years, with severe malaria occurring in over 10% of cases. These data underscore the high potential for malaria-associated morbidity and mortality in VFR travelers and migrants, thus, clinicians should promptly exclude malaria when encountering fever in this population. West Africa continues to be the dominant source region for malaria imported to Canada.