## 4.1 Malaria

## Summary

Number of cases: 88

Crude incidence rate<sup>1</sup>: 1.8/100,000

1 Rates calculated per 100,000 population as per Census 2016

In 2016, 88 malaria cases were notified in Ireland, an increase of 8.6% in comparison to 81 cases reported in 2015 (Figure 1). Among European Union (EU) member states reporting malaria data to the European Centre for Disease Prevention and Control, Ireland had the fifth highest incidence rate for imported malaria in 2014 (the latest year for which comparative data are available); only Belgium, Norway, Sweden and the United Kingdom had higher reported incidence rates.

In common with the rest of the EU, males predominated with a male:female ratio of 2.2:1.0. The highest numbers of cases were aged between 25 and 54 years. The number of paediatric cases reported was 14, an increase compared to six cases reported during 2015 (Figure 1). Nine paediatric cases did not have details on endemic areas visited, reason for travel or on malarial prophylaxis taken. For the five paediatric cases with such details reported, all reported visiting family in their country of origin as their reason for travel to countries in sub-Saharan Africa. Of these five paediatric cases, only one reported taking malaria

prophylaxis but no details on compliance were available for this case. Three paediatric cases reported not taking any prophylaxis for their travel, while the remaining paediatric case did not have information on prophylaxis reported.

Among all age groups, the category of traveller most affected in Ireland continued to be African immigrants and their families who were exposed while returning to visit family in their country of origin. This almost certainly reflects the greater frequency with which this group travels to malarious areas, but also reflects Ireland's importance as a destination for those emigrating from English speaking West Africa. Of the 31 cases (35.2%) in 2016 where reason for travel was reported, 61.3% cited visiting family in their country of origin, all of whom travelled to Africa. Other reasons cited for travel this year were business/professional travel (n=6), Irish citizen living abroad (n=2), other reason for travel (n=2), foreign visitor ill in Ireland (n=1) and new entrant to Ireland (n=1).

Probable country of infection was reported for 36 cases (40.9%). Nigeria remained the country most frequently visited, accounting for 52.8% of cases where country of infection was reported. The remaining 17 cases were exposed in 13 other countries within Africa and one case acquired their infection in India. The majority of cases who reported travel to Nigeria were visiting family in country of origin (16/19) with known reason for travel. One case reported no

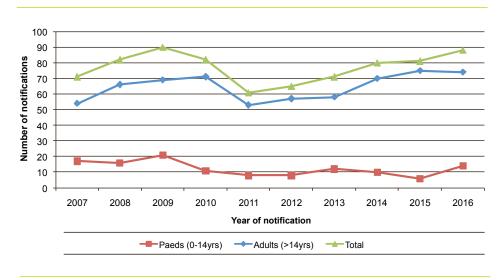


Figure 1: Annual number of malaria notifications by age, Ireland 2007-2016

recent history of travel to an endemic area. This case was thought to have acquired their malaria in an airport in a non-endemic country.

Plasmodium falciparum accounted for 86.9% of infections in 2016, reflecting the dominance of exposure in Africa as the source of the majority of notifications. Five cases of *P. ovale*, five cases of *P. vivax* and one case of *P. malariae* were also reported. The remaining four cases did not have *Plasmodium* species specified.

HPSC resources for health professional include a poster which can be downloaded from the HPSC website for display in GP surgeries, maternity/paediatric hospitals and emergency departments. The material advises immigrant families travelling to Africa to consult their doctor about malaria before travelling. A leaflet for intending travellers, available in English and French, highlights the value of antimalarial prophylaxis and protection against mosquito bites. Clinical Guidelines on the Management of Suspected Malaria are also available on the HPSC website.

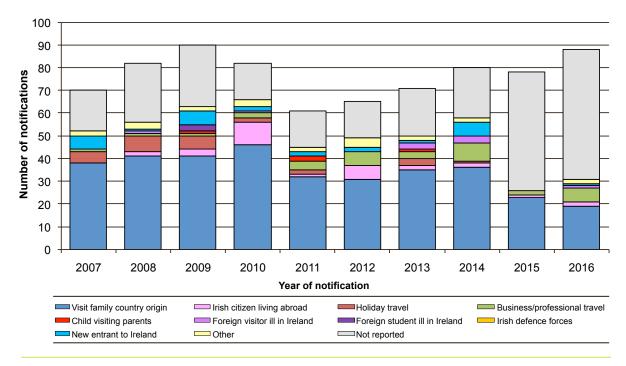


Figure 2: Annual number of notifications malaria by reason for travel, Ireland 2007-2016