4.2 Malaria

Summary

Number of cases, 2008: 82 Number of cases, 2007: 71 Crude incidence rate, 2008: 1.9/100,000 International information on malaria is available at http://www.who.int/malaria/

In 2008, 82 cases of malaria were notified (Figure). This is an increase of 15% on the number reported in 2007, and equates to a crude annual incidence rate of 1.9 per 100,000 (95% C.I. 1.5-2.4).

Cases ranged in age from 0 to 56 years (mean 28 yrs, median 32 years), and male cases (n=48) were more common than female cases (n=34). Paediatric cases accounted for 16 cases (almost 20%), with an additional 70% of cases between the ages of 20 and 50.

Malaria, in particular that caused by *P* falciparum, can cause severe illness, and this year 49 malaria cases in Ireland were hospitalised as a result of their illness, This represents around 80% of the notifications where hospitalisation status was reported. A further seven cases were hospital out-patients, two were hospital daypatients, two were GP patients, with the hospitalisation status of the remainder not known or not reported. No deaths due to malaria were reported to HPSC in 2008.

The vast majority of infections reported in Ireland are due to recent exposure in a country endemic for malaria. As has been the case for the last few years, the vast majority of cases were exposed in sub-Saharan Africa, with a small number of cases associated with exposure in Asia and South America (Table 1). There were no cases of airport, congenital, induced or introduced malaria reported, although two *P. ovale* cases were reported as relapsed infections.

The most common species reported was *P. falciparum*, accounting for 83% of all cases notified (n=68). There were also two *P. vivax*, three *P. ovale*, two *P. malariae*, two mixed infections, and five cases where the species was not specified. *P. falciparum* has been the most common species among notifications in Ireland since species information was first collected in 2001. This reflects the fact that most infections in Ireland were acquired in Africa.

Based on information provided on the cases reason for travelling, the largest subgroup identified in 2008 was people who had travelled to visit family/friends in their country of origin –over 70% of those for whom the information was available (Table 2). This included nine children who were born in Ireland (age range 0-16



Figure. Number of malaria notifications, Ireland 1982-2008

years). Seven cases were exposed during holiday travel, two were Irish citizens living abroad, one was a visitor to Ireland from an endemic country, one was a new entrant and three reported their reason for travel as 'other' (Table 2).

Only five cases reported being fully compliant with advice received on prophylaxis. A further seven cases took prophlaxis but failed to complete the course, while 41 cases took no prophylaxis. No information was available for the remaining cases.

The epidemiology of malaria in Ireland bears many similarities with that in the United Kingdom, with the highest burden of illness being borne by people of African origin travelling to visit family in their country of origin. For more information see http://www.hpa.org.uk/hpr/archives/2009/hpr1609.pdf

Table 1: Malaria notifications by country of exposure, Ireland 2008

Country of exposure	Number notifications	% notifications		
Sub-saharan Africa	58	71%		
Nigeria	49	60%		
Other that Nigeria	9	11%		
Asia	1	1%		
South America	1	1%		
Not reported	22	27%		
Total	82	100%		

Table 2: Malaria notifications by country of birth and reason for travel, Ireland 2008

	Country of birth					
Reason for travel	Nigeria	Other African country	Ireland	Other non- endemic country	Not specified	Total
Visiting family/friends in country of origin	25	2	9		5	41
Holiday travel	2	2		1	2	7
Irish citizen living abroad			2			2
New entrant	1					1
Foreign visitor ill while in Ireland					1	1
Business/professional travel					1	1
Other			2	1		3
Unknown/not specified	2	1			23	26
Total	30	5	13	2	32	82

Protection from biting mosquitoes and appropriate prophylaxis can minimise the risk of malaria during travel in malarious regions.