



Health Protection Report

weekly report

Volume 2 Number 27 Published on: 4 July 2008

Current News

- ▶ Updated guidance on the management of STI outbreaks and incidents
- ▶ Head lice infection control advice

Infection Reports

Respiratory

- ▶ Laboratory reports of respiratory infections made to CfI from HPA and NHS laboratories in England and Wales: weeks 23-26/08

Travel Health

- ▶ Imported infections, England and Wales: January to March 2008

News

Volume 2 Number 27 Published on: 4 July 2008

- ▶ Updated guidance on the management of STI outbreaks
 - ▶ Head lice infection control advice
-

Updated guidance on the management of STI outbreaks

Updated guidance on the management of outbreaks/incidents of sexually transmitted infections at a local or regional level, with details of national support arrangements, has been posted on the HPA website.

The 12-page document describes the main elements of a localised STI outbreak plan, including a flowchart for the identification, control and evaluation phases, and guidance on recognition/declaration of outbreaks, the process of convening outbreak teams, as well as the handling of less serious incidents.

Guidance for Managing STI Outbreaks and Incidents [1] has been produced by the HIV/STI Department (Centre for Infections) and the Local and Regional Services Division of the HPA, in collaboration with the British Association for Sexual Health and HIV (BASHH); also in collaboration with the Public Health Medicine Environmental Group (PHMEG) and the British HIV Association.

The document comprises two sections:

- Principles of managing outbreaks/incidents of sexually transmitted infections
- Guidelines for managing local acute STI outbreaks

The second, main section describes how different organisations responsible for the control of STIs – particularly genitourinary medicine services, consultants in communicable disease control and directors of public health in PCTs – should collaborate with each other in the event of a suspected outbreak and, where appropriate, reach joint decisions on key issues.

The new guidance integrates into a single document previous web guidance and a toolkit on STI outbreaks and is intended to be a more succinct summary which will assist in recognition and management of acute outbreaks.

References

1. Guidance for managing STI outbreaks and incidents (May 2008), is available at: http://www.hpa.org.uk/web/HPAwebFile/HPAweb_C/1214553002033

Head lice infection control advice

A report on the prevention and control of head louse infection, first published in 1998 [1], has been updated [2] by the Public Health Medicine Environmental Group (PHMEG), the national professional organisation for Consultants in Communicable Disease Control (CCDC) in Great Britain and Ireland.

The document was originally published without references, in the form of a consensus statement, because there was at the time insufficient high-quality scientific research evidence available for the production of authoritative, evidence-based policies. Since then the recommendations have been widely adopted, and have provided information both for the public (an accompanying video has also been produced) and as a basis for the development of local policy by professionals.

In contrast to the original 1998 Stafford report, the 2008 update is fully referenced and explicitly identifies the strength of evidence behind each recommendation. The distinction made between statements which are supported by research and those which rely on consensus among the authors allows specialists to identify areas of care where there they may reasonably exercise clinical judgment.

References

1. Public Health Medicine Environment Group. Head lice: a report for Consultants in Communicable Disease Control (the 'Stafford report'), 1998. Available at: <http://www.phmeg.org.uk/>
2. Public Health Medicine Environment Group. Head lice: evidence-based guidelines based on the Stafford report - 2008 update, 2008. Available at: <http://www.phmeg.org.uk/>

Infection reports

Volume 2 Number 27 Published on: 4 July 2008

Respiratory

▶ **Laboratory reports of respiratory infections made to Cfl from HPA and NHS laboratories in England and Wales: weeks 23-26/08**

Laboratory reports of respiratory infections made to Cfl from HPA and NHS laboratories in England and Wales: weeks 23-26/08

Table 1 Reports of influenza infection made to Cfl, by week of report

Week	Week 23	Week 24	Week 25	Week 26	Total
Week ending	08/06/08	15/06/08	22/6/08	29/06/08	
Influenza A	3	4	2	–	9
Isolation	–	–	–	–	–
DIF	2	–	–	–	2
Four-fold rise in paired sera	–	–	–	–	–
PCR	–	3	1	–	4
Other	1	1	1	–	3
Influenza B	9	4	4	12	29
Isolation	1	–	–	2	3
DIF	1	–	–	–	1
Four-fold rise in paired sera	–	–	–	–	–
PCR	1	3	2	–	6
Other	6	1	2	10	19
Influenza (untyped)	–	–	–	–	–
Isolation	–	–	–	–	–
DIF	–	–	–	–	–
Four-fold rise in paired sera	–	–	–	–	–
PCR	–	–	–	–	–
Other	–	–	–	–	–

DIF = Direct Immunofluorescence.

Other = 'Antibody detection - Single high titre' or 'method not specified'.

Table 2 Respiratory viral detections by any method (culture, direct immunofluorescence, PCR, four-fold rise in paired sera, single high serology titre), by week of report

Week	Week 23	Week 24	Week 25	Week 26	Total
Week ending	08/06/08	15/06/08	22/6/08	29/06/08	
Adenovirus [*]	15	17	15	10	57
Coronavirus	1	–	–	2	3
Parainfluenza [†]	35	44	40	26	145
Rhinovirus	16	26	14	36	92
Respiratory Syncytial Virus (RSV)	9	9	4	6	28

* Respiratory samples only. Excludes diagnoses made by electron microscopy (EM).

† Includes parainfluenza types 1, 2, 3, 4 and untyped.

Table 3 Respiratory viral detections by age group, data for weeks 23-26/2008

Age group (years)	<1 year	1-4 years	5-14 years	15-44 years	45-64 years	≥65 years	Un-known	Total
Adenovirus [*]	21	20	4	5	4	3	–	57
Coronavirus	–	–	–	1	1	1	–	3
Influenza A	3	–	–	1	3	2	–	9
Influenza B	–	1	1	12	6	9	–	29
Parainfluenza [†]	75	30	7	14	13	6	–	145
Rhinovirus	36	21	4	14	11	6	–	92
Respiratory syncytial virus (RSV)	20	2	–	2	2	2	–	28

* Respiratory samples only.

† Includes parainfluenza types 1, 2, 3, 4, and untyped.

Table 4 Laboratory reports of infections associated with atypical pneumonia, by week of report

Week	Week 23	Week 24	Week 25	Week 26	Total
Week ending	08/06/08	15/06/08	22/6/08	29/06/08	
<i>Coxiella burnetii</i>	–	–	2	1	3
Respiratory <i>Chlamydia</i> sp. [*]	4	4	1	4	13
<i>Mycoplasma pneumoniae</i>	5	16	3	8	32
Legionella sp.	9	5	5	7	26

* Includes *Chlamydia psittaci*, *Chlamydia pneumoniae*, and *Chlamydia* sp detected from blood, serum, and respiratory specimens.

Table 5a Reports of legionnaires' disease cases in England and Wales, by week of report

Week	Week 23	Week 24	Week 25	Week 26	Total
Week ending	08/06/08	15/06/08	22/6/08	29/06/08	
Nosocomial	–	–	1	1	2
Community	3	2	3	5	13
Travel Abroad	6	3	1	1	11
Travel UK	–	–	–	–	–
Total	9	5	5	7	26
Male	7	3	4	4	18
Female	2	2	1	3	8

Twenty-six cases were reported with pneumonia; 18 males aged 28-77 years and eight females aged 27-85 years. Thirteen cases had community-acquired infection and two acquired infection in hospital. One death was reported in a 66 year old male.

Eleven cases were travel-associated: Andorra/France (1), Cuba (1), France (1), Greece (1), Italy/United Kingdom (1), Poland (1), Spain (3), Spain/United Kingdom (1) and Turkey (1).

Table 5b Reports of legionnaires' disease by region of report in England and Wales, weeks 23-26/2008

Region	Nosocomial	Community	Travel abroad	Travel UK	Total
North East	–	–	–	–	2
Yorkshire & Humber	–	–	–	–	0
East Midlands	–	1	–	–	1
East of England	–	1	1	–	2
London	1	5	2	–	8
South East	–	2	2	–	4
South West	–	1	–	–	1
West Midlands	1	3	–	–	4
North West	–	–	2	–	2
Wales	–	–	2	–	2
Total	2	13	11	–	26

Travel Health

Imported infections, England and Wales: January to March 2008

Imported infections, England and Wales: January to March 2008

The data presented in this report should be interpreted in conjunction with the report *Illness in England, Wales, and Northern Ireland associated with foreign travel – a baseline report to 2002* [1], especially the content under the section 'Sources of data on travel-associated illness and their limitations for analysis'. Please note that all data presented are provisional and subject to change; the confirmed final data will be presented on a biennial basis. All data presented in table 1 are for laboratory reports with specimen dates within the first quarter of 2008 unless specified otherwise. Travel-associated infections are generally under reported as information on travel history is incomplete through routine reporting mechanisms. For some infections listed in table 1 – such as malaria, the arboviruses, leishmaniasis, schistosomiasis, filariasis, trypanosomiasis, and *Rickettsia* spp – it is assumed that although no country of travel is given in the laboratory report, they are all foreign travel-related as they are not known to occur in the UK.

Table 1. Laboratory confirmed reports of infections associated with foreign travel, England and Wales: first quarter 2008

Organism	Total reports for Q1 (Jan - Mar)				Cumulative totals for Jan - Mar			
	2008*		2007		2008*		2007	
	Travel-related	All reports	Travel-related	All reports	Travel-related	All reports	Travel-related	All reports
Gastrointestinal Infections								
Bacterial								
<i>Salmonella</i> spp	387	1685	447	2278	387	1685	447	2278
<i>Campylobacter</i> spp	227	8053	259	8377	227	8053	259	8377
<i>Shigella flexneri</i>	11	92	7	77	11	92	7	77
<i>Shigella dysenteriae</i> †	7	12	1	5	-	-	-	-
<i>Shigella sonnei</i>	14	95	22	180	14	95	22	180
<i>Shigella boydii</i> †	17	27	17	29	-	-	-	-
Other (species unknown)	2	46	-	21	2	46	-	21
<i>Salmonella</i> Typhi	34	65	24	59	34	65	24	59
<i>Salmonella</i> Paratyphi (A,B,C)	39	62	26	39	39	62	26	39
<i>Vibrio cholerae</i> O1†	-	-	-	1	-	-	-	-
<i>Vibrio parahaemolyticus</i>	-	5	2	6	-	5	2	6
Protozoal								
<i>Entamoeba histolytica</i>	3	33	3	32	3	33	3	32
<i>Giardia lamblia</i>	59	657	69	612	59	657	69	612
<i>Cryptosporidium</i>	10	397	14	447	10	397	14	447
<i>Cyclospora</i> spp	2	4	1	4	2	4	1	4

Intestinal helminths									
<i>Strongyloides</i> spp	-	6	-	7	-	6	-	7	
Hookworm	3	7	2	4	3	7	2	4	
<i>Ascaris</i> spp (round worm)	2	12	2	9	2	12	2	9	
<i>Trichuris</i> spp (whip worm)	1	5	1	4	1	5	1	4	
<i>Hymenolepis</i> spp	-	-	1	2	-	-	1	2	
<i>Taenia</i> spp (tape worm)	-	16	6	24	-	16	6	24	
<i>Gnathostoma</i> spp	-	-	-	-	-	-	-	-	
<i>Diphyllobothrium latum</i> (fish tape worm)	-	1	-	-	-	1	-	-	
Arthropod-borne infections									
Malaria - total ‡	241	241	283	283	241	241	283	283	
<i>Plasmodium falciparum</i>	194	194	207	207	194	194	207	207	
<i>Pl. vivax</i>	25	25	39	39	25	25	39	39	
<i>Pl. malariae</i>	5	5	7	7	5	5	7	7	
<i>Pl. ovale</i>	15	15	26	26	15	15	26	26	
<i>Pl. unspesified</i>	-	-	-	-	-	-	-	-	
Mixed	2	2	4	4	2	2	4	4	
Other (<i>P. knowlesi</i>)	-	-	-	-	-	-	-	-	
Arboviruses									
Dengue virus ††	31	31	16	16	31	31	16	16	
Chikungunya virus ††	1	1	5	5	1	1	5	5	
Ross river virus ††	-	-	-	-	-	-	-	-	
Sandfly fever virus ††	-	-	1	1	-	-	1	1	
Eastern Equine Encephalitis ††	-	-	-	-	-	-	-	-	
West Nile virus ††	-	-	-	-	-	-	-	-	
Leishmaniases									
Cutaneous	8	8	5	5	8	8	5	5	
Visceral	3	3	2	2	3	3	2	2	
Unspecified	-	-	4	4	-	-	4	4	
Filariases									
<i>Loa loa</i>	-	-	-	-	-	-	-	-	
<i>Wuchereria bancrofti</i>	-	-	-	-	-	-	-	-	
<i>Mansonella perstans</i>	1	1	-	-	1	1	-	-	
<i>Onchocerca volvulus</i>	-	-	-	-	-	-	-	-	
Unspecified	-	-	-	-	-	-	-	-	
Lyme borreliosis §	7	82	NA	89	7	82	NA	89	
Trypanosomiasis	-	-	1	1	-	-	1	1	

Miscellaneous								
Schistosome infections								
<i>Schistosoma mansoni</i>	2	2	–	–	2	2	–	–
<i>Schistosoma haematobium</i>	7	7	3	13	7	7	3	13
<i>Schistosoma intercalatum</i>	–	–	–	–	–	–	–	–
<i>Schistosoma</i> spp	8	8	1	6	8	8	1	6
Other infections								
Leptospirosis §	2	7	2	10	2	7	2	10
Legionnaires' disease**	19	56	11	55	19	56	11	55
<i>Coxiella burnetii</i> (Q fever)	–	6	–	6	–	6	–	6
<i>Rickettsia</i> spp ‡‡	10	10	11	11	10	10	11	11

All data extracted from Labbase 10.06.08 unless otherwise specified.

* All data for 2008 are provisional and may be subject to change.

† Data on cholera, *S.boydii* and *S.dysenteriae* supplied by the CfI Laboratory of Enteric Pathogens.

‡ Data for malaria supplied by the HPA Malaria Reference Laboratory and are provisional. Trends are best interpreted on an annual basis.

§ Data for Lyme borreliosis and leptospirosis supplied by the Zoonoses Surveillance Reference Unit, CDSC Wales, on behalf of the Leptospira Reference Unit, Hereford and the Lyme Disease Reference Unit, Southampton.

** Data on legionnaires' disease supplied by the Legionella Section of the Respiratory Diseases Department of CfI.

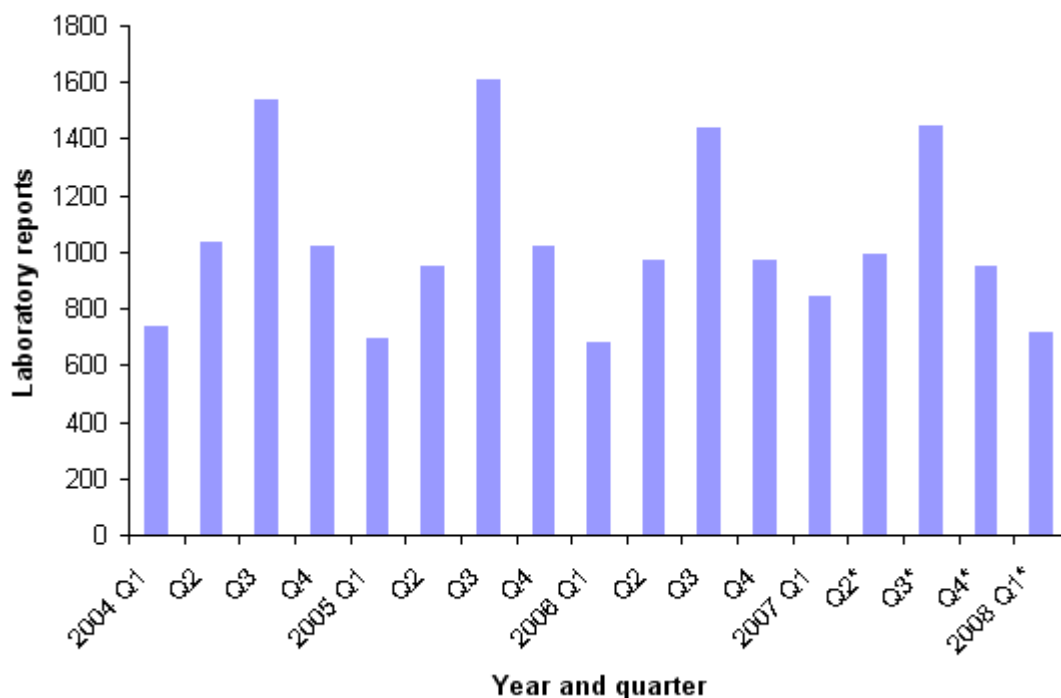
‡‡ Data from the Special Pathogens Reference Unit, Centre for Emergency Preparedness and Response.

NA Not available

Gastrointestinal infections

Gastrointestinal infections are the most common travel-associated infection; they can affect travellers worldwide. 'Travellers' diarrhoea' (TD) affects between 20% and 60% of overseas travellers [2]; the risk depends on the country visited. Although TD can occur in travellers all year round, there is a seasonal distribution, with the highest number of cases reported during the summer months [figure 1].

Figure 1. Laboratory reports of organisms† typically causing travellers' diarrhoea by quarter, England and Wales: 2004 – 2008



† Organisms include: *Salmonella* spp (non typhoid), *Campylobacter* spp, *V. parahaemolyticus*, *Shigella* spp, *Cryptosporidium*, *Giardia lamblia*.

* Provisional

Salmonella spp (non-typhoidal)

There were 1,685 laboratory reports of *Salmonella* spp, of which 387 (23%) were associated with recent travel abroad. *Salmonella* Enteritidis was the most common serovar associated with travel abroad (112/387, 29%), of which phage types (PT) 1, 4, 15, 8, 14B and 21 were most commonly reported [table 2].

Table 2. Laboratory reports of *Salmonella* Enteritidis associated with foreign travel, England and Wales: first quarter 2008.

Country of travel	<i>Salmonella</i> Enteritidis phage types (PTs)								Total
	PT 1	PT 4	PT 15	PT 8	PT 14B	PT 21	Other	PT not known	
Egypt	–	4	10	–	–	2	2	2	20
Portugal	2	–	–	4	–	–	1	1	8
India	2	–	–	–	–	2	1	1	6
Maldives	1	–	–	–	–	–	5	–	6
Spain	1	–	–	2	2	–	1	–	6
Singapore	3	–	–	–	–	–	1	–	4
Morocco	1	1	–	–	–	–	–	1	3
Thailand	1	1	–	–	–	–	1	–	3
Cuba	–	–	–	–	–	–	2	–	2
Cyprus	1	1	–	–	–	–	–	–	2
Dominican Republic	1	1	–	–	–	–	–	–	2
Guatemala	–	2	–	–	–	–	–	–	2
Kenya	–	–	1	–	–	–	–	1	2
Malta	–	–	–	–	–	1	1	–	2
Tunisia	–	–	–	–	2	–	–	–	2
Other (N=25)	3	2	1	2	2	1	1	3	15
Country not stated	8	–	–	3	5	3	6	2	27
Total	24	12	12	11	11	9	22	11	112

Other serovars reported were *S. Typhimurium* (53/387, 14%), *S. Virchow* (27, 7%), *S. Stanley* (16, 4%), and *S. Kentucky* (10, 3%) [table 3].

Table 3. Laboratory reports of other *Salmonella* spp associated with foreign travel, England and Wales: first quarter 2008.

Country of travel	<i>S Typhimurium</i>	<i>S Virchow</i>	<i>S Kentucky</i>	<i>S Newport</i>	Other	Total
Thailand	9	3	9	–	20	41
India	12	2	–	–	23	37
Egypt	3	8	1	6	17	35
Kenya	1	4	–	–	7	12
The Gambia	–	3	–	1	7	11
Pakistan	1	2	2	–	6	11
Mauritius	4	–	–	–	3	7
Nigeria	–	–	–	1	6	7
Malaysia	2	–	–	–	4	6
Morocco	2	–	–	1	2	5
South Africa	2	–	–	–	3	5
Africa	1	–	–	–	3	4
Spain	2	–	–	–	2	4

Bangladesh	–	1	–	–	2	3
Barbados	1	–	–	–	2	3
Tunisia	2	–	–	–	1	3
Gabon	–	1	–	–	1	2
Other (N=33)	6	–	–	–	40	46
Country not stated	5	3	4	1	20	33
Total	53	27	16	10	169	275

***Campylobacter* spp**

There were 8,053 laboratory reports of *Campylobacter* spp, of which 227 (3%) were associated with recent travel abroad. *Campylobacter* infections are mostly associated with travel to Spain and the Middle East in the summer months, reflecting UK travel patterns, but during the winter months, India is more often reported [table 4].

Table 4. Laboratory reports of *Campylobacter* spp associated with foreign travel, England and Wales: first quarter 2008.

Country of travel	<i>Campylobacter</i> spp
India	77
Spain	22
Morocco	15
Egypt	12
Thailand	12
Bangladesh	6
Pakistan	5
Caribbean	4
Hong Kong	3
Portugal	3
South America	3
Other (N=40)	58
Country not stated	7
Total	227

***Shigella* spp**

In total, there 272 reports of shigella infection in the first quarter of 2008, of which 51 (19%) were associated with foreign travel. Travel history information was available for 62% of both *S. boydii* and *S. dysenteriae* reports, but for only 31% for *S. sonnei* and *S. flexneri*. Countries of travel are listed for each species in table 5.

Table 5. Laboratory reports of *Shigella* spp associated with foreign travel, England and Wales: first quarter 2008

Country of travel	<i>Shigella</i> species					Total
	<i>S. boydii</i>	<i>S. sonnei</i>	<i>S. dysenteriae</i>	<i>S. flexneri</i>	<i>Shigella</i> unspecified	
India	2	8	5	4	1	20
Egypt	2	4	–	–	1	7
Pakistan	1	3	–	1	–	5
Cambodia	1	–	2	–	–	3

Madagascar	–	–	1	–	–	1
Nepal	1	–	–	–	–	1
Afghanistan	–	–	–	1	–	1
Cameroon	–	–	1	–	–	1
Morocco	1	–	–	–	–	1
Sudan	–	1	–	–	–	1
Ghana	–	1	–	–	–	1
Hong Kong	1	–	–	–	–	1
Kenya	–	–	1	–	–	1
Dominican Republic	–	–	1	–	–	1
Philippines	1	–	–	–	–	1
Cape Verde	–	–	1	–	–	1
East Africa	–	–	1	–	–	1
Somalia	1	–	–	–	–	1
Uganda	–	–	–	–	–	1
Country not stated	–	–	–	1	–	1
Total	11	17	14	7	2	51

Cryptosporidium

During the first quarter, there were 397 reports of *Cryptosporidium* reported via Co-Surv, of which 10 reports (2.5%) stated recent travel abroad. Countries of travel reported were Pakistan (two), Morocco, Egypt, Africa, France, Nepal, Cameroon, Viet Nam, and Australia and Korea (all one each). Sentinel surveillance submission forms to the UK *Cryptosporidium* Reference Unit (CRU) during the same time frame included 14 (12.5%) travel abroad-related cases [Rachel Chalmers, Head of UK *Cryptosporidium* Reference Unit, NPHS Wales, personal communication, 17 June 2008]. Travel-related cases were identified as *Cryptosporidium hominis* (Pakistan, four; India, two; Africa unspecified, two; Ethiopia, one; Zimbabwe, one; Kenya, one), *C. parvum* (Egypt, one; India, one), and *C. meleagridis* (Nepal, one). Travel-related *Cryptosporidium* is under-estimated by routine surveillance.

Giardia lamblia

There 657 giardia infections reported, of which 59 (9%) were associated with recent foreign travel. Countries of travel are listed in table 6.

Table 6. Laboratory reports of *Giardia lamblia* associated with foreign travel, England and Wales: first quarter 2008

Country of travel	<i>Giardia</i> reports
India	17
Thailand	7
Egypt	5
Congo	2
Madagascar	2
Other (N=22)	24
Country not stated	2
Total	59

Other intestinal protozoa

Other intestinal protozoa reported were *Entamoeba histolytica*; three out of a total of 33 were associated with recent foreign travel; countries reported were India, Ghana, and Viet Nam (one report each). There were four reports of infection with *Cyclospora*, of which two were associated with recent foreign travel (Sudan and Cambodia).

Enteric fever

During the first quarter of 2008, there were 65 reports of *S. Typhi* and 62 reports of *S. Paratyphi* (58 *S. Paratyphi A*, and four *S. Paratyphi B*).

Sixty-two per cent (34/65) of *S. Typhi* and 63% of *S. Paratyphi* (39/62) reports were associated with recent foreign travel. Countries of travel are listed in table 7. The Indian sub-continent remains the most reported region of travel for cases of enteric fever and is mainly associated with those visiting friends and relatives in their country of ethnic origin [3].

Table 7. Laboratory reports of enteric fever associated with foreign travel, England and Wales: first quarter 2008

Resort country	<i>Salmonella</i> spp			Total
	<i>S. Paratyphi A</i>	<i>S. Paratyphi B</i>	<i>S. Typhi</i>	
India	16	1	11	28
Pakistan	8	–	8	16
Bangladesh	6	–	8	14
Nepal	–	–	4	4
Afghanistan	–	–	1	1
Australia	1	–	–	1
China	–	1	–	1
The Gambia	6	–	2	8
Total	37	2	34	73

Intestinal helminths

In the first quarter of 2008, there were 547 reports of intestinal helminth infection, of which six were associated with recent foreign travel [table 8]. Helminth infections can persist in the body for months and it may not be possible to say for certain where these infections were acquired; they are probably associated with new entrants to the UK as well as short-term travellers.

Table 8. Intestinal helminths associated with recent foreign travel, England and Wales: first quarter 2008

Organism	Country of travel (reports)
<i>Ascaris</i> spp	Morocco (2)
Hookworm spp	Borneo (1) Not stated (2)
<i>Trichuris</i> spp	Bangladesh (1)

Arthropod-borne infections

Malaria

During the first quarter of 2008, there were 241 cases of malaria reported in the United Kingdom, 80% (194 cases) of which were caused by the parasite, *Plasmodium falciparum* and 10% (25 cases) were caused by *P. vivax*. Where country of travel was known, 77% (114/149) of malaria cases caused by *P. falciparum* were reported to be acquired in West Africa, and 74% (14/19) of *P. vivax* cases were reported to be acquired in Asia.

Dengue

Thirty-one cases (includes 10 confirmed and 21 probable) were reported by the HPA Special

Pathogens Reference Unit (SPRU) in the first quarter. Of those, 24 had information about country of travel. The majority of cases reported recent travel to Asia: eight to South East Asia (including Indonesia, Malaysia, Philippines, Thailand, and Viet Nam) and seven to the Indian sub-continent (India and Sri Lanka). Other countries of travel reported included Barbados, Brazil, Mexico, Tonga, and Namibia.

Chikungunya

There was one case of confirmed chikungunya infection reported by the HPA Special Pathogens Reference Unit (SPRU) that had reported recent travel to Sri Lanka.

Leishmaniasis

There were 11 cases of leishmaniasis reported in the first quarter, eight of which were presumed to be cutaneous leishmaniasis and three were visceral leishmaniasis; there was no country of travel reported for any of the cases.

Lyme borreliosis

In the first quarter of 2008, there were 82 laboratory confirmed reports of Lyme borreliosis, compared with 89 reports in the same quarter of 2007.

A travel history was reported by seven individuals (five males, two females) with travel to the United States, Hungary, Sweden, Germany and the Czech Republic; one patient was a Swedish resident and one resident in Eastern Europe. Two of those reporting travel histories were known to have had pre-existing infections. Five reported having received a tick bite.

The full range of clinical and epidemiological information is not available at this stage and the information provided will be subject to further revision.

Other infections

Schistosomiasis

There were 17 reports of infection with *Schistosoma* spp, of which seven were *S. haematobium* and two were *S. mansoni*. Only two *S. haematobium* reports had information about travel; one travelled to Malawi and the other to Zimbabwe.

Rickettsial infections

There were 10 cases of rickettsial infection reported by the SPRU in the first quarter. One was confirmed as epidemic typhus with travel to Thailand and one confirmed as spotted fever with no travel history; eight were probable spotted fever (four had no country of travel, the others reported travel to Kenya, Mauritius, Africa (unspecified), and India).

Legionnaires' disease

There were 73 cases of legionnaires' disease reported in the third quarter, of which 29 (40%) were associated with foreign travel. Most cases are sporadic but five of the travel-associated cases were involved in four different outbreaks occurring in Tunisia, China, Italy, and two cases occurred on a cruise.

Leptospirosis

In the first quarter of 2008, there were seven cases of leptospirosis (two *L. icterohaemorrhagiae*, one *L. hardjo* and three for which the serovar has not been identified). All the cases were males in the 25 to 64 year age group. Two cases are known to have acquired their infections overseas, one in the Dominican Republic (*L. icterohaemorrhagiae*) and one in Nigeria (serovar undetermined). The nature of the activities undertaken or the risk factors involved are unknown.

References

1. Health Protection Agency. *Illness in England, Wales, and Northern Ireland associated with foreign travel – a baseline report to 2002*. London: HPA, 2004. Available at http://www.hpa.org.uk/webw/HPAweb&HPAwebStandard/HPAweb_C/1203496904956?p=1158945066450.
2. National Travel Health Network and Centre. *Prevention of food and waterborne diseases (information sheet)*: London: NaTHNaC, November 2006. Available at <http://www.nathnac.org/pro/factsheets/food.htm>.
3. Health Protection Agency. *Pilot of enhanced surveillance of enteric fever in England, Wales and Northern Ireland, 1 May 2006 to 30 April 2007*. London: Health Protection Agency, March 2008. Available at http://www.hpa.org.uk/web/HPAwebFile/HPAweb_C/1206575041711.