



# CDR WEEKLY

*the Communicable Disease Report Weekly*

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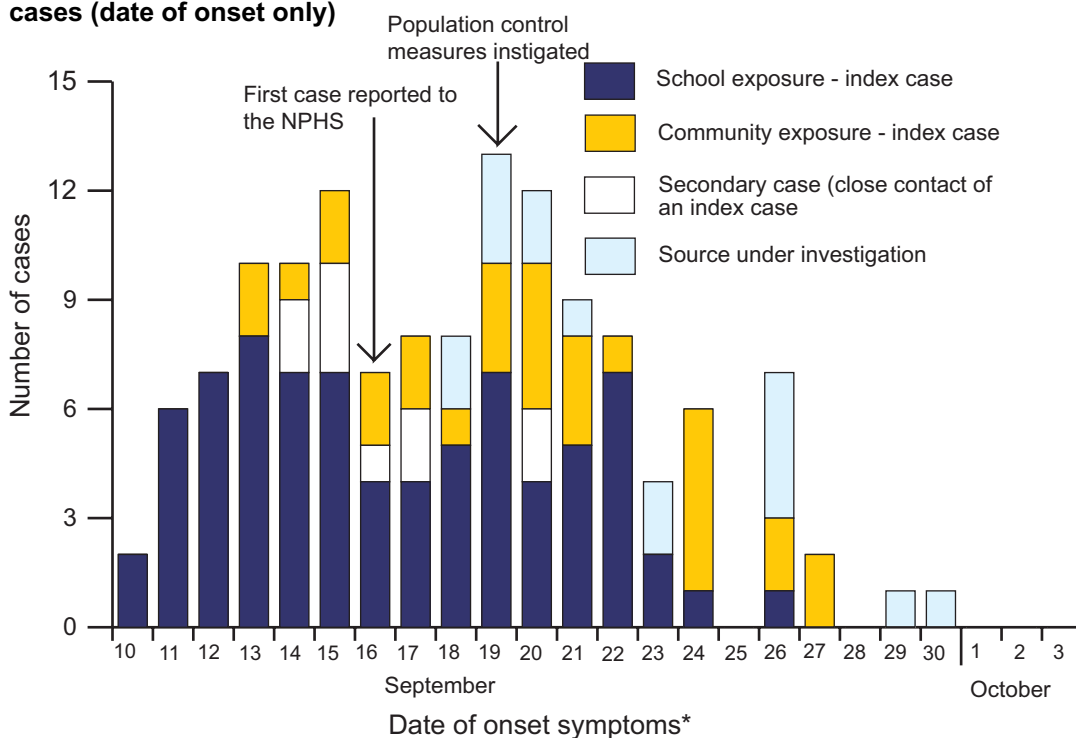
## News

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### Vero-cytotoxin producing *E. coli* O157 (VTEC O157) outbreak in the south Wales valleys: update

As of Monday 3 October 2005, there have been 157 reported cases (defined as any person residing in south Wales presenting with bloody diarrhoea in September or with a faecal isolate of presumptive vero-cytotoxin producing *E. coli* O157) of which 97 have been confirmed microbiologically (1). The Laboratory of Enteric Pathogens (LEP), Health Protection Agency Centre for Infections, has so far confirmed 81 isolates as VTEC O157 (PT) 21/28 with genes for vero-cytotoxin (VT) 2, and one isolate as PT32, VT2. Of four other cases, three were infected with VT-negative strains of PT1, and there was one isolate of PT8, VT1+2. These have been excluded from the case list as they have plausible alternative histories not linked to the outbreak, to explain their infection.

**Figure Vero-cytotoxin producing *E. coli* O157 Outbreak in South Wales September and October 2005, number of cases (date of onset only)**



\*Of a total of 157 reported cases, 24 cases have as yet no known date of onset. The overall number of cases shown is, therefore, 133.

Of the 157 cases (67 are males and 90 females) 65% (102/157) are in school aged children. Onset dates range from 10 to 30 September (figure) with over forty schools recording cases. There has been one death in a male aged 5 years.

Evidence exists to suggest a link between the outbreak and a supplier of cooked meats to the school meals services.

The distribution of cases with a small number of cases in a large number of schools suggested a centrally distributed

product with low levels of contamination rather than a problem in individual schools. This was followed by secondary person-to-person spread.

Of 10 primary cases with early onset (before 17 September) in school children, contacted between 16 and 20 September, had all eaten school dinners compared with 8 of 13 controls selected at random from the school register ( $p < 0.05$ ). Overall, approximately 60% of children in the local authority areas take school dinners each day.

A single main supplier distributes cooked meats to the affected schools. Cooked meats have been associated with *E. coli* O157 outbreaks in the past. Practices that could result in contamination of cooked meat at the supplier's premises were the subject of enforcement action by the supplier's home local authority on 19 September 2005. The Food Standards Agency Wales also issued a food alert on 21 September 2005.

The National Public Health Service for Wales Laboratory in Cardiff has isolated *E. coli* O157 from three samples of sliced cooked meat obtained by Environmental Health staff. Isolates have been confirmed by LEP as PT21/28, VT2 and examined by pulse-field gel electrophoresis (PFGE). Results, so far, on cultures from two samples have shown that PFGE profiles of strains from the food samples are indistinguishable from those found in people with the infection. PFGE typing work is continuing on the third strain. Contaminated cooked meats have been associated with previous outbreaks of VTEC O157 infection in the United Kingdom (2,3).

Control measures to remove ready-to-eat foods (as opposed to foods cooked on the premises) and to curtail educational activities which might facilitate person-to-person spread have been in place since the week beginning 19 September and are kept under review by the outbreak control team.

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## Enhanced influenza surveillance: winter 2005/2006

Annually, the beginning of October marks the start of the enhanced surveillance for seasonal influenza and other respiratory viruses in the United Kingdom (UK). In previous years the peak of influenza activity has occurred between October and May in the UK and the impact of the disease on the population has been dependent on the strain of influenza circulating that year.

The data collected by the enhanced influenza surveillance carried out by the Health Protection Agency (HPA) Centre for Infections is summarised in regular influenza reports which provide comprehensive information on the clinical and virological indicators of influenza activity throughout the influenza season (October to May)\*.

An aspect of this surveillance is the annual monitoring of influenza vaccine uptake in England, co-ordinated by the HPA on behalf of the Department of Health (DH). Influenza vaccine has been recommended for every person aged 65 years and over since 2000, in addition to those other high-risk groups aged under 65 years including health care workers, carers, and those in long-term residential care (1). Influenza vaccine uptake among all of these groups, except for those in long-term care and carers, will be collected electronically through a website-based reporting system during the 2005/2006 influenza season.

### Avian flu (H5N1) current situation

The avian influenza A (H5N1) situation in Asia continues to be monitored by the HPA. Pandemic planning information and situation updates can be found on the HPA Avian Influenza website at: [www.hpa.org.uk/infections/topics\\_az/avianinfluenza/menu.htm](http://www.hpa.org.uk/infections/topics_az/avianinfluenza/menu.htm).

Since December 2003 a total of 116 laboratory confirmed cases of human influenza A (H5N1) have been identified, of which 60 have died. The World Health Organization (WHO) have recently published a review of the human avian influenza A (H5N1) cases to date (2) and a document detailing the recommended strategic actions that countries should adopt to prepare for a possible influenza pandemic (3).

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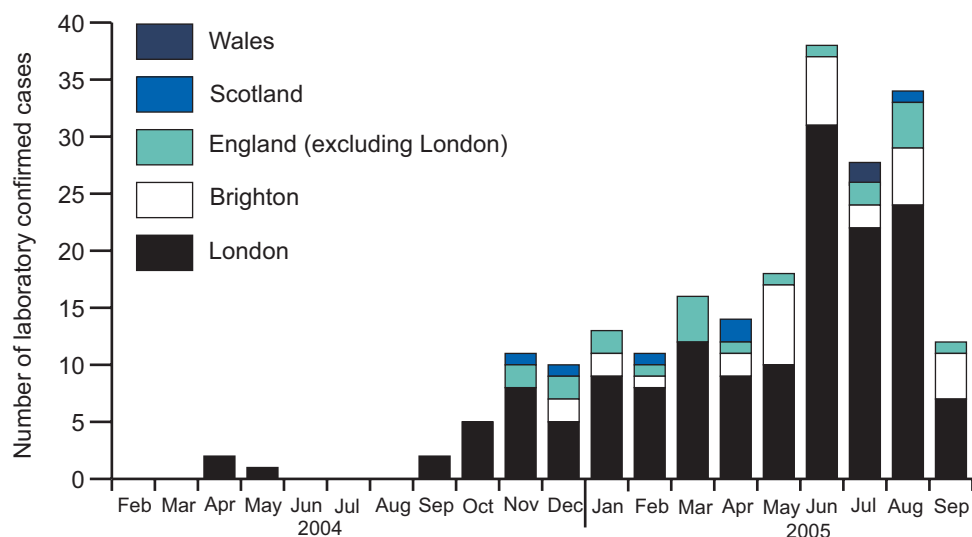
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\*If you wish to receive these reports by e-mail please send your name and email address to [respcdsc@HPA.org.uk](mailto:respcdsc@HPA.org.uk)

## Lymphogranuloma Venereum (LGV) in men who have sex with men (MSM) in the UK: an update

Data to the end of September 2005 for the enhanced surveillance of Lymphogranuloma Venereum (LGV) programme in the United Kingdom, (UK) reveals a total of 215 cases (confirmed by the Health Protection Agency Sexually Transmitted Bacteria Reference laboratory [STBRL]) (figure 1). Of the 215 cases, epidemiological and clinical reports have been received for 147 confirmed cases. 144 cases are in men who have sex with men (MSM), with two reported in heterosexual men.

**Figure 1 UK LGV laboratory confirmed cases by month and place of diagnosis to end September 2005 (n=215)**



Cases have been reported from across the UK, although the majority have been diagnosed in London (153, 71%) and Brighton (31, 14%). The majority of cases continue to be reported in men who have HIV infection (119/147, 81%), and most are symptomatic with proctitis.

In June 2005, STBRL confirmed the hundredth case of lymphogranuloma venereum (LGV) in the UK. Initial results were first reported in the *CDR Weekly* on 27 January 2005 (1). One hundred and forty cases of LGV were confirmed between October 2004 and 26 July 2005 (2).

The HPA launched an initiative to raise awareness and improve the diagnosis and surveillance of LGV in MSM in

England in October 2004 (3). This was extended to include the rest of the UK in January 2005 following publication of the initial results from enhanced surveillance (4,5). A UK incident group was also established at this time.

It is essential that HIV and genitourinary medicine (GUM) clinics work closely with local Health Protection Units and voluntary sector organisations to raise awareness among professionals and service users. Intensive promotion of condom use and safer sex strategies are essential for men who are being screened or treated for HIV.

Further information, including the LGV enhanced surveillance protocol, can be found on the HPA website at: [http://www.hpa.org.uk/infections/topics\\_az/hiv\\_and\\_sti/LGV/lgv.htm](http://www.hpa.org.uk/infections/topics_az/hiv_and_sti/LGV/lgv.htm).

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## The start of the Mandatory MRSA bacteraemia Enhanced Surveillance Scheme: 1 October 2005

The Methicillin resistant *Staphylococcus aureus* (MRSA) bacteraemia Enhanced Surveillance Scheme will be mandatory for all NHS Acute Trusts in England from 1 October 2005. This scheme has been developed by the Health Protection Agency at the request of the Department of Health.


Trusts will have access to a website that they can use to enter details about each MRSA bacteraemia episode that is detected in their Trust. The existing CoSurv surveillance system is also currently undergoing developments and will be ready to accept MRSA bacteraemia enhanced surveillance information in January 2006.

Enhanced surveillance will involve collecting patient details for each MRSA bacteraemia episode such as NHS number, hospital number, date of birth, sex, as well as information concerning the patient's location, date of admission, consultant speciality, and care details at the time the blood sample was taken.

It is hoped that this new scheme will provide Trusts with a more accurate picture, with respect to MRSA bacteraemia rates, than current mandatory surveillance allows, and will contribute to building a better evidence base regarding risk-factors for infection.

Further information about the scheme can be obtained by emailing [mandatory-surveillance@hpa.org.uk](mailto:mandatory-surveillance@hpa.org.uk).

## Respiratory

 Laboratory reports of respiratory infections made to the Health Protection Agency Centre for Infections from HPA and NHS laboratories in England and Wales: weeks 35-39/05  
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### Laboratory reports of respiratory infections made to the Health Protection Agency Centre for Infections from HPA and NHS laboratories in England and Wales: weeks 35-39/05

Table 1 Reports of influenza infection made to HPA Centre for Infections, by week of report: weeks 35-39/2005

Week	35/05	36/05	37/05	38/05	39/05	
Week ending	04/09/05	11/09/05	18/09/05	25/09/05	02/10/05	Total
<b>Influenza A</b>	3	1	6	1	1	<b>12</b>
Isolation	1	0	0	0	0	<b>1</b>
DIF*	0	0	1	0	0	<b>1</b>
Four-fold rise in paired sera	0	0	0	0	0	<b>0</b>
PCR	0	0	0	0	0	<b>0</b>
Other†	2	1	5	1	1	<b>10</b>
<b>Influenza B</b>	0	1	0	0	0	<b>1</b>
Isolation	0	0	0	0	0	<b>0</b>
DIF*	0	0	0	0	0	<b>0</b>
Four-fold rise in paired sera	0	0	0	0	0	<b>0</b>
PCR	0	1	0	0	0	<b>1</b>
Other†	0	0	0	0	0	<b>0</b>
<b>Influenza (untyped)</b>	0	0	0	0	0	<b>0</b>
Isolation	0	0	0	0	0	<b>0</b>
DIF*	0	0	0	0	0	<b>0</b>
Four-fold rise in paired sera	0	0	0	0	0	<b>0</b>

PCR	0	0	0	0	0	0
Other†	0	0	0	0	0	0

\*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, genomic, electron microscopy, other method, other method unknown), by week of report: weeks 35-39/2005**

Week	35/05	36/05	37/05	38/05	39/05	Total
Week ending	04/09/05	11/09/05	18/09/05	25/09/05	02/10/05	
Adenovirus*	5	16	9	22	7	59
Coronavirus	0	0	0	0	0	0
Parainfluenza†	0	10	5	6	1	22
Rhinovirus	1	9	2	1	1	14
Respiratory syncytial virus (RSV)‡	6	3	2	5	8	24

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

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

‡ Excludes diagnosis made by electron microscopy (EM).

**Table 3 Respiratory viral detections by age group: weeks 35-39/2005**

Age group (years)	<1 year	1-4 years	5-14 years	15-44 years	45-64 years	≥65 years	Unknown	Total
Adenovirus*	5	9	8	26	7	4	0	59
Coronavirus	0	0	0	0	0	0	0	0
Influenza A	0	0	1	4	3	3	1	12
Influenza B	0	0	0	0	1	0	0	1
Parainfluenza†	13	2	0	3	4	0	0	22
Rhinovirus	6	4	0	2	2	0	0	14
Respiratory syncytial virus (RSV)‡	18	4	0	2	0	0	0	24

\*Respiratory samples only.

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

‡ Excludes diagnoses made by electron microscopy (EM).

**Table 4 Laboratory reports of infections associated with atypical pneumonia, by week of report: weeks 35-39/2005**

<b>Week</b>	<b>35/05</b>	<b>36/05</b>	<b>37/05</b>	<b>38/05</b>	<b>39/05</b>	
<b>Week ending</b>	<b>04/09/05</b>	<b>11/09/05</b>	<b>18/09/05</b>	<b>25/09/05</b>	<b>02/10/05</b>	<b>Total</b>
<i>Coxiella burnettii</i>	0	0	1	0	0	<b>1</b>
Respiratory <i>Chlamydia</i> sp*	2	2	0	3	2	<b>9</b>
<i>Mycoplasma pneumoniae</i>	6	11	13	15	9	<b>54</b>
<i>Legionella</i> sp	9	17	17	11	20	<b>74</b>

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

**Table 5a Reports of legionnaires' disease (pneumonic and non-pneumonic\*) cases in England and Wales, by week of report: weeks 35-39/2005**

<b>Week</b>	<b>35/05</b>	<b>36/05</b>	<b>37/05</b>	<b>38/05</b>	<b>39/05</b>	
<b>Week ending</b>	<b>04/09/05</b>	<b>11/09/05</b>	<b>18/09/05</b>	<b>25/09/05</b>	<b>02/10/05</b>	<b>Total</b>
Nosocomial	0	1	0	0	0	<b>1</b>
Community	3	13	10	5	9	<b>40</b>
Travel abroad	3	2	5	6	7	<b>23</b>
Travel UK	3	1	2	0	4	<b>10</b>
<b>Total</b>	<b>9</b>	<b>17</b>	<b>17</b>	<b>11</b>	<b>20</b>	<b>74</b>
Male	6	15	13	8	14	<b>56</b>
Female	3	2	4	3	6	<b>18</b>

\*Represents non-pneumonic cases where present.

Seventy-three cases were reported with pneumonia – 56 males aged between 31 and 84 years and 17 females aged between 27 and 77 years. F 57y One 57 year old female was reported without pneumonia. Forty cases had community-acquired infection. There were two deaths in M 62y and 64y. Eighteen cases were associated with outbreaks.


Thirty three cases were travel-associated: England (7), Spain (7), Greece (3), France (3), Austria (1), Bulgaria (1), Canada (1), Dominican Republic (1), England/Scotland/Wales (1), Germany/Switzerland (1), Italy (1), Mediterranean cruise (1), Scotland (1), Serbia & Montenegro (1), Turkey (1), Turkey/Iran (1), and Wales (1).

**Table 5b Reports of Legionnaires' disease (pneumonic and non-pneumonic\*) cases by region of report in England and Wales: weeks 35-39/2005**

Region	Nosocomial	Community	Travel (Abroad)	Travel	Total
North East	0	2	0	1	<b>3</b>
Yorkshire & the Humber	0	1	4	0	<b>5</b>
East Midlands	0	2	2	1	<b>5</b>
East of England	0	4	0	1	<b>5</b>
London	0	20	1	3	<b>24</b>
South East	0	1	4	1 (1*)	<b>7</b>
South West	1	3	1	1	<b>6</b>
West Midlands	0	4	3	1	<b>8</b>
North West	0	2	5	0	<b>7</b>
Wales	0	1	3	0	<b>4</b>
<b>Total</b>	<b>1</b>	<b>40</b>	<b>23</b>	<b>10</b>	<b>74</b>

\*Represents non-pneumonic cases where present.

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 [Imported infections, England and Wales: April to June 2005](#)  
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Infection Report Archive

**Imported infections, England and Wales: April to June 2005**

This second quarter report on imported infections in England and Wales covers the period from April to July 2005 inclusive. 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 annually.

Of the infections in table 1 that were reported via Labbase2\* , there were slightly fewer infections reported in England and Wales in the second quarter of 2005 (16,526) compared with the same period in 2004 (17,751) – the figures for 2004 are higher than the 13,855 previously reported in the *CDR Weekly* quarterly report in July 2004 (2). This difference is due to late loading of reports into Labbase2. Travel history reporting also decreased slightly from 12.4% in second quarter of 2004 to 11.3% in the second quarter of 2005, this may also be due to late reporting and, therefore, the figures for 2005 will be subject to change. The overall proportion of travel history reporting, however, is still low and limits the interpretation of the following data.

**Gastrointestinal infections****Bacterial infections**

Gastrointestinal infections are the most frequently reported type of infection in England and Wales and, although under-reported, are the most common infection in travellers. In the second quarter of 2005, *Salmonella* spp (non-typhoidal) were the most frequently reported infection associated with recent travel abroad (500/1996), even though more campylobacter infections are reported in England and Wales in general (12,686 in total of which 288 reported recent travel abroad). Travel history reporting was more complete for *Salmonella* spp than for *Campylobacter* spp, with 62.5% of *Salmonella* spp reports having any information about travel history compared with only 3.2% for *Campylobacter* spp. All salmonella infections are usually followed up and this means that better information is available; travel history reporting has incidentally improved compared to the second quarter of 2004 (57.4%). Travel history reporting for *Campylobacter* spp is historically under-estimated in routine surveillance systems (3). It has been shown from the campylobacter sentinel surveillance scheme that around 20% of *Campylobacter* spp are imported from abroad (4).

Of the *Salmonella* spp reports that stated recent travel abroad, 26% (132/500) reported recent travel abroad to Europe, 22% (109/500) to north Africa and the middle east, 14% (70/500) to the Indian sub-continent (ISC), 8% (41/500) to sub-Saharan and southern Africa, 8% (38/500) to south east Asia and the far east, and 6.2% (31/500) travelled to the Caribbean. The top three countries of travel most frequently reported were Spain, including resort islands of the Canaries and Balearics (15%, 76/500), India, (9%, 47/500), and Egypt (9%, 45/500); and country of travel not stated (10% (50/500)).

A similar pattern was seen for *Campylobacter* spp. Of reports that stated recent travel abroad, 43% (123/288) reported travel to Europe, 19% (54/288) to the Indian sub-continent, and 17% (49/288) to north Africa and the middle east. The top three most frequently reported countries of travel were Spain (28%, 81/288), India (10%, 30/288) and Pakistan (6%, 18/288); and country of travel not stated (9% (27/288)).

In the first quarter of 2005, there were 428 reports of shigella infection, 30 due to *S. boydii* and 20 due to *S. dysenteriae*, the organisms that cause dysentery-like (bloody diarrhoea) illness. Twenty per cent of all *Shigella* spp reported recent travel abroad, the majority having travelled to northern African, the middle east, and the ISC.

There were three reports each of *Vibrio cholerae* O1 El Tor Inaba and *V. cholerae* O1 El Tor Ogawa, all of which had travelled abroad. Of those, five had travelled to the ISC and one had no country stated.

The geographical distribution of gastrointestinal infections, in particular salmonella and campylobacter, tends to reflect the travelling patterns of UK travellers, as they are common worldwide. During the winter months (*ie*, the first and fourth quarters of the year), the proportion of British travellers who travel further afield for winter sun holidays, is higher than in summer (second and third quarters of the year). For example, 2.3% of all visits in winter months were to the ISC compared to 1.5% in summer; 1.9% of all visits in winter were to sub-Saharan and southern Africa compared to 1.4% in summer. Conversely, in the summer months the proportion of travellers who travel to Europe is 81.2% compared to 76.1% in winter (5).

### Protozoal infections

During the second quarter, there were 598 reports of cryptosporidiosis in total in England and Wales, of which 16 (2.7%) had any information stated about travel history. Twelve reports stated recent travel abroad; the most reported region of travel was the ISC (five reports). There were 584 reports of *Giardia lamblia*, of which 44 (7.5%) had any information stated about travel history and all had travelled. The most frequently reported regions of travel were the ISC (19 reports) and northern Africa and the middle east (six reports). Other infections reported in this category included *Entamoeba histolytica* and *Ent. coli*, *Cyclospora* spp, and *Endolimax nana*; those that reported recent travel abroad were mainly associated with travel to the Tropics. There were three cases with dual infections, one with *Giardia lamblia* and *Shigella flexneri*, who had travelled to Pakistan, one with *Entamoeba coli* and *Shigella flexneri* who had travelled to Bolivia, and one with *Entamoeba coli* and *E. histolytica* where country of travel was unknown.

### Enteric fever

Seventy-four per cent of all enteric fever reports had some information about travel history compared to 76% in the first quarter of 2004. In the first quarter of 2005, there were 62 reports of *Salmonella Typhi*, of which 36 reported recent travel abroad. Twenty-nine reports stated recent travel to the ISC (12 to India, 11 to Pakistan, five to Bangladesh, and one to Sri Lanka), one each stated travel to Nigeria and Indonesia, two to Asia unspecified and three had no country stated. There were 67 reports of *S. Paratyphi* (62 *S. Paratyphi* A and five *S. Paratyphi* B), of which 33 stated recent travel abroad (30 *S. Paratyphi* A and three *S. Paratyphi* B). Thirty-one reports stated travel to the ISC (16 to India, 12 to Pakistan, and three to Bangladesh); one case of paratyphoid B had recently travelled to south America and one travelled to Finland.

### Helminths

In the second quarter of 2005, there were 38 reports of helminth infection, of which one report of *Taenia saginata* stated recent travel abroad to Thailand. Helminth infections can persist in the body for months and it is, therefore, not possible to say for certain where these infections may have been acquired.

### Arthropod-borne infections

#### Dengue

Two cases of dengue fever were reported through the routine laboratory reporting system; no travel history was available for these cases. This is very likely an under estimate.

#### Leishmaniasis

Two cases of leishmaniasis were reported in the second quarter. There was no information available about type of leishmaniasis or travel history.

#### Lyme borreliosis

In England and Wales, laboratory-confirmed reports of Lyme borreliosis are currently running at slightly higher levels

than seen at the same time in previous years; these include infections acquired in the UK, from northern European countries, and from the eastern United States. A provisional total of 99 reports, up to the end of June 2005, have been received, compared with an annual average of 75 reports during the same period from 2001 to 2004. Sixty-five reports were received in the second quarter of 2005 of whom seven were known to have received tick bites overseas; most of the overseas cases have occurred primarily in holiday-makers; details of the travel histories are still awaited. The major foci of Lyme borreliosis in England and Wales are around the New Forest, Salisbury Plain, Exmoor, and Thetford Forest, where, as in previous years, over half of indigenously-acquired cases are reported.

### Other infections

#### Schistosomiasis

Nine cases of schistosomiasis were reported in the second quarter of 2005, compared to 19 in 2004. Three reports had reported recent travel abroad despite the absence of this infection in the UK. One case with *Schistosomiasis haematobium* infection and one with *Schistosomiasis* sp had travelled to Malawi, and one case of *S. haematobium* had no country of travel stated.

#### Leptospirosis

There were five cases of leptospirosis reported in the second quarter of 2005 of which two were associated with overseas travel. Details of the travel histories are still awaited.

#### Legionnaires' disease

There were 50 cases of legionnaires' disease reported with onset dates in the second quarter of which 21 were acquired abroad. There were no notable outbreaks to mention during this period.

**Table Imported infections in England and Wales: April to June 2005**

Organism	Total reports for Apr to Jun				Cumulative totals for Apr to Jun			
	2005*		2004		2005*		2004	
	Travel-related	All reports	Travel-related	All reports	Travel-related	All reports	Travel-related	All reports
<b>Gastrointestinal Infections</b>								
<b>Bacterial</b>								
<i>Salmonella</i> spp	500	1996	525	2524	824	3625	812	4089
<i>Campylobacter</i> spp	288	12,686	344	13105	495	19,211	619	21,741
<i>Shigella flexneri</i>	18	94	14	66	23	158	23	131
<i>Shigella dysenteriae</i> †	14	20	10	15	19	28	16	27
<i>Shigella sonnei</i>	37	260	28	193	66	430	47	356
<i>Shigella boydii</i> †	17	30	19	34	34	54	37	58
Other (species unknown)	1	24	1	30	2	49	1	69
<i>Salmonella</i> Typhi	36	62	29	53	65	102	53	94
<i>Salmonella</i> Paratyphi	33	67	33	51	49	95	54	83

(A,B,C)									
<i>Vibrio cholerae</i> O1†	6	6	0	1	–	–	0	1	
<i>Vibrio parahaemolyticus</i>	0	5	3	7	2	11	6	12	
<b>Protozoal</b>									
<i>Entamoeba histolytica</i>	4	29	13	61	16	95	23	139	
<i>Entamoeba coli</i>	3	14	1	18	3	27	6	43	
<i>Giardia lamblia</i>	44	584	69	705	98	1154	163	1505	
Cryptosporidium	12	598	19	749	30	902	43	1347	
<i>Cyclospora</i> spp	4	26	8	29	7	33	8	34	
<i>Endolimax nana</i>	0	15	2	8	0	25	4	17	
<b>Helminths</b>									
<i>Strongyloides stercoralis</i>	0	1	2	9	0	6	3	20	
<i>Strongyloides</i> spp	0	1	0	0	0	2	1	1	
<i>Ancylostoma duodenale</i>	0	0	0	1	0	0	0	1	
<i>Necator americanus</i>	0	0	0	0	0	0	0	0	
Hookworm unspec	0	4	3	7	1	5	4	12	
<i>Ascaris lumbricoides</i> (round worm)	0	12	2	22	2	25	6	47	
<i>Trichuris trichiura</i> (whip worm)	0	6	3	14	1	15	5	30	
<i>Hymenolepis diminuta</i>	0	0	0	0	0	0	0	0	
<i>Hymenolepis nana</i>	0	1	0	1	0	3	1	4	
<i>Hymenolepis</i> spp	0	0	0	0	0	0	0	0	
<i>Taenia saginata</i>	1	6	5	19	4	18	8	38	
<i>Taenia</i> spp	0	7	0	8	0	15	1	18	
<i>Gnathostoma</i> spp	0	0	0	2	0	1	0	2	
<i>Diphyllobothrium latum</i> (fish tape)	0	0	0	0	1	1	0	0	

worm)									
<b>Arthropod borne infections</b>									
Malaria	NA	NA	NA	NA	NA	NA	NA	NA	NA
<i>Plasmodium falciparum</i>	NA	NA	NA	NA	NA	NA	NA	NA	NA
<i>Plasmodium vivax</i>	NA	NA	NA	NA	NA	NA	NA	NA	NA
<i>Plasmodium malariae</i>	NA	NA	NA	NA	NA	NA	NA	NA	NA
<i>Plasmodium ovale</i>	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>Arboviruses</b>									
Dengue virus	0	2	0	6	0	3	0	9	
Chikungunya virus	0	0	0	0	0	0	0	0	
Ross river virus	0	0	0	1	0	0	0	1	
Sandfly fever virus	0	0	0	0	0	0	0	0	
Unspecified	0	0	0	0	0	0	0	2	
<b>Leishmaniases</b>									
Cutaneous	0	0	11	14	4	5	15	19	
Visceral	0	0	0	0	1	1	2	2	
Unspecified	0	2	1	3	0	2	2	5	
<b>Filariases</b>									
<i>Loa loa</i>	0	0	2	5	0	0	2	5	
<i>Wucheria bancrofti</i>	0	0	0	0	0	0	0	0	
<i>Mansonella perstans</i>	0	0	0	0	0	0	0	0	
<i>Onchocerca vulvulus</i>	0	0	0	0	0	0	0	0	
Unspecified	0	0	0	0	0	1	0	1	

<i>Lyme borreliosis</i> ‡	6	65	7	62	14	99	15	99
<b>Miscellaneous</b>								
<b>Schistosome infections</b>								
<i>Schistosoma mansoni</i>	0	0	2	6	0	2	5	11
<i>Schistosoma haematobium</i>	2	7	3	9	5	15	5	18
<i>Schistosoma intercalatum</i>	0	0	0	0	0	0	0	0
<i>Schistosoma</i> spp.	1	2	0	4	2	5	2	12
<b>Other infections</b>								
Leptospirosis‡	2	5	2	4	3	11	3	8
Legionnaires' disease§ (4)	21	50	29	48	–	–	–	–
<i>Coxiella burnetii</i> (Q fever)	0	10	1	21	0	13	1	31
<i>Rickettsia</i> spp	0	5	0	0	0	9	0	0

\*All data for 2004 is provisional and subject to change. All data extracted from Labbase 21 September 2005, except for gastro infections for 2005 unless otherwise specified, which were extracted from Labbase 25/05/05.

† Data on cholera, *S. boydii* and *S. dysenteriae* supplied by the HPA Centre for Infections Laboratory of Enteric Pathogens.

‡ The Zoonoses Surveillance Reference Unit, CDSC Wales, supplied data for Lyme borreliosis and leptospirosis 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.

Table compiled by the Health Protection Agency's Travel Health Surveillance Section at the HPA Centre for Infections, London.

## Footnotes

\*Labbase2 is the database that collects laboratory reports of all micro-organisms isolated at nearly 400 NHS and other laboratories throughout England and Wales. The database is managed and accessed at the HPA Centre for Infections.

†Note that these figures refer to data extracted from Labbase2 only, and do not include cholera, *S. dysenteriae*, *S. boydii*, malaria, legionnaires' disease, Lyme borreliosis or leptospirosis where data has been obtained from other sources.

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