CDR WEEKLY

Current Issue: Volume **14** Number **45** **Published on**: 4 November 2004

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News

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- Capital Catch-up – the NHS and HPA drive to increase MMR uptake in London
- Death in Spain associated with yellow fever vaccine
- Influenza and other respiratory virus activity in the UK and Europe
- Update on avian influenza (H5N1)

Capital Catch-up – the NHS and HPA drive to increase MMR uptake in London

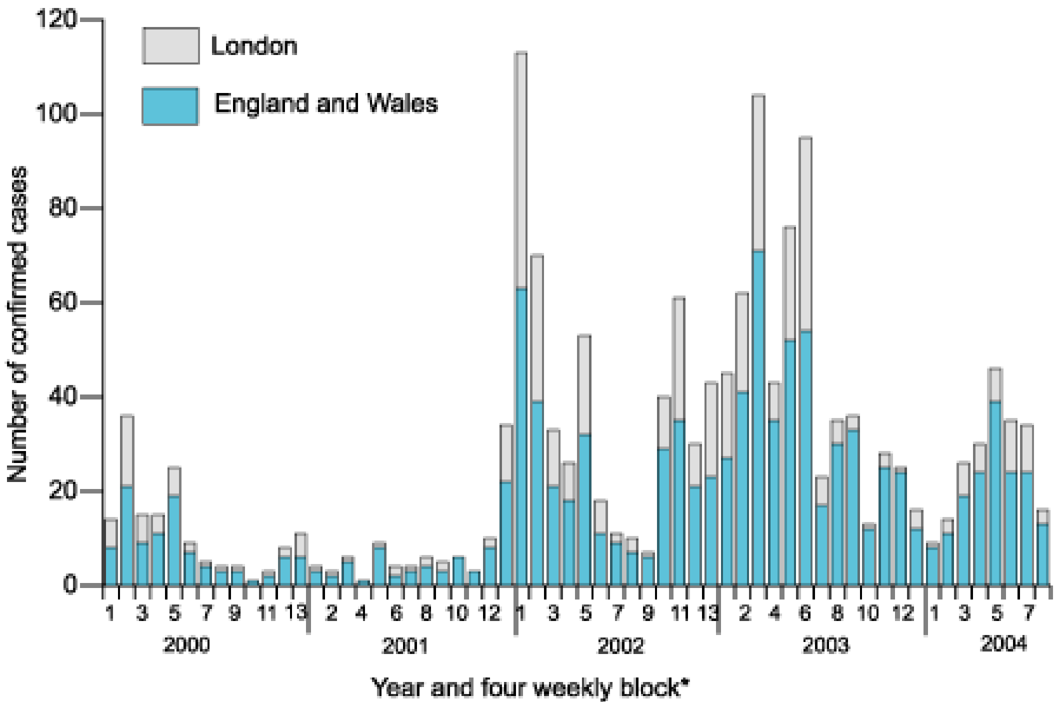
London's Primary Care Trusts (PCTs) have announced they are planning initiatives this winter to increase measles, mumps, and rubella vaccine (MMR) uptake among primary school children in London. The current uptake level among children aged five years of age for the first dose of the MMR vaccine is 80%, and coverage of the second dose only 58% (table). The World Health Organization recommends immunity levels of around 95% to prevent outbreaks of disease. MMR vaccination rates have been steadily declining since 1997. The decline has been more marked in London than in the UK overall.

Table Uptake levels of first and second dose MMR vaccine in London strategic health authorities: April to June 2004

Strategic Health Authority	% 1st dose of MMR	% 2nd Dose
North central London	80.3	59.5
North east London	83.4	66.1
North west London	80.9	59.5
South east London	75.7	48.1
South west London	77.6	55.5

Number of confirmed measles cases is increasing in London (figure). After nearly a decade of reduction with only sporadic cases, a substantial outbreak of measles occurred in 2002, predominantly in pre-school children. More than 90,000 primary school children in London are now estimated to be susceptible to measles. Mathematical models based on historical MMR coverage data, suggest that the level of susceptibility in primary schools is now sufficient to support measles transmission. This raises the possibility of a London-wide epidemic during the next year.

Figure Confirmed monthly cases of measles in London, England, and Wales: 2000 to 2004



*Surveillance data is measured in four weekly blocks for each year, and not in discrete calendar months.

From November 2004, PCTs, working with health protection units of the Health Protection Agency (HPA) London will implement a range of measures to improve uptake. These include especially arranged vaccination sessions in both schools and general practice settings. This will offer children who have missed out on MMR another chance to be protected against all three infections.

It is hoped that efforts to offer catch-up vaccination to primary school children will be particularly effective in reducing the risk of wider community outbreaks, as primary school age children have many more social contacts than pre-school age children.

From November 2004, participating schools will send out information to parents, and an invitation to have their child vaccinated at school if they have not yet received the recommended two doses of the MMR vaccine. Some London PCTs will be conducting a range of programmes in association with general practitioners (GPs), including running education sessions for nurses, health visitors, GPs and others involved in immunisation, and working with those practices with the lowest rates to improve take-up for all children.

Death in Spain associated with yellow fever vaccine

The Agencia Española del Medicamentos y Productos Sanitarios (Spanish Drugs and Health Products Agency) has recently been informed of a death following yellow fever vaccination (1). The death was in a woman aged 26 years, with no known underlying disease risk factors, who was vaccinated against yellow fever (Stamaril lot number: X5424-3), cholera, tetanus, and diphtheria on 14 October 2004. On 17 October 2004, she started to experience high fever, malaise, and arthralgia, and later developed diarrhoea and vomiting. She was admitted to hospital on 21 October 2004 where her general status deteriorated with multi-organ failure and respiratory distress syndrome; she died 25 October 2004.

Multi-organ failure has been associated with yellow fever vaccination and is currently known as yellow fever vaccine-associated viscerotropic disease (YEL-AVD). This adverse reaction is very rare and is described in the summary of product characteristics (SmPC) of yellow fever vaccines. Other similar cases in the United States, Australia, and Brazil have been described in the literature; vaccines from three different manufacturers were involved (2-4). All cases except one had a fatal outcome. Yellow fever virus (17D, the vaccine strain) was identified in serum and tissue samples of some of the cases described; other aetiologies were ruled out in all of them.

In Spain, the vaccine is imported from Aventis Pasteur MSD in France. A total of 53,898 doses of the lot number X5424 have been distributed in 15 countries, among them Croatia, Czech Republic, Greece, the Republic of Ireland, Lithuania, Romania, Slovakia and the United Kingdom. No alert or case has been received from any other country. The Agencia Española del Medicamentos y Productos Sanitarios has analysed all the information related to production process of the batch. The Official Control Authority in France has also analysed the implicated batch, issuing an EC/EEA official control authority batch release certificate that indicated all manufacturing and control data are compliant with specifications.

The most likely explanation is an idiosyncratic host susceptibility to the 17D vaccine strain, rather than a reversion of the vaccine strain to a wild-type strain, and these reactions remain rare. It is possible that the increase in the number of such cases reported in recent years is due in part to improved surveillance of adverse effects and this requires further investigation (5,6).

The risk of yellow fever to travellers to countries where there is ongoing transmission or the infection is endemic or enzootic (present in animals/mosquitoes), outweighs the risk of adverse effects of the vaccine (7). It is essential that all travellers to countries in the endemic/enzootic zones of Africa and south America be vaccinated against yellow fever unless documented contraindications exist (8).

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Influenza and other respiratory virus activity in the UK and Europe

Levels of influenza activity in the United Kingdom continue to remain low. Consultations with general practitioners (GPs) for influenza remain well within the range of baseline activity in England, Scotland, and Wales, where thresholds are used to describe levels of activity. Influenza activity in Northern Ireland and Eire also remains low.

Since week 40, two influenza A (H3) viruses have been detected by the Health Protection Agency's Enteric, Respiratory, and Neurological Virus Laboratory (ERNVL). Both samples derived from travel associated infections. One virus isolate has been further characterised as influenza A/Wellington/1/2004 (H3N2)-like.

Levels of respiratory syncytial virus (RSV) activity are beginning to increase, as expected for this time of year. The largest increase in laboratory reports made to the Health Protection Agency's Centre for Infections in the last two of weeks is among children aged under 1 year. RSV is the commonest cause of severe respiratory illness such as bronchiolitis (inflammation of the bronchioles) in young children (aged under 2 years), and it is the commonest cause of hospital admissions due to acute respiratory illness in young children. Peak numbers of RSV infections are reported in December and January every winter, although the size of the peak varies from winter to winter.

Further information is available from: <http://www.hpa.org.uk/infections/topics_az/respiratory_virus/menu.htm>.

Influenza activity across Europe continues to remain low. In week 43, all of the reporting networks indicated that the intensity of clinical activity was low, meaning that there was no influenza activity or influenza activity was at baseline levels. Since week 40, 14 influenza viruses from sentinel and non-sentinel sources have been characterised, six were A (not subtyped), six were A(H3) [three of these were A(H3N2)], and two were B. Four of the virus isolates have been antigenically and/or genetically characterised: three were A/Wellington/1/2004 (H3N2)-like (from France, Norway, and Sweden) and one was A/Fujian/411/2002 (H3N2)-like (from Germany). Further information is available from <http://www.eiss.org/index.cgi>.

Influenza activity between February and September 2004

Influenza A (H3N2) viruses predominated in Africa, the Americas, Asia, Europe, and Oceania between February and September 2004. Although many viruses were closely related to the A/Fujian/411/2002 viruses, an increasing proportion of recent isolates were more closely related to influenza A/Wellington/1/2004. As a consequence, A/Wellington/1/2004 was recommended as the (H3N2) vaccine component for the 2005 (southern hemisphere) winter. Further information is available at: <http://www.who.int/wer/2004/wer7941/en/>.

Update on avian influenza (H5N1)

Further human death associated with influenza H5N1 in Thailand

On 25 October 2004, the World Health Organization (WHO) issued a statement confirming a further fatal case of human infection with influenza H5N1 in Thailand. The case, a girl aged 14 years from Sukhothai province developed symptoms on 8 October and died on 19 October. Chickens at the household had died suddenly in late September.

This death brings the total cases in Thailand to 17, 12 of whom have died. Since January 2004, 44 human cases of avian influenza A (H5N1) infection have been reported from Thailand and Viet Nam, 32 of whom have died. No cases have been reported from China.

H5N1 in domestic ducks

On 29 October, WHO reported, ahead of publication, the main findings of a new laboratory study of avian influenza A (H5N1) in domestic ducks in southern China, due to the public health implications.

The study found that highly pathogenic H5N1 virus replicated in the respiratory and intestinal tracts of experimentally infected ducks, and that large amounts of virus were excreted via the respiratory and faecal route. The majority of ducks infected were asymptomatic, suggesting that the ducks might be acting as a 'silent' reservoir for the H5N1 virus. The amount of virus shed was sufficient to allow transmission of the virus directly from apparently healthy ducks to chickens.

The study compared the infection of ducks with several H5N1 influenza viruses from the 2004 outbreak, with viruses from previous H5N1 outbreaks in 2003. The experimentally infected ducks appeared to shed the 2004 viruses for longer, and preliminary results of environmental stability tests indicate that the 2004 viruses have become more stable meaning that they can survive longer at 37•C.

It is a public health concern that ducks may be infected and shed virus for long periods of time, yet remain asymptomatic. In rural areas of countries affected by the H5N1 virus, free-ranging ducks and chickens may mingle, facilitating the spread of the virus. The findings contribute to recent evidence suggesting that domestic ducks may have played a central role in generating and maintaining H5N1 in its highly pathogenic form in parts of Asia.

Further information is available from WHO at: < http://www.who.int/csr/disease/avian_influenza/en/>.

Avian influenza H5N1 infection in Tigers and Leopards

A report has been published in the journal *Emerging Infectious Diseases* indicates that the avian influenza H5N1 virus has expanded its host range to include big cats (tigers and leopards) (1). These mammals were not previously considered susceptible to infection with influenza virus.

In December 2003, two tigers and two leopards at a zoo in Suphanburi, Thailand, showed clinical symptoms, including high fever and respiratory distress, and died unexpectedly. The cats had been fed fresh chicken carcasses from a local slaughterhouse. A number of chickens in the area had died at that time from infections that were subsequently identified as due to influenza H5N1. Influenza H5N1 was isolated from one of the tigers and one of the leopards, and analysis of the isolates showed that they were virtually identical to the H5N1 viruses circulating in poultry at the time. It is likely that the tigers and leopards were infected with avian influenza H5N1 by feeding on infected poultry carcasses. Detailed analysis of the isolates showed that they were of avian origin and that no reassortment with mammalian influenza viruses had occurred.

Two illegally imported eagles into Europe from Thailand test positive for influenza H5N1

On 18 October 2004, a Thai man travelling from Bangkok to Brussels, via Vienna, was apprehended by customs officials at Brussels international airport and found to be carrying two illegally imported mountain hawk eagles (2). The birds were quarantined at the airport, and later found to be positive for influenza H5N1. The birds were euthanized.

Passengers on the flight were advised to seek medical treatment if they developed any flu-like symptoms. Twenty-five people who had been in direct or indirect (same room) contact with the infected eagles were given oseltamivir prophylaxis. Swabs taken from 23 people all tested negative for influenza H5. No evidence of any spread of infection has been reported.

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Respiratory

Last updated: **28 October 2004**
Next update due: **25 November 2004**

Laboratory reports of respiratory infections made to CDSC from Health Protection Agency and NHS laboratories in England and Wales: weeks 41-44/04

Laboratory reports of respiratory infections made to CDSC from Health Protection Agency and NHS laboratories in England and Wales: weeks 41-44/2004

Data are recorded by week of report, but only include specimens taken in the last eight weeks (*ie*, recent specimens).

Table 1 Reports of influenza infection made to CDSC, by week of report: weeks 41-44/2004

Week	**41/04**	**42/04**	**43/04**	**44/04**	
Week ending	**10/10/04**	**17/09/04**	**24/10/04**	**31/10/04**	**Total**
Influenza A	**11**	**4**	**11**	**3**	**29**
Isolation	–	–	–	–	–
DIF	–	1	–	–	1
Four-fold rise in paired sera	–	–	–	1	1
PCR	–	–	–	–	–
Other	11	3	11	2	27
Influenza B	–	–	1	–	**1**
Isolation	–	–	–	–	–
DIF	–	–	–	–	–
Four-fold rise in paired sera	–	–	–	–	–
PCR	–	–	–	–	–
Other	–	–	1	–	1
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, genomic, electron microscopy, other method, other method unknown), by week of report: weeks 41-44/2004

Week	**41/04**	**42/04**	**43/04**	**44/04**	
Week ending	**10/10/04**	**17/09/04**	**24/10/04**	**31/10/04**	**Total**
Adenovirus*	17	25	12	16	**70**
Coronavirus	–	–	–	–	–
Parainfluenza†	2	8	4	5	**19**
Rhinovirus‡	6	4	4	6	**20**
Respiratory syncytial virus (RSV)	12	40	55	121	**228**

*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: weeks 41-44/2004

Age group (years)	**<1 year**	**1-4 years**	**5-14 years**	**15-44 years**	**45-64 years**	**≥65 years**	**Unknown**	**Total**
Adenovirus*	12	6	4	31	10	7	–	**70**
Coronavirus	–	–	–	–	–	–	–	**–**
Influenza A	1	2	3	12	5	5	1	**29**
Influenza B	–	–	1	–	–	–	–	**1**
Parainfluenza†	14	5	–	–	–	–	–	**19**
Rhinovirus‡	13	2	3	–	1	1	–	**20**
Respiratory syncytial virus (RSV)	180	25	1	5	9	6	2	**228**

*Respiratory samples only, and excludes diagnoses made by electron microscopy (EM).
†includes parainfluenza types 1, 2, 3, 4, and untyped.

Table 4 Laboratory reports of infections associated with atypical pneumonia, by week of report: weeks 41-44/2004

Week	**41/04**	**42/04**	**43/04**	**44/04**	
Week ending	**10/10/04**	**17/09/04**	**24/10/04**	**31/10/04**	**Total**
Coxiella burnettii	–	–	–	1	**1**
Respiratory *Chlamydia* sp*	–	4	3	3	**10**
Mycoplasma pneumoniae	6	12	8	13	**39**
Legionella sp	16	11	12	10	**49**

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

Table 5 Reports of legionnaires' disease (pneumonic and non-pneumonic*) cases in England and Wales, by week of report: weeks 41-44/2004

Week	**41/04**	**42/04**	**43/04**	**44/04**	
Week ending	**10/10/04**	**17/09/04**	**24/10/04**	**31/10/04**	**Total**
Nosocomial	–	–	–	–	**–**
Community	5	3	9	3	**20**
Travel abroad	9	8	3	6	**26**
Travel UK	2	–	–	1	**3**
Total	**16**	**11**	**12**	**10**	**49**
Male	12	10	9	6	**37**
Female	4	1	3	4	**12**

Forty-nine cases were reported with pneumonia. Thirty-seven males aged between 37 and 80 years and 12 females aged between 21 and 74 years. Twenty cases were community-acquired infections. Three deaths were reported, males aged 78, 79 and 80 years.

Twenty-nine cases were travel-associated: Spain (7), Malta (4), United Kingdom (3), Greece (2), Italy (2), Turkey (2), Bulgaria (1), China (1), Croatia (1), France (1), Ireland (1), Portugal (1), Sri Lanka (1), United Arab Emirates (1), and United States of America (1).

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Travel health

Last updated: **4 November 2004**
Next update due: **2 December 2004**

Imported Infections, England and Wales: July to September 2004

Imported infections, England and Wales: July to September 2004

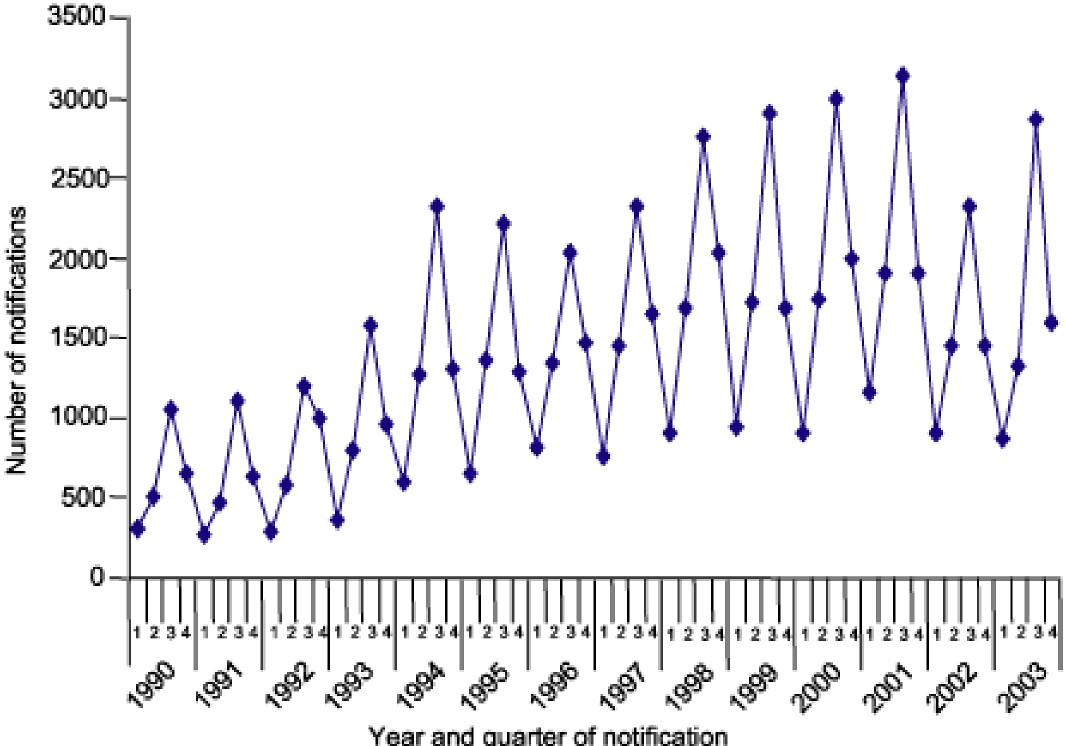
This third quarter report on imported infections in England and Wales covers the period from July to September 2004 inclusive. The data presented in this report should be interpreted in conjunction with the report *Illness in England, Wales, and Northern Ireland associated with foreign travel – a baseline 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.

In general, there were fewer infections reported in England and Wales via Labbase* in the third quarter of 2004 (18,576)† compared to the same period in 2003 (27,054). Travel history reporting, however, improved significantly from 14.5% of reports stating any information at all on recent travel in 2003 to 21.1% in 2004 (χ^2 = 340.75, 1 d.f., p<0.01). The overall proportion of travel history reporting however is still low and limits the interpretation of the data.

Gastrointestinal infections

Gastrointestinal infections, or food poisoning, are generally the most frequently reported illnesses associated with foreign travel, and are more frequently reported in the summer months (particularly in the third quarter of the year) when more people go abroad for holidays (figure 1) thereby increasing the potential for illness acquired abroad. The Office for National Statistics International Passenger Survey shows that the majority of UK visits abroad are to countries within the European Union, in particular Spain (2).

Figure 1 Notifications of food poisoning acquired abroad by quarter, England and Wales: 1990 to 2003



In the third quarter of 2004, *Salmonella* spp (non-typhoidal) continued to be the most frequently reported bacterial infection (780/5115) where 'recent travel abroad' was stated as 'yes', although *Campylobacter* infections were the most frequently reported overall in England and Wales (11,088 reports of which only 395 stated recent travel abroad). Travel history continues to be more complete for *Salmonella* reports (63.3% of reports had information on whether the patient travelled or not) than for *Campylobacter* (3.6%), with Salmonella travel history reporting significantly higher in 2004 compared to the same period in 2003 when it was 38.4% (χ^2= 732.39, 1 d.f., p<0.01). The number of reported *Campylobacter* cases associated with foreign travel is historically underestimated (3).

Of the *Salmonella* spp reported that stated recent travel abroad in the third quarter of 2004, 49.4% (385/780) reported recent travel to Europe of which, 46% (177/385) travelled to Spain (may also include Spanish islands but none were specifically reported), 28.6% (110/385) travelled to Greece, and 4.9% (19/385) to Portugal. Nearly 19% (146/788) reported travel to north Africa and the middle east, nearly half of those to Turkey‡ (70/146), 19.9% (29/146) to Egypt, and 17.1% (25/146) to Tunisia. Other regions of the world such as the Indian sub-continent (ISC), south east Asia and the far east, the Caribbean and sub-Saharan, and southern Africa were reported in smaller numbers and 11.8% (92/780) had no country stated.

Of the 295 reports of *Campylobacter* spp that stated recent foreign travel, 55.6% (164/295) reported recent travel to Europe, of which, 63.4% (104/164) reported travel to Spain and the Spanish islands. North Africa and the middle east was the second most frequently reported region (13.9%, 41/295) of recent travel abroad, of which, nearly half (20/41) travelled to Turkey. A smaller number of reports stated travel to the ISC, south east Asia and the far east, and sub-Saharan and southern Africa. Just over five per cent (15/295) of reports did not have a country of travel stated.

During the same period there were 205 events§ of gastrointestinal illness (reported to be associated with foreign travel) with onset dates between July and September 2004, 101 of those were due to *Salmonella*, 40 to *Campylobacter,* and 29 to *Cryptosporidium*, although these events/outbreaks have not been confirmed or typed further. Sixty-three per cent (112/177) of outbreaks associated with these three organisms were associated with travel to Europe, 56% (63/112) of those to Spain, and 21.4% (24/112) to Greece.

In the third quarter of 2004, there were 64 laboratory reports of *Salmonella* Typhi, of which 39 had reported recent travel abroad. Thirty reports stated recent travel to the ISC (India 16, Pakistan 12, and Bangladesh 2), five to Europe (four Bulgaria four and Spain one), two to sub-Saharan and southern Africa (Nigeria 1 and one Tanzania 1), one to Brunei, and the other to Asia (country not stated). There were 74 reports of *Salmonella* Paratyphi (*S.* Paratyphi A 73 and *S.* Paratyphi B one), of which 43 stated recent travel abroad (all Paratyphi A). Thirty-six reports stated recent travel to the ISC (Pakistan 16, India 13, Bangladesh five, and Nepal two), one to each of China, Thailand, Indonesia, Asia (unspecified country), Bulgaria, and two with country not stated.

There were six reports of cholera caused by *Vibrio cholerae* O1 El Tor Ogawa; five with reported travel to the Indian sub-continent (four India and one Pakistan), the other did not have a country stated.

Of 284 reports of *Shigella* infection for the third quarter of 2004, 35 were due to *S. boydii* or *S. dysenteriae*, the organisms that cause a dysentery-like illness. Nearly sixteen per cent (45/284) of all reports of *Shigella* infection stated recent travel

abroad, 13 of which reported recent travel to north Africa and the middle east (Egypt eight, Turkey two, and one each Iraq, Morocco, and Yemen). Travel history reporting for *Shigella* spp (not including *S. boydii* or *dysenteriae*) via Labbase* is incomplete, with only 11.6% of reports having any information on recent travel abroad in the third quarter of 2004 and 13.9% with travel information in 2003.

There was a 32.5% reduction in the number of *Giardia lamblia* infections reported in total in the third quarter of 2004 compared with 2003 and also a reduction in the proportion of reports (from 8.6% in 2003 to 6.6% in 2004) that stated recent travel abroad; this is not, however, statistically significant. There has, however, been a statistically significant reduction in the number of reports of *Cryptosporidium* that stated recent foreign travel from 9.6% in 2003 to 4.4% in 2004 (χ^2=28.92, 1 d.f., p<0.01). There was a large outbreak of cryptosporidiosis in travellers to Majorca in 2003, which may have contributed to this difference (5); no such outbreak has yet been reported in 2004. The largest proportion of *Cryptosporidium* reports that stated recent travel abroad had travelled to Europe (22/49) and the largest proportion of *Giardia lamblia* reports that stated recent travel abroad had travelled to the ISC (15/45).

Only five of 53 reports for *Entamoeba histolytica* stated recent travel abroad, three to Africa (one with a dual infection of *Entamoeba histolytica* and *Entamoeba coli*), one to South America, and one to the Philippines. Of seven reports of *Endolimax nana* infection for the third quarter, one stated recent travel abroad to India; this same case also had reports for *Entamoeba dispar* and *Entamoeba coli.*

Helminths

In the third quarter of 2004, there were 19 reports of *Ascaris lumbricoides*, of which one stated recent travel (to Rwanda). There were 16 reports of *Trichuris trichiura* (whip worm), of which five stated foreign travel, two to Bangladesh (one with dual infection with a hookworm of unknown species) and one to each of Nigeria, Kenya, and the Philippines (the latter also having dual infection with a hookworm).

Arthropod borne infections
There were four reports to Labbase of dengue virus, two of which specified recent foreign travel to Sri Lanka and India. It is assumed that all infections were acquired abroad as dengue does not occur in the UK. One report was confirmed as serotype 3.

There were twelve reports of leishmaniasis; five of those had information in the comments field that suggested they were probably of the cutaneous type. Ten had information on recent travel abroad; five of these had travelled to Afghanistan with no type specified. All of those reports presumed to be cutaneous leishmaniasis had information on recent travel and all had travelled to central and south America.

There was one report of *Loa loa* infection, which causes a filariasis, but no travel details were specified.

There were twelve reports of overseas-acquired Lyme borreliosis received during the quarter; six patients reported tick exposure in unidentified French woods, four of which received tick bites. One patient reported tick exposure in north west France and another ‘in France’. One patient received a tick bite while in New England (United States) reports of tick bites were received from patients who had visited Germany and Sweden. One report was received of Lyme disease following tick exposure in Greece. Exposure to ticks in Greece is seldom reported.

Other infections
There were 17 reports of schistosomiasis reported in the third quarter of 2004, five due to *Schistosoma mansoni*, five due to *S. haematobium* and the others unspeciated. Only five (four *S. mansoni*, one unspeciated) stated recent travel abroad even though schistosomiasis does not occur in the UK; two did not state any country of travel, one travelled to Sudan, one to the Congo and the other to Africa and Asia.

In the third quarter of 2004, there were 121 cases of Legionnaires’ disease reported in England and Wales, 55 of those, including two deaths, were related to travel abroad. One case was associated with travel to Sri Lanka, but several travel-related cases have been associated with clusters occurring in European countries such as Malta, Bulgaria and Spain. (6)

Two reports of overseas-acquired leptospirosis were received during the quarter. Infection with *Leptospira celadoni* was reported in M 24y who had been white water rafting in Thailand and infection with serovar *grippotyphosa* was identified in a M 51y who had been canoeing in southern France. Both are believed to be isolated cases and not associated with group activities.

Table Imported infections in England and Wales: July to September 2004

Organism	Total reports for Jul to Sep				Cumulative totals for Jan to Sep			
	2004*		2003		2004*		2003	
	Travel-related	All reports	Travel-related	All reports	Travel-related	All reports	Travel-related	All reports
Gastrointestinal Infections								
Bacterial								
Salmonella spp	780	5115	1319	7000	1509	8883	2250	11,852
Campylobacter spp	295	11,088	464	15,257	822	28,492	1084	35,474
Shigella flexneri	2	41	11	64	25	137	26	206
Shigella dysenterae†	10	12	8	13	13	38	22	31
Shigella sonnei	20	181	23	179	64	424	68	481
Shigella boydii†	11	23	9	14	50	82	31	64
Shigella unknown spp	2	27	1	23	5	84	2	51
Salmonella Typhi	35	59	26	47	85	150	92	164
Salmonella Paratyphi (A,B,C)	43	72	35	69	99	155	92	172
Vibrio cholerae (Type O1)†	5	6	5	6	6	8	6	7
Protozoal								
Entamoeba histolytica	5	53	15	63	16	120	43	192
Entamoeba coli	2	15	2	17	7	53	5	49
Giardia lamblia	45	684	87	1013	165	1837	216	2442
Cryptosporidium spp	48	1087	306	3178	78	2249	347	4348
Cyclospora spp	6	13	4	13	11	34	11	33
Endolimax nana	1	7	2	9	5	18	5	43
Helminths								
Strongyloides stercoralis	–	6	3	10	–	15	3	19
Strongyloides spp	–	4	–	3	–	4	–	6
Ancylostoma duodenale	–	–	–	–	–	1	–	1
Necator americanus	–	–	–	–	–	–	–	–
Hookworm unspecified	1	8	2	9	3	15	5	58
Ascaris lumbricoides (round worm)	1	19	5	23	7	56	9	76
Trichuris trichiura (whip worm)	5	16	2	10	7	34	4	66
Hymenolepis diminuta	–	–	–	–	–	–	–	–
Hymenolepis nana	–	1	–	3	1	5	1	13
Hymenolepis spp	–	–	–	–	–	–	–	–
Taenia saginata	2	15	–	11	3	30	1	21
Taenia spp.	1	6	–	6	2	20	1	32
Gnathostoma spp	–	1	–	–	–	2	–	1
Arthropod borne infections								
Arboviruses								
Dengue virus	2	4	2	7	2	12	3	12
Chikungunya virus	–	–	–	–	–	–	–	–

Ross river virus	–	–	–	–	–	1	–	1
Sandfly fever virus	–	–	–	–	–	–	1	1
Unspecified	1	4	–	–	1	4	–	1
Leishmaniases								
Cutaneous	5	5	7	9	8	9	16	21
Visceral	–	1	–	–	–	1	1	1
Unspecified	5	5	–	2	5	6	–	3
Filariases								
Loa loa	–	1	–	1	–	2	–	1
Wuchereria bancrofti	–	–	–	–	–	–	–	1
Mansonella perstans	–	–	–	1	–	–	–	2
Onchocerca volvulus	–	–	–	–	–	–	–	–
Unspecified	–	–	1	1	–	–	2	3
Lyme borreliosis‡	12	119	8	231	32	223	19	284
Miscellaneous								
Schistosome infections								
Schistosoma mansoni	4	5	–	2	5	12	2	8
Schistosoma haematobium	–	5	3	7	3	16	14	35
Schistosoma intercalatum	–	–	–	–	–	–	–	–
Schistosoma unknown spp	1	7	–	1	3	16	–	4
Other infections								
Leptospirosis‡	2	11	5	3	3	19	5	22
Legionnaires' disease§	55	121	57	97	95	205	110	218
Coxiella burnetii (Q fever)	–	4	1	11	1	23	2	39
Rickettsia spp	–	1	–	–	–	1	1	1

Gastro data extracted from Labbase 19.10.04, other data 20.10.04
*All data for 2004 is provisional and subject to change.
† Data on cholera, S.boydii and S.dysenteriae supplied by the SMRD 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 were supplied by the Legionella Section of the Respiratory Diseases Department of CDSC and represent cases of legionnaires' disease reported to the National Surveillance Scheme in residents of England and Wales. Travel-related cases are those who have spent all or part of the incubation period of between two and ten days abroad prior to onset of symptoms.

Table compiled by the Health Protection Agency's Travel Health Surveillance Section at the Centre for Infections Communicable Disease Surveillance Centre (CDSC), London.

Footnotes

*Labbase is the database that collects laboratory reports of all microorganisms isolated at nearly 400 NHS and other laboratories throughout England and Wales. The database is managed and accessed at CDSC.

†Note that these figures refer to data extracted from Labbase only, and do not include cholera, malaria, Legionnaires' disease, Lyme borreliosis or leptospirosis where data has been obtained from other sources.

‡Although Turkey is politically a European country, the regions of the world in this report have been classified geographically in accordance with the UK yellow book, *Health Information for overseas travel*, (4) where Turkey is classified as part of north Africa and the middle east.

§Gastrointestinal illness events are reported to the Environmental and Enteric Diseases Department of CDSC by CCDCs and Environmental Health officers and each event may be one or more cases. It is a passive database and can only give a broad idea as to what sort of infections travellers are returning to England and Wales with. It cannot be matched to the laboratory reporting system.

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Zoonoses

Last updated: **7 October 2004**
Next update due: **4 November 2004**

Common animal associated infections, England and Wales laboratory reports: weeks 40-44/04

Common animal associated infections, England and Wales laboratory reports: weeks 40-44/04

	Total reports for weeks 40-44		Cumulative totals for weeks 01-40	
	2004*	2003	2004*	2003
*Borrelia burgdorferi**‡	19	16	222	272
Leptospira hardjo†§	–	–	2	–
Leptospira icterohaemorrhagiae†§	–	1	4	7
Leptospira other†§	–	–	13	8
Pasteurella haemolytica	–	–	8	3
Pasteurella multocida	15	27	239	234
Pastaurella pneumotropica	–	–	6	7
Pasteurella spp	4	6	68	72
Toxocara spp	–	–	3	4
Toxoplasma gondii	1	2	21	27
Toxoplasma spp	5	6	45	50
Capnocytphaga spp	1	–	4	10
Echinococcus granulosus	1	2	4	10
Coxiella burnettii	3	3	30	33
Chlamydia psittaci	6	14	62	75
Brucella spp	4	1	15	5
Orf-paravaccinia virus	–	–	1	5

* provisional data; † by specimen date; ‡ Lyme Disease Reference Laboratory and CDSC.
§ Leptospira Reference Laboratory and CDSC. NA = Not available.

Comment

Lyme borreliosis
Indigenous cases: M 48y with erythema migrans, flu-like illness and facial palsy; M 60y tick bite and arthralgia; M 62y with neuroborreliosis; M 52y New Forest resident with tick bite; F 43y new Forest resident with erythema migrans; M 59y with neuroborreliosis; M 57y with tick bite and lymphadenopathy; F 44y erythema migrans following tick bite; M10y with facial palsy; M 47y with neuroborreliosis; F 35y erythema migrans after camping in Somerset.

Overseas acquired cases: M 56y rash following tick bite in Sweden; M 66y erythema migrans after tick bite in Latvia; M 9y erythema migrans following tick bite in Germany; F 72y with neuroborreliosis (from Switzerland); F 27y previously diagnosed Lyme disease in Czech Republic; M 8y rash, facial palsy & lymphocytic meningitis after tick bite in Norway; M 53 y holiday exposure, Kola Penninsula, Russia; F 19y erythema migrans, flu-like illness following tick bite in the United States.

Pasteurellosis
Pasteurella multocida:
Pasteurella multocida: M 68 y following cat bite; F 70y with leg wound; M 39y with unspecified animal contact; 4 females aged 5 – 91ys and 8 males aged 5 – 85ys with no clinical or epidemiological details.

Pasteurella spp: M 47y with dog bite; F 8y with'skin infection'; 2 males aged 72-86y.

***Capnocytophaga* sp**: M 13y with unspecified animal contact.

Toxoplasmosis
***Toxoplasma gondii*:** M 44y with no clinical details.
***Toxoplasma* spp:** Two females aged 26 – 33ys with no clinical details. F 33y 19/40 pregnant, contact with cats; M 19y; sex not stated 28y with no clinical details.

Hydatid disease
Echinococcus granulosus: M 51y with no clinical details; M 56y (specimen hydatid cyst fluid).

Q fever
Coxiella burnetii: F 61y with acute Q fever; F 28y with a 10 day history of fever; M 33y with no clinical details.

Psittacosis
Chlamydia psittaci: M 50y with unspecified bird contact; M 40y dizziness and URT symptoms, works for the RSPCA; M age not stated; sex not stated 11y; F 61y & M 73y with no clinical details.

Brucellosis
Brucella melitensis: F 36y no clinical details; F 58y arrived in UK from Kosovo 5years ago, history of fever sweats & rigors associated with back pain.
Brucella spp: F 30y; F 32y (identified by serology).

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Diary

Last updated: **4 November 2004**

[Zoonotic Diseases: Global Threats & Local Issues]

Zoonotic Diseases: Global Threats & Local Issues

The conference *Zoonotic Diseases: Global Threats and Local Issues* will be held at Rochestown Park Hotel, Cork, on Tuesday 19 Wed 20 October 2004.

Included in Registration fee:

- Reception and Conference Dinner on Tues 19 October
- Tea /Coffee/Lunch (both days)
- Conference pack

Note:

- Places are strictly limited. Applications without conference fee will not be processed
- All applications will be acknowledged
- If places are unavailable, cheques will be returned
- We regret that fees will not be refunded for any cancellations made after 1 October 2004

Our sponsors are very gratefully acknowledged: Food Safety Promotion Board and Food Safety Authority of Ireland

For an application form please contact:

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