Health Protection Agency

CDR WEEKLY

Current Issue: Volume **14** Number **19** **Published on**: 7 May 2004

MAIN STORIES THIS WEEK:

REPORTS BY INFECTION:

Respiratory:

Travel:

Zoonoses:

CDR SUBSCRIPTION:

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News

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Next update due: **13 May 2004**

Chinese authorities confirm SARS infection in previously reported cases

The Chinese authorities have confirmed a diagnosis of SARS in five cases previously reported. A further four patients remain under investigation. Further information on can be found at: <http://www.who.int/csr/don/2004_04_30/en/>.

Investigation of the source of the outbreak continues to focus on lapses in biosafety procedures at the National Institute of Virology in Beijing. Further information is available at <http://www.who.int/csr/don/2004_05_05/en/>.

The HPA is continuing to monitor the situation, however, the threat to the United Kingdom remains low at this time and no travel restrictions to China or surrounding countries have been imposed by the Department of Health, the Foreign and Commonwealth Office, or the World Health Organization.

Current information is available on the HPA website at <http://www.hpa.org.uk/infections/topics_az/SARS/menu.htm>.

Health Protection Agency Annual Conference 2004

Online booking is now open for the Health Protection Agency Annual Conference 2004, taking place at Warwick University between 13 and 15 September. The conference website – <http://www.hpaconference.org.uk> – has full details of how to register online as well as information about the programme. Melanie Johnson, Minister for Public Health, will give a keynote address and invited speakers will address sessions on the main themes for the conference: children's health, international health, and risk communication.

The conference will be an important showcase for the presentation of high quality new research from the Health Protection Agency and partner organisations – over 400 abstracts have been submitted in a wide range of categories including emergency response, environmental, healthcare associated illness, medical treatment and control, and quality management and surveillance. The complete programme of parallel sessions will be available on the website in June.

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Respiratory

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Next update due: **4 June 2004**

Laboratory reports of respiratory infections made to CDSC from Health Protection Agency and NHS laboratories in England and Wales: weeks 14-18/2004

Laboratory reports of respiratory infections made to CDSC from Health Protection Agency and NHS laboratories in England and Wales

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 14-18/2004

Week	14/04	15/04	16/04	17/04	18/04	Total
Week ending	**04/04/04**	**11/04/04**	**18/04/04**	**25/04/04**	**02/05/04**	
Influenza A	13	2	1	4	9	**29**
Isolation	–	–	1	–	1	**4**
DIF	–	–	–	–	–	**–**
Four-fold rise in paired sera	–	–	–	–	4	**4**
PCR	–	–	1	–		**1**
Other	11	1	–	4	4	**20**
Influenza B	–	–	2	–	2	**4**
Isolation	–	–	–	–	–	**–**
DIF	–	–	1	–	–	**1**
Four-fold rise in paired sera	–	–	–	–	1	**1**
PCR	–	–	–	–	–	**–**
Other	–	–	1	–	1	2
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 14-18/04

Week	14/04	15/04	16/04	17/04	18/04	Total
Week ending	**04/04/04**	**11/04/04**	**18/04/04**	**25/04/04**	**02/05/04**	
Adenovirus*	32	29	29	18	37	**145**
Coronavirus	1	–	–	–	–	**–**
Parainfluenza†	13	5	20	13	26	**77**
Rhinovirus	11	5	6	–	4	**26**
Respiratory syncytial virus (RSV)‡	94	33	40	19	37	**223**

*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 14-18/04

Age group (years)	<1 year	1-4 years	5-14 years	15-44 years	45-64 years	≥65 years	Unknown	Total
Adenovirus*	16	18	10	81	16	3	1	**145**
Coronavirus	–	1	–	–	–	–	–	**1**
Influenza A	1	2	4	8	8	6	–	**29**
Influenza B	–	–	–	1	2	1	–	**4**
Parainfluenza†	53	11	3	3	5	1	1	**77**
Rhinovirus	18	3	1	3	–	1	–	**26**
Respiratory syncytial virus (RSV)‡	176	19	1	8	8	9	2	**223**

*Respiratory samples only, and excludes diagnoses made by electron microscopy (EM).
†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 (non-pneumonic cases*): weeks 14-18/04

Week	14/04	15/04	16/04	17/04	18/04	Total
Week ending	**04/04/04**	**11/04/04**	**18/04/04**	**25/04/04**	**02/05/04**	
Coxiella burnettii	2	–	1	–	–	**3**
Respiratory *Chlamydia* sp†	2	–	3	3	4	**12**
Mycoplasma pneumoniae	8	7	3	9	6	**33**
Legionella sp	4	7	2	2	3	**18**

* Non-pneumonic cases in brackets.
†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 14-18/04

Week	14/04	15/04	16/04	17/04	18/04	Total
Week ending	04/04/04	11/04/04	18/04/04	25/04/04	02/05/04	
Nosocomial	2	–	–	–	–	**2**
Community	2	5	1	1	1	**10**
Travel abroad	–	2	1	(1)	2	**6**
Travel UK	–	–	–	–	–	–
Total	**4**	**7**	**2**	**2**	**3**	**18**
Male	3	5	2	1	1	**12**
Female	1	2	–	1	2	**6**

* Non-pneumonic cases in brackets.

Seventeen cases were reported with pneumonia and one with non-pneumonic illness, 12 males aged from 31 to 78 years and six females aged from 22 to 73 years. Two cases were hospital-acquired and ten in the community-acquired. Three deaths were reported, (M 37y, M 65y, and M 68y).

Six cases were travel associated: one from each of Australia, Egypt, France and United States, Italy, Jersey, and Kenya.

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Travel health

Last updated: **7 May 2004**
Next update due: **4 June 2004**

Click here for links to travel health websites

Imported infections, England and Wales: January to March 2004

This is the first quarterly report on imported infections in England and Wales and covers the period from January to March 2004. The data presented below must be interpreted with caution. It is recommended that the section on 'Sources of data on travel-associated illness and their limitations for analysis' in *Illness in England, Wales, and Northern Ireland associated with foreign travel- a baseline report to 2002* (1) be used for guidance on interpretation of data on travel-associated illness. Please note, all data are provisional, final, confirmed data will be presented annually.

Gastrointestinal infections

Gastrointestinal infections were the most commonly reported illnesses associated with recent travel abroad in the first quarter of 2004. *Salmonella* (non-typhoidal) was the most frequently reported bacterial infection followed by *Campylobacter*, representing 17.8% (262/1476) and 3.1% (234/7476) of total reports respectively.

Reporting of travel history for gastrointestinal infections has been highly variable since 1990 (1). In particular, it is poorly reported in LabBase for *Campylobacter*, with 96% of reports with no information about travel history for the first quarter of 2003 and 2004. Travel history reporting for *Salmonella* infections is usually better with 62% of reports with no travel history information in 2003 and 47% in 2004. For the first quarter of 2004, a change in the automated computer system that feeds laboratory results into LabBase (from Oracle to MOLIS), resulted in 'country of travel' being omitted from most *Salmonella* reports. Therefore only 16.8% (44/262) of *Salmonella* infections with a report of recent travel abroad in 2004 had a 'country of travel' specified. This problem is currently being addressed. In 2003, 93.6% (322/344) of *Salmonella* infections reporting recent travel abroad had a country of travel specified, 41% (133/322) of those specified travel to Europe and the Indian sub-continent (ISC).

Salmonella typhi and *paratyphi* infections were imported into England and Wales in small numbers in the first quarter of 2004, with a small increase over 2003. The majority of infections (37/46) associated with recent travel abroad had no country of travel stated, due to the reasons stated above. In 2003, typhoid was most commonly associated with recent travel to the ISC.

Eleven per cent (22/199) of all *Shigella* infections reported in the first quarter of 2004, specified recenttravel abroad; ten were associated with recent travel to the ISC. *Giardia lamblia* was the most commonly reported protozoal infection associated with recent travel abroad during the first quarter of 2004 and represented 10% (64/619) of the total *Giardia* reports. The majority of reports (28/64) were associated with travel to the ISC.

Helminths

There were 16 laboratory reports of *Ascaris lumbricoides* (round worm) infection in the first quarter of 2004; only two

reported recent travel abroad. One (F 3y), reported recent travel to Pakistan, and the other (M 34y) had a dual infection with *Trichuris trichiura* ; he had recently returned from The Congo.

There were 23 reports of tapeworm infection, 12 of those were due to *Taenia saginata* (the beef tapeworm) of which one (F 27y) reported recent travel to Ethiopia, and 11 were unspeciated, of which one (M 20y) also reported travel to Africa.

Arthropod borne infections

Two hundred and ninety-seven cases of malaria were reported in the whole of the United Kingdom (UK) for the first quarter of 2004. All cases were imported, 78% (233/297) were due to *Plasmodium falciparum*, the most severe form of malaria.

There were three reports in LabBase of dengue fever, although none had stated any recent travel abroad it can be assumed they were imported, as dengue fever does not occur in the UK.

Three cases of cutaneous leishmaniasis were reported in the first quarter of 2004, all of whom reported recent travel abroad. Two cases (M 38y and F 48y) were caused by the *Leishmania vianniа*group and were imported from Belize and Bolivia respectively, and the other (M 25y) by *L. major* imported from Sudan.

Twenty-two cases of Lyme borreliosis were reported during the first quarter of 2004. Four were identified as having acquired their infections overseas. One (F 60y) had a persistent rash following a tick bite in Hungary. Another (M 12y) had oligoarthritis after tick exposure in Massachusetts. A serviceman (M 40y) had been posted back to the UK from Germany where he was originally diagnosed. The fourth overseas-acquired case had seroconverted following a tick bite in Sweden.

Other infections

Sixteen cases of schistosomiasis were reported in the first quarter of 2004, four of whom reported recent travel abroad. Of those with a travel history, two (F 26y, M 20y) were due to *S. haematobium* with recent travel to Malawi and Zimbabwe respectively where this species is endemic. Two schistosomal infections (M 28y, M 46y) where the species was not identified were imported from Zambia and Madagascar respectively.

As of 28 April 2004, there were eleven travel-associated cases of legionnaires' disease from a total of 36 reported in the first quarter of 2004. Three of the eleven travel-associated cases were involved in three different outbreaks; one each in outbreaks in Cyprus and France, where both cases died, and one case that was part of an outbreak in Tunisia.

If there are any queries or comments on the above data, please contact the Health Protection Agency's Travel Health Surveillance Section, Communicable Disease Surveillance Centre (CDSC), at <thss@hpa.org.uk>.

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/infections/topics_az/travel/pdf/full_version.pdf>..

Organism	Total reports for Jan-Mar				Cumulative totals for Jan-Mar			
	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	262	1476	344	1778	262	1476	344	1778
Campylobacter spp	234	7476	250	8183	234	7476	250	8183
Aeromonas spp	7	35	4	51	7	35	4	51

Shigella flexneri	7	49	8	85	7	49	8	85
Shigella dysenterae								
Shigella sonnei	15	116	20	140	15	116	20	140
Shigella boydii								
Shigella unknown spp	–	34	1	12	–	34	1	12
Salmonella Typhi	25	41	26	42	25	41	26	42
Salmonella Paratyphi (A,B,C)	21	31	15	39	21	31	15	39
Vibrio parahaemolyticus	2	3	2	6	2	3	2	6
Vibrio enterocolitica	–	–	–	–	–	–	–	–
Protozoal								
Entamoeba histolytica	5	31	10	50	5	31	10	50
Entamoeba coli	3	22	2	19	3	22	2	19
Giardia lamblia	64	619	72	714	64	619	72	714
Cryptosporidium spp	16	518	20	544	16	518	20	544
Cyclospora spp	–	2	–	1	–	2	–	1
Endolimax nana	2	7	3	25	2	7	3	25
Helminths								
Strongyloides stercoralis	–	6	–	1	–	6	–	1
Strongyloides spp	–	–	–	1	–	–	–	1
Ancylostoma duodenale	–	–	–	–	–	–	–	–
Necator americanus	–	–	–	–	–	–	–	–
Hookworm unspecified	–	3	2	12	–	3	2	12
Ascaris lumbricoides (round worm)	2	16	–	19	2	16	–	19
Trichuris trichiura (whip worm)	1	10	–	12	1	10	–	12
Hymenolepis diminuta	–	–	–	–	–	–	–	–
Hymenolepis nana	–	2	1	5	–	2	1	5
Hymenolepis spp	–	–	–	–	–	–	–	–
Taenia saginata	1	12	1	10	1	12	1	10
Taenia spp	1	11	–	10	1	11	–	10
Gnathostoma spp	–	1	1	1	–	1	–	1

Organism	**Total reports for Jan-Mar**				**Cumulative totals for Jan-Mar**			
	2004*		**2003**		**2004***		**2003**	
	Travel-related	**All reports**	**Travel-related**	**All reports**	**Travel-related**	**All reports**	**Travel-related**	**All reports**
Arthropod borne infections								
Malaria †								
Plasmodium falciparum	233	233	244	244	233	233	244	244
Plasmodium vivax	29	29	25	25	29	29	25	25

Plasmodium ovale	41	41	29	29	41	41	29	29
Plasmodium malariae	9	9	9	9	9	9	9	9
Mixed species	4	4	1	1	4	4	1	1
Total	297	297	327	327	297	297	327	327
Arboviruses								
Dengue virus	–	3	1	4	–	3	1	4
Chikungunya virus	–	–	–	–	–	–	–	–
Ross river virus	–	–	–	–	–	–	–	–
Sandfly fever virus	–	–	–	–	–	–	–	–
Unspecified	–	–	–	1	–	–	–	1
Leishmaniases								
Cutaneous	3	3	5	8	3	3	5	8
Visceral	–	–	–	–	–	–	–	–
Unspecified	–	–	–	1	–	–	–	1
Filariases								
Loa loa	–	–	–	–	–	–	–	–
Wuchereria bancrofti	–	–	–	–	–	–	–	–
Mansonella perstans	–	–	–	1	–	–	–	1
Onchocerca volvulus	–	–	–	–	–	–	–	–
Unspecified	–	–	1	1	–	–	1	1
Lyme borreliosis ‡	4	22	5	14	4	22	5	14
Miscellaneous								
Schistosome infections								
Schistosoma mansoni	–	2	–	4	–	2	–	4
Schistosoma haematobium	2	7	5	16	2	7	5	16
Schistosoma intercalatum	–	–	–	–	–	–	–	–
Schistosoma unknown spp	2	7	–	1	2	7	–	1
Other infections								
Leptospirosis ‡	–	4	–	12	–	4	–	12
Legionnaires' disease #	11	36	20	54	11	36	20	54
Coxiella burnetii (Q fever)	–	7	1	13	–	7	1	13
Rickettsia spp	–	–	–	–	–	–	–	–

*All data for 2004 is provisional and subject to change.
† Data on malaria was supplied by the HPA Malaria Reference Laboratory and represents the whole of the UK.
‡ 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 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.

Tables compiled by the Travel Health Surveillance Section, Communicable Disease Surveillance Centre (CDSC).

Most of the data was extracted from LabBase (non-provisional database) on 8 April 2004 using earliest specimen quarter unless otherwise stated. Information on travel history was extracted using the 'Recent travel abroad' field, the comments field and the feature fields 'Acquired in GB', 'Lived/travelled abroad in past', and 'Travel abroad'.

Unusual infections associated with foreign travel – part 2: Rickettsial infections

The organisms that will be described in this article are of the genera *Rickettsia* and *Coxiella,* both of which are in the Rickettsiaceae family.

There are three main species of *Rickettsia* that affect humans:

- ***R. prowazekii***, which causes epidemic typhus and ***R. typhi (mooseri)***, the organism that causes endemic (murine) typhus;
- ***R. rickettsia*** and ***R. conorii***, the main organisms causing spotted fevers;
- ***R. tsutsugamushi***, the organism that causes scrub typhus.

Coxiella burnetii, the only species in its genus, is the organism that causes Q fever.

Epidemic and endemic typhus

Epidemic typhus is caused by *R. prowazekii* and is transmitted by the human body louse *Pediculus humanus corporis*. After the body louse has ingested *Rickettsia* organisms by biting an infected human, the *Rickettsia* multiply rapidly in the gut of the louse and are excreted in large numbers in the faeces which can then be rubbed into an itching bite or be transmitted via the conjunctival membrane (1). Airborne transmission may occur in crowded conditions via inhalation of louse faeces. The clinical features of epidemic typhus are characterised by sudden onset of headache, chills, prostration, vomiting, high fever, severe myalgia, and shin pain; a petechial rash usually develops after the second to fourth day of fever. In populations with poor nutrition and immunity, the case fatality rate can be 20%. Typhus can often be confused with other diseases such as typhoid, malaria, measles, meningococcal septicaemia, and leptospirosis. Typhus must be included in the differential diagnosis of anyone who has travelled to an endemic area despite the fact it is now a rare disease.

Epidemic typhus is the only rickettsial disease that causes explosive pandemics in humans and has, in the past, been associated with wars and human disasters (2). It is, however, still endemic in the highlands and cold areas of Africa (particularly Burundi, Rwanda, Ethiopia, South Africa, Lesotho, Namibia, Nigeria, and Uganda), Asia (China, Kurdistan, northern India, and Pakistan), and central and South America. In the early 20th century, over 30 million cases of epidemic typhus occurred in Russia (3).

Endemic (murine) typhus is a similar disease to epidemic typhus but symptoms are not as severe, the case fatality rate is typically between 1% and 2%. It is caused by *R. typhi* (*R. mooseri*) and its epidemiology is linked to the distribution of rats and the rat flea *Xenopsylla cheopis*, the principle vector. Transmission to humans occurs much in the same way as *R. prowazekii* (described above). Endemic typhus is more common in warmer countries and has been known to cause disease in the United States (US), Mexico, Israel, Pakistan, India, south east Asia, China, Australia, and the northern part of South America (1), and has been reported as being an important cause of fever in displaced Khmer refugees in Thailand (4).

Scrub typhus

Scrub typhus is a febrile illness similar to epidemic and endemic typhus as (described above), caused by *R. tsutsugamushi.* It is transmitted to humans *via* the larvae of trombiculid mites, which can enter through cuts or abrasions in human skin caused by walking through jungle grass (*Imperata cylindrical).* One of the most distinguishing characteristics is a skin lesion at the site of entry by the mite larva, which often develops into a black ‘eschar’ before fever develops. The case fatality rate ranges between 1% and 60%.

Scrub typhus is endemic in low-lying rural areas of Asia (parts of China, Japan, Taiwan, the Philippines, Indonesia, Malaysia, Thailand, Cambodia, Vietnam, Laos, Myanmar, Sri Lanka, and India), north eastern Australia, and the islands of the Indian Ocean. It has also been associated in the past, with US military exercises in south east Asia (5) and was common in soldiers in the Second World War.

Spotted fevers

The most common 'spotted fevers' are those caused by *R. rickettsii* (Rocky Mountain spotted fever) and *R. conorii* (Mediterranean spotted fever) (*R. africae*) (African tick typhus). They are transmitted to humans via the bite of an infected tick (of various genera, depending on geographic location). Rocky Mountain spotted fever occurs in Brazil, Canada, Colombia, Mexico, and the south eastern states of the US. The main clinical features, which may differ depending on the specific agent are: abrupt onset of fever, severe headaches and muscle pains, and a rash that usually develops after two to three days on the soles of the feet, wrists, and forearms. The case fatality rate can be between 1% and 7%.

African tick typhus is prevalent throughout Africa, especially South Africa. It is caused by *R. conorii* and is transmitted to humans via the bite of infected dog or other animal ticks. The main areas of risk are savannah and veldt areas; and travellers on safari are at particular risk of exposure. *R. conorii* also occurs in coastal Mediterranean countries (Mediteranean tick typhus), the clinical features are similar to Rocky Mountain spotted fever but commonly, there is an 'eschar' at the site of the tick bite.

Rickettsial infections in travellers from England and Wales

Table 1 shows the laboratory reports of rickettsial infections that were reported in England and Wales between 1990 and 2002. During this time, there were 66 laboratory reports in LabBase of typhus or spotted fever reported as being caused by *Rickettsia* spp. The majority of infections reported (45/66) did not have a species named, although rickettsia spotted fever seemed to be the most reported. *Rickettsia* spp do not occur in the United Kingdom (UK); therefore it can be assumed that all of these infections were probably acquired abroad. Forty-two (42/66) reports specified a recent history of travel abroad and of those reports, 28 specified recent travel to sub-Saharan or southern Africa (19 to South Africa). These data reflect the endemic foci of rickettsial infections, so travellers to these areas should take measures to avoid tick bites. It would be helpful to have more complete information about the species of *Rickettsia* that occur in travellers from the UK, along with full travel histories in order to elucidate the risk to travellers from these infections.

Table 1 Laboratory reports of rickettsial infections, England and Wales: 1990 to 2002

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Total
R. conorii	–	1	1	2	1	4	–	–	–	1	–	–	–	**10**
R. mooseri	–	1	1	-	2	–	–	–	–	–	1	–	–	**5**
R. prowazekii	–	–	–	1	–	–	–	–	3	–	–	–	–	**4**
R. tsutsugamushi	–	–	–	–	1	–	–	–	–	–	–	–	–	**1**
R. typhi	–	–	–	1	–	–	–	–	–	–	–	–	–	**1**
R unspecified	1	2	1	–	–	–	2	2	3	1	3	1	3	**19**
Rickkettsial spotted fever	3	2	–	1	2	1	2	2	4	5	1	1	2	**26**
Total	**4**	**6**	**3**	**5**	**6**	**5**	**4**	**4**	**10**	**7**	**5**	**2**	**5**	**66**

Q Fever

Q (Query) fever, (so-called because for many years its cause was unknown), is caused by the organism *Coxiella burnetii*. It is a zoonotic infection with sheep, cattle, and goats being the most common carriers. The organism localises in the uterus and mammary glands and is found in the afterbirth and birth fluids, as well as the milk, urine, and faeces of infected animals. Infection in these animals is usually asymptomatic. Human infection usually occurs by inhalation of infected dust or exposure to amniotic fluid or placenta, where the organism can survive for a long time (6).

Q fever occurs all over the world and is particularly prevalent where the reservoir animals are present; therefore farmers, veterinarians, meat and dairy workers are at a high risk of infection. Some individuals have been known to contract Q fever from eating unpasteurised dairy products. Although it is relatively uncommon in most parts of the UK, indigenous cases occur especially in south west England and Northern Ireland, a reflection of the importance of agriculture in these regions. Imported cases also occur.

Q Fever in UK travellers

Between 1990 and 2002, there were 1459 laboratory reports of *Coxiella burnetii* and *Coxiella* sp in LabBase from England, Wales, and Northern Ireland. (Note that *C. burnetii* is the only species in the genus *Coxiella*.) Forty-nine of those (3.4%) reported recent travel or residence abroad with an average of 4.7 cases reported annually between 1990 and 1999. No cases were reported in 2000, and only one case was reported in both 2001 and 2002. Table 2 shows the region of travel/residence of reported cases of Q fever in England, Wales, and Northern Ireland between 1990 and 2002.

Table 2 Laboratory reports of Q fever that have reported recent travel/residence, England, Wales, and Northern Ireland: 1990 to 2002

Region of travel/residence	No of reports
Europe (Mediterranean)	12
North Africa and middle east	7
Indian sub-continent (ISC)	6
Sub-Saharan and southern Africa	6
South east Asia and far east	4
Europe (non-Mediterranean)	3
Australia, New Zealand, and United States	3
Central America	1
Caribbean	1
South America	1
Africa (unspecified)	1
Asia (unspecified)	1
More than one region	1
Unknown	2
Total	**49**

Of the 49 cases that reported recent travel/residence abroad, 12 reported recent travel/residence in Mediterranean countries of Europe such as Cyprus (4), Spain (4) and Turkey (3). Seven cases had been in countries in North Africa and the Middle East such as Egypt (2), Libya, Jordan, Tunisia, Morocco, and Yemen (all one case each) and six cases each in the ISC and sub-Saharan and southern Africa. Cases have been reported from most world regions, which illustrates the global distribution of Q fever, while revealing that it does not necessarily reflect travelling patterns of UK residents. Two of the cases reported contact with animals but information regarding exact exposure is incomplete for most of the reports. The risk of acquiring Q fever is significantly higher in the UK (1410/1459, 96.6%) than as a result of foreign travel (49/1459, 3.4%) although more complete information is required to determine the extent of the risk of acquiring Q fever during overseas travel.

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Zoonoses

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Common animal associated infections, England and Wales laboratory reports: weeks 14-17/04

Common animal associated infections, England and Wales laboratory reports: weeks 14-17/04

	Total reports for weeks 14-17		Cumulative totals for weeks 14-17	
	2004*	2003	2004*	2003
*Borrelia bugdorfer**‡	3	15	25	20
Leptospira hardjo†§	–	–	–	–
Leptospira icterohaemorrhagiae†§	–	–	3	4
Leptospira other†§	1	1	2	9
Pasteurella haemolytica	1	–	5	1
Pasteurella multocida	16	16	83	88
Pastaurella pneumotropica	–	1	1	3
Pasteurella spp	6	8	25	25
Toxocara canis	–	–	–	1
Toxocara cati	–	–	–	–
Toxocara spp	–	–	–	–
Toxoplasma gondii	1	6	9	13
Toxoplasma spp	1	5	18	19

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

Imported infections, England and Wales: 2004

As of 7 May 2004, imported infections data is now reported quarterly in the Travel section of *CDR Weekly*, and is available at: <http://www.hpa.org.uk/cdr/pages/travel.htm>.

Comments: weeks 14-17/04

***Lyme borreliosis*:** two males, two females.
***Borrelia burgdorferi*:** M 26y, F 29y, M 29y, and F 60y with erythema migrans.

Leptospirosis: one male.
***Leptospira* spp:** M 16y with no clinical or epidemiological details.

Pasteurellosis: fifteen females, seven males.
***Pasteurella multocida*:** F <1y, dog bites, F 35y, cat bite, F 68y in coronary care unit, F 60y, dog bite to right middle finger five months previously, F 30y, dog bite to thigh; M 43y, cat bite; three males aged between 16y and 60y, and seven females aged between 41y and 93y with no clinical or epidemiological details.
***Pasteurella haemolytica*:** M 41y with no clinical details.
***Pasteurella* spp:** F 42y, F 97y, F 7y, M 38y, M 43y, all with no clinical or epidemiological details

Toxoplasmosis: one male, one female.
***Toxoplasma gondii*:** M 36y with no clinical details.
***Toxoplasma* spp:** F 24y with no clinical details.