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- ▶ Winter Flu vaccinations for poultry workers – updated DH policy and guidance
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Winter Flu vaccinations for poultry workers – updated DH policy and guidance

On 28 September 2007, the Department of Health (DH) updated their January 2007 guidance for those who work in close contact with poultry with the recommendation to offer influenza immunisation this winter [1]. This is being done as a precautionary public health measure and does not mean that workers are at any higher risk of getting flu this winter than usual. Nor does it mean that there is an increased risk of an outbreak of bird flu in the UK as this risk remains low.

The Health Protection Agency (HPA) definition of a 'poultry worker' is unchanged from last year. The definition forms the basis of selection and includes:

1. Workers employed at or regularly visiting registered poultry units who fall into one or more of the following categories:
 - a. routinely access enclosed poultry rearing or egg production areas;
 - b. perform initial sorting of poultry eggs if the sorting area is an integral part of the production unit;
 - c. catch or cull poultry within enclosed poultry rearing or egg production areas;
 - d. perform final clean down of poultry sheds following depopulation of a poultry house.
2. Workers who collect and remove poultry manure or litter from within enclosed poultry rearing or egg production areas of registered poultry units.
3. Workers in poultry processing units that:
 - a. catch and handle live birds;
 - b. kill and eviscerate birds;
 - c. cleanse and disinfect areas and equipment contaminated by poultry faeces.

Primary Care Trusts are being asked to put in place Local Enhanced Schemes for immunisation of poultry workers. The Health Protection Agency will be coordinating the collection of vaccine uptake data on this scheme on behalf of the DH.

Seasonal Flu immunisation campaign

In March 2007, the DH published information about the seasonal influenza immunisation campaign including recommendations on the groups to be targeted for vaccination [2].

References

1. Department of Health. Flu vaccination for poultry workers [online] [accessed 4 October 2007]. London : Department of Health, 28 September 2007. Available at: <http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_063041 >.

2. Department of Health. Flu [online] [accessed 4 October 2007]. London : Department of Health, March 2007. Available at: <<http://www.dh.gov.uk/en/Policyandguidance/Healthandsocialcaretopics/Flu/index.htm>>.

UK Government-wide strategy for global health - report of stakeholder meetings

On 2 October 2007, the Department of Health (DH) published *UK Government-wide strategy for global health* [1]. Following the publication of *Health is global: proposals for a UK Government-wide strategy* [2] in March 2007, the DH launched an informal discussion period to help establish priority areas for the strategy. A cross-government steering group, with representatives from all departments with an interest in global health was formed to oversee the process. As a key part of this, the DH contracted a consultant to organise three stakeholder meetings to discuss how the United Kingdom (UK) Government can best respond to global health issues.

The report concludes that health is rising up the global political agenda, in the same way as environmental issues have done in the last 20 years,. Factors behind this include growing awareness of inequalities in health, and the consequences for people's health in the global trade in foodstuffs, medicines and tobacco, the migration of trained health workers, and the impact of war and climate change. International relations are affected by diseases such as HIV/AIDS and avian flu, and also by variations in food standards and the training of health workers.

Four broad themes emerged from the three meetings: the rising profile of health as an issue, the absence of a consensus on the level at which a global health strategy should be pitched, policy coherence and how to achieve it, and the need for principles to guide practice.

References

1. Department of Health [accessed 3 October 2007] . *UK Government-wide strategy for global health*. London : Department of Health, 2 October 2007. Available at http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_079012

2. Department of Health [accessed 3 October 2007] . *Health is global: proposals for a UK Government-wide strategy*. London : Department of Health, 7 March 2007. Available at: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_072697

Respiratory

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Laboratory reports of respiratory infections made to Cfl from HPA and NHS laboratories in England and Wales: weeks 36-39/2007

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

Table 1 Reports of influenza infection made to Cfl, by week of report: weeks 36-39/2007

Week	Week 36	Week 37	Week 38	Week 39	Total
Week ending	09/09/07	16/09/07	23/09/07	30/09/07	
Influenza A	3	1	2	3	9
Isolation	-	-	-	-	-
DIF	-	-	-	-	-
Four-fold rise in paired sera	-	-	-	-	-
PCR	1	-	-	-	1
Other	2	1	2	3	8
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), by week of report: weeks 36-39/2007

Week	Week 36	Week 37	Week 38	Week 39	Total
Week ending	09/09/07	16/09/07	23/09/07	30/09/07	

Adenovirus [*]	22	11	23	18	74
Coronavirus	–	–	–	–	–
Parainfluenza [†]	8	4	7	8	27
Rhinovirus	9	1	11	4	25
Respiratory Syncytial Virus (RSV)	10	12	15	35	72

*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 36-39/2007

Age group (years)	<1 year	1-4 years	5-14 years	15-44 years	45-64 years	≥65 years	Unknown	Total
Adenovirus [*]	7	12	7	31	12	5	–	74
Coronavirus	–	–	–	–	–	–	–	–
Influenza A	–	1	–	4	3	1	–	9
Influenza B	–	–	–	1	–	–	–	1
Parainfluenza [†]	11	6	4	3	2	1	–	27
Rhinovirus	13	4	2	1	5	–	–	25
Respiratory Syncytial Virus (RSV)	49	7	–	4	5	7	–	72

*Respiratory samples only.

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

Table 4 Laboratory reports of infections associated with atypical pneumonia, by week of report: weeks 36-39/2007

Week	Week 36	Week 37	Week 38	Week 39	Total
Week ending	09/09/07	16/09/07	23/09/07	30/09/07	
<i>Coxiella burnettii</i>	9	1	1	1	12
respiratory Chlamydia sp.	2	–	1	24	27
<i>Mycoplasma pneumoniae</i>	11	4	11	13	39
Legionella sp.	21	15	9	10	55

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

Table 5a Reports of legionnaires' disease cases in England and Wales, by week of report: weeks 36-39/2007

Week	Week 36	Week 37	Week 38	Week 39	Total
Week ending	09/09/07	16/09/07	23/09/07	30/09/07	
Nosocomial	–	1	–	1	2
Community	12	8(1†)(1*)	3	3	26
Travel Abroad	7	6	5	5	23

Travel UK	2(1*)	–	1	1	4
Total	21	15	9	10	55
Male	14	12	7	7	40
Female	7	3	2	3	15

* Non-pneumonic case(s).

† 2006 case(s).

53 cases of Legionnaires' disease were reported with pneumonia along with two non-pneumonic cases; 55 males aged 34-90yrs and 15 females aged 37-74yrs. 26 cases had community acquired infection. One death was reported in a 34 year old male.

27 cases were travel associated: Belgium/Czech Republic (1), Bulgaria (1), Canada (1), Cruise/Spain (2), France (1), France/Italy (1), FYR of Macedonia (1), Greece (2), Italy (2), Malta (2), Portugal/Turkey (1), Spain (2), Turkey (5), United Kingdom (4) and United States of America (1).

Table 5b Reports of legionnaires' disease cases by region of report in England and Wales: weeks 36-39/2007

REGION	Nosocomial	Community	Travel Abroad	Travel UK	Total
North East	–	–	–	–	2
Yorkshire & Humber	–	1	1	1	3
East Midlands	–	2	1	2	5
East of England	–	7(1*)	3	–	10
London	–	4	3	–	7
South East	–	4	2	–	6
South West	–	2(1†)	4	–	6
West Midlands	1	2	1	–	4
North West	1	1	2	1(1*)	5
Wales	–	3	2	–	5
Unknown	–	–	2	–	2
Total	2	26	23	4	55

* Non-pneumonic case(s).

†2006 cases.

	related	reports	related	reports	related	reports	related	reports
Gastrointestinal Infections								
Bacterial								
<i>Salmonella</i> spp	536	2460	600	2392	977	4717	948	3927
<i>Campylobacter</i> spp	305	13711	232	13066	557	21885	428	20813
<i>Shigella flexneri</i>	3	83	15	121	10	157	29	196
<i>Shigella dysenteriae</i> [†]	12	18	9	14	13	23	15	25
<i>Shigella sonnei</i>	45	308	25	175	67	484	36	285
<i>Shigella boydii</i> [†]	22	44	24	45	41	73	33	65
Other (species unknown)	–	27	3	43	1	51	4	62
<i>Salmonella</i> Typhi	37	70	25	55	61	128	50	107
<i>Salmonella</i> Paratyphi (A,B,C)	35	70	54	83	61	109	87	149
<i>Vibrio cholerae</i> O1 [†]	14	14	5	5	14	15	5	5
<i>Vibrio parahaemolyticus</i>	1	3	2	6	3	7	5	10
Protozoal								
<i>Entamoeba histolytica</i>	–	13	2	28	1	32	4	50
<i>Giardia lamblia</i>	61	650	56	606	123	1253	137	1239
<i>Cryptosporidium</i>	7	609	6	616	21	1048	19	1095
<i>Cyclospora</i> spp	5	12	1	8	6	16	1	9
Helminths								
<i>Strongyloides stercoralis</i>	–	3	2	7	0	7	4	12
<i>Strongyloides</i> spp	1	2	–	2	1	5	–	2
<i>Ancylostoma duodenale</i>	–	–	–	1	–	–	–	1
<i>Necator americanus</i>	–	–	–	–	–	–	–	0
Hookworm unspec	–	4	–	8	2	8	1	9

<i>Ascaris lumbricoides</i> (round worm)	3	13	3	14	5	22	5	29
<i>Trichuris trichiura</i> (whip worm)	–	3	1	8	1	7	4	16
<i>Hymenolepis diminuta</i>	–	–	–	–	–	–	–	–
<i>Hymenolepis nana</i>	–	1	–	2	1	3	–	4
<i>Hymenolepis</i> spp	–	–	–	–	–	–	–	–
<i>Taenia saginata</i>	2	16	3	12	6	27	5	26
<i>Taenia</i> spp	1	13	1	11	1	21	1	19
<i>Gnathostoma</i> spp	–	–	–	–	–	–	–	–
<i>Diphyllobothrium latum</i> (fish tape worm)	–	–	–	2	–	–	–	2
Arthropod borne infections								
Malaria UK‡	341	341	415	415	624	624	757	757
<i>Plasmodium falciparum</i>	235	235	335	335	442	442	609	609
<i>Pl. vivax</i>	69	69	54	54	108	108	90	90
<i>Pl. malariae</i>	6	6	2	2	13	13	8	8
<i>Pl. ovale</i>	27	27	20	20	53	53	45	45
<i>Pl.unspecified</i>	–	–	1	1	–	–	1	1
Mixed	4	4	1	1	8	8	2	2
Other (<i>P. knowlesi</i>)	–	–	1	1	–	–	1	1
Arboviruses								
Dengue virus	2	5	1	10	2	7	3	15
Chikungunya virus	–	–	–	10	–	3	–	11
Ross river virus	–	–	–	–	–	–	1	1
Sandfly fever virus	–	–	–	–	–	–	–	–
Unspecified	–	3	–	1	1	8	1	5
Leishmaniases								
Cutaneous	3	3	2	5	5	6	14	18
Visceral	4	4	1	2	5	6	3	5

Unspecified	-	4	-	1	1	8	-	2
Filariases								
<i>Loa loa</i>	-	-	-	-	-	-	-	1
<i>Wucheria bancrofti</i>	-	-	-	-	-	-	1	1
<i>Mansonella perstans</i>	-	-	-	-	-	-	-	-
<i>Onchocerca volvulus</i>	-	-	-	-	-	-	-	-
Unspecified	-	-	-	-	-	-	-	-
Lyme borreliosis§								
	8	160	NA	NA	22	318	NA	NA
Miscellaneous								
Schistosome infections								
<i>Schistosoma mansoni</i>	1	2	0	5	1	2	-	5
<i>Schistosoma haematobium</i>	-	4	1	11	4	17	2	16
<i>Schistosoma intercalatum</i>	-	-	-	-	-	-	-	0
<i>Schistosoma</i> spp	3	10	1	4	4	16	1	6
Other infections								
Leptospirosis§	1	7	1	4	3	21	NA	NA
Legionnaires' disease**	-	-	34	63	10	53	55	112
<i>Coxiella burnetii</i> (Q fever)	2	12	-	5	2	19	-	8
<i>Rickettsia</i> spp	1	5	2	2	2	7	2	6

All data extracted from Labbase 13.09.07 unless otherwise specified

*All data for 2007 is provisional and may be subject to change†Data on cholera, *S. boydii* and *S. dysenteriae* supplied by the CfI Laboratory of Enteric Pathogens

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

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

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

†† Includes one *T. solium*, typically found in pig

Gastrointestinal infections

Bacterial infections

Gastrointestinal infections are the most common infection reported in returning travellers, with salmonella infections being the most frequently reported. In the second quarter of 2007, there were 2,460 reports of non-typhoidal *Salmonella* spp in England and Wales, of which 536 (22%) were associated with recent travel abroad. In general, campylobacter infections are more frequently reported in England and Wales than salmonella infections but fewer of them are reported to be associated with travel, (13,711 in total of which 305 (2%) reported recent travel abroad). Travel history is however not as complete as for salmonella reports [2].

Salmonella spp (non typhoidal)

Of the *Salmonella* spp reports that stated recent travel abroad (536), *Salmonella* Enteritidis was the most reported (224, 42%), with phage types (PT) 1, 4, 21, and 6 being the most common, followed by *Salmonella* Typhimurium (65) and *S. Virchow* (28). The countries of travel most frequently reported are listed in table 2, with 53 other countries also reported in much smaller numbers. Eighty-two reports had no country stated. *Salmonella* spp as well as other gastrointestinal infections are wide spread throughout the world and travel-associated infections tend to follow travel patterns of UK residents. Countries such as India, Spain (particularly the Spanish islands of the Canaries and the Balearics), Egypt, Morocco, and Tunisia tend to be popular destinations for UK travellers so we would expect to see more infections acquired in these countries. Thailand also featured high in the top ten list and infections acquired in Thailand tended to be caused by *S. Stanley* (nine reports); this is consistent with previous years [3].

Table 2 Laboratory reports of *Salmonella* spp associated with foreign travel, England and Wales: April to June 2007

Country of travel	S. Enteritidis						S. Typhimurium	S. Virchow	Other serotypes	Total
	PT1	PT4	PT21	PT6	Other PT	PT Not stated				
India	4	–	–	–	–	1	10	7	26	48
Spain	15	3	3	–	10	6	6	2	2	47
Egypt	6	2	–	–	1	1	7	8	14	39
Thailand	1	–	–	–	1	–	5	4	26	37
Pakistan	–	–	–	–	1	–	–	1	22	24
Kenya	2	1	–	–	1	–	3	2	14	23
Turkey	–	6	4	7	–	1	1	1	1	21
Greece	3	–	9	9	1	2	4	–	–	28
Tunisia	1	1	–	–	5	–	1	–	1	9
Morocco	4	–	–	–	1	–	2	1	6	14
Other (N=53)	13	12	8	3	16	11	16	2	83	164
Not stated	11	6	3	4	18	6	10	–	24	82
Total	60	31	27	23	55	28	65	28	219	536

Campylobacter spp

Of the *Campylobacter* spp reports that stated recent travel abroad (305), the most frequently reported country of travel was Spain (66, 22%), followed by India, Morocco, and Portugal

[table 3]. Thirty-four other countries were also reported in much smaller numbers. Fourteen reports had no country stated.

Table 3 Laboratory reports of *Campylobacter* spp associated with foreign travel, England and Wales: April to June 2007

Country of travel	Laboratory reports
Spain	66
India	32
Morocco	23
Portugal	23
Turkey	16
France	13
Pakistan	12
Egypt	9
Tunisia	8
Kenya	7
Other countries (N=34)	82
Country not stated	14
Total	305

***Shigella* spp**

In the second quarter of 2007, there were 480 reports of shigella infection, of which 44 were caused by *S. boydii* and 18 by *S. dysenteriae*, the organisms that cause dysentery-like (bloody diarrhoea) illness. Thirty-one percent of all *Shigella* reports had travel history of which 82 (17% of the total) were associated with recent travel abroad. Egypt (36/82, 44%) followed by India (14/82, 17%) and Pakistan (10/82, 12%) were the most frequently reported countries of travel. Other countries reported were Morocco (three), Nepal, South Africa, and Ghana (two each), and Kenya, Bangladesh, Tibet, Dominican Republic, Spain, Nigeria, and Iraq (one each); four reports had no country of travel stated.

Cholera

There were 14 reports of *Vibrio cholerae* serogroup O1, compared to only five in the same period in 2006; countries of travel reported were Pakistan (nine), India (four), and Egypt (one).

Intestinal protozoal infections

Cryptosporidium

During the first quarter, there were 609 reports of *Cryptosporidium* reported via Co-Surv in England and Wales (16% with travel history), of which 7/609 (1%) reports stated recent travel abroad. Two reports stated travel to India, and one each travelled to Morocco, Tanzania, Cuba, Zambia, and Brazil. Sentinel surveillance submission forms to the UK *Cryptosporidium* Reference Unit (CRU) in Swansea for genotyping during the same time frame included 14/208 (6.7%) travel abroad-associated cases. [Rachel Chalmers, Head of UK *Cryptosporidium* Reference Unit, NPWS Wales, personal communication, 21 September 2007]. Of the 14 travel-associated cases; eight were confirmed as *C. parvum* and had travelled to Pakistan (two), France (one), Gran Canaria (one), Tenerife (one), Japan (one), Sweden (one), and one had no country stated; four were *C. hominis* with travel to India (two), Pakistan (one), and South Africa (one); one case with travel to Egypt was not confirmed as *Cryptosporidium* and a further untyped case had no country stated.

Giardia lamblia

There were 650 reports of *Giardia lamblia* (26% with travel history), of which 61 had stated recent travel abroad. The most frequently reported country of travel was India (13 reports) followed by Egypt (six), Pakistan (four), Spain, Morocco, United Arab Emirates, Tanzania, Netherlands, The Gambia, and Madagascar (two each). Twenty other countries or regions were also reported and one report had no country of travel stated.

Other intestinal protozoa

Other infections reported in this category included 13 reports of *Entamoeba histolytica*, none of which were associated with recent travel abroad, and 12 reports of *Cyclospora*, of which five were associated with recent travel abroad; one each stated travel to Asia unspecified, Cuba, Nepal, Mexico, and Colombia.

Enteric fever

During the second quarter of 2007, there were 70 reports of *Salmonella* Typhi and 70 reports of *S. Paratyphi* (63 were *S. Paratyphi* A and seven *S. Paratyphi* B). Reports of *S. Paratyphi* decreased by 16% compared to the same period in 2006 (83 reports) and *S. Typhi* reports increased by 27% (55 reports in 2006). Fifty-one percent of all enteric fever reports in the second quarter in 2007, had travel history information compared to 57% in 2006.

Recent travel abroad was indicated for 37/70 (53%) reports of *S. Typhi* and 33/63 (52%) of *S. Paratyphi* A reports. Of the seven *S. Paratyphi* B reports, two were associated with recent travel abroad, one to India, and one to South America. Countries of travel for *S. Typhi* and *Paratyphi* A are indicated in table 4.

Table 4 Enteric fever reports associated with foreign travel, England and Wales: April to June 2007

Country of travel	S . Typhi	S . Paratyphi A	Total
India	17	17	34
Pakistan	7	8	15
Bangladesh	5	1	6
Nigeria	1	–	1
Country not stated	7	7	14
Total	37	33	70

Intestinal helminths

In the second quarter of 2007 there were 55 reports of helminth infection, of which seven stated recent travel abroad. Countries of travel stated are in table 5. Helminth infections can persist in the body for months and it may not be possible to say for certain where these infections were acquired; they are probably associated with new entrants to the UK as well as short-term travellers.

Table 5 Intestinal helminths associated with foreign travel, England and Wales: second quarter 2007

Organism	Countries of travel	Total
<i>Ascaris lumbricoides</i>	Bangladesh (2), Middle East	3
<i>Taenia saginata</i>	Egypt , Poland	2

<i>Taenia</i> sp	South Africa	1
<i>Strongyloides</i> sp	Thailand	1

Arthropod borne infections

Malaria

During the second quarter of 2007, there were 341 cases of malaria reported in the United Kingdom; 69% (235 cases) of which were caused by the parasite, *Plasmodium falciparum* (which causes the most serious, and potentially fatal, form of malaria) and 20% (69 cases) were caused by *P. vivax*. Where region of travel was known, 77% (151/197) of malaria cases caused by *P. falciparum* were acquired in West Africa; 88% (50/57) of *P. vivax* cases were acquired in the Indian sub-continent, and 86% (19/22) of *P. ovale* were acquired in West Africa.

Dengue

Five cases of dengue fever were reported through Co-Surv compared to ten in the same period in 2006. Travel history was available for two cases, one of which was associated with travel to Papua New Guinea, and the other associated with travel to Malaysia, Philippines, and Thailand. During the same time period, the HPA Special Pathogens Reference Unit (SPRU) reported eleven confirmed, 23 probable, and one possible case of dengue fever (35 in total). Where stated, countries of travel included Brazil (six), Thailand (four), Cook Islands, Indonesia, Philippines, Kenya (two each), and Cambodia (two each), and nine other countries (some cases travelled to more than one country); nine cases had no country of travel stated.

Chikungunya

No cases of chikungunya infection were reported through Co-Surv in the second quarter, compared to ten in the same period in 2006. During the same time period, the SPRU reported one confirmed and two probable cases. All three cases reported were associated with travel to India.

Leishmaniasis

There were eleven cases of leishmaniasis reported in the second quarter, three of which were presumed to be cutaneous leishmaniasis, one each travelled to Guyana, Spain, and Tunisia. There were four presumed visceral infections, one each stated travel to Afghanistan, Portugal, Spain, and Turkey. There were four unspecified leishmania infections, all with no travel history.

Lyme borreliosis

Reports of Lyme borreliosis confirmed by the HPA Lyme Borreliosis Unit have continued to show an increase in the second quarter of 2007 compared with the same period in 2006. One hundred and sixty cases were identified, compared with 103 during the same period in 2006. The increase in laboratory confirmations during 2007 has been matched by an increase in clinical submissions to the reference unit. A travel history was available for 13 (8%) reports – eight reported travel abroad and five travel within the British Isles.

Infections acquired abroad were acquired in northern European countries (table 6), however, the majority of infections continue to be acquired within the UK. The age and sex distributions of cases continue to exhibit previously described characteristics (http://www.hpa.org.uk/infections/topics_az/zoonoses/lyme_borreliosis/data_2006.htm).

Table 6. Countries of travel for leptospirosis acquired abroad, UK : 2nd quarter 2007

Country of infection	Number of reports
Germany	3
Latvia	1
Slovakia	1
Norway	1
Sweden	1
Ukraine	1
Total	8

Other infections

Schistosomiasis

Sixteen cases of schistosomiasis were reported in the second quarter of 2007, four *Schistosoma haematobium*, none of which had a travel history, two *S. mansoni* of which one had travelled to Papua New Guinea, and ten unspecified species of which three had travelled, two to Zimbabwe and one with no country stated.

Rickettsial infections

There were five cases of *Rickettsia* infection reported via Co-Surv, one diagnosed with tick bite fever, which had travelled to South Africa, three *Rickettsia* spotted fevers, all with no travel history, and one unspecified *Rickettsia* infection with no travel history. During the same time period the SPRU reported one confirmed case of *Rickettsia* spotted fever (no travel history) and one case of epidemic typhus, who had travelled to India. In addition, there were 15 probable cases of spotted fever of which four had travelled to Africa and one to Bosnia and Herzegovina, and two probable cases of epidemic typhus, both with no travel history.

Legionnaires' disease

There were 119 cases of legionnaires' disease reported in total, of which 51 spent all or some of the incubation period of two to ten days prior to onset of symptoms abroad. This is compared to 37 travel-related cases from a total of 71 reported during the same period in 2006. There were two deaths associated with the travel-related cases and 11 of the 51 travel cases were involved in six different outbreaks in Spain, Turkey and Bulgaria.

Leptospirosis

Seven cases of Leptospirosis (one acquired abroad) were identified during the second quarter of 2007; this compares with four during the same period in 2006 (one acquired abroad).

One case was identified with serovar *L. Icterohaemorrhagiae*, one case had *L. Hebdomadis* (past infection) and in five cases, including the infection acquired abroad, the serovar was not determined.

References

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3. Health Protection Agency. *Foreign travel associated illness, England, Wales, and Northern Ireland – 2007 report*. London: HPA, 2007. Available at <<http://www.hpa.org.uk/publications/PublicationDisplay.asp?PublicationID=101>>.

*Co-Surv is the routine laboratory reporting system 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 the Centre for Infections.

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

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Common animal associated infections, England and Wales: laboratory reports, weeks 27 to 39/07

Common animal associated infections, England and Wales: laboratory reports, weeks 27 to 39/07

Organism	Total reports for week 27 – 39		Cumulative totals for weeks 01 – 39	
	2007*	2006	2007*	2006
<i>Borrelia burgdorferi</i> *,‡	268	280	511	435
<i>Leptospira hardjo</i> †,§	–	1	–	1
<i>Leptospira icterohaemorrhagiae</i> †,§	1	5	5	8
<i>Leptospira</i> other†,§	12	8	20	9
<i>Pasteurella haemolytica</i>	–	–	1	5
<i>Pasteurella multocida</i>	78	89	224	362
<i>Pasteurella pneumotropica</i>	4	6	7	14
<i>Pasteurella</i> other/ spp	21	19	61	88
<i>Toxocara canis</i>	–	–	–	1
<i>Toxocara</i> other/ spp	–	–	1	–
<i>Toxoplasma gondii</i>	3	6	26	37
<i>Toxoplasma</i> spp	12	20	38	80
<i>Coxiella burnetii</i>	18	10	38	26
<i>Chlamydia (Chlamydophila) psittaci</i>	10	9	27	36
<i>Capnocytophaga</i> spp	4	5	12	11
<i>Mycobacterium marinum</i>	2	5	13	24
Orf virus	–	–	–	1
<i>Echinococcus granulosus</i>	–	3	7	15

* provisional data; † by specimen date; ‡ Lyme Diagnostic Unit and CDSC; §Leptospira Reference Unit and CDSC

Commentary

***Borrelia burgdorferi* (Lyme borreliosis):** (268)

Reports were received from all English regions (247), Wales (5) and Northern Ireland (1); for 15 patients the source laboratory was unknown. Sixty-two percent of reports were from the South east and South West health regions of England . All age groups were represented and the near equal male:female ratio observed in previous reports was maintained.

Region	Laboratory confirmations
North West	17 (3.4%)
North East	6 (3.0%)
Yorkshire & Humberside	3 (1.1%)
West Midlands	9 (3.4%)
East Midlands	8 (3.0%)
South West	80 (29.9%)
East of England	9 (3.4%)
South East	86 (32.1%)
London	29 (10.8%)
Wales	5 (1.9%)
Northern Ireland	1 (0.4%)
Not Stated	15 (5.6%)

Six patients reported travel within the British Isles and 24 reported travel overseas.

Country visited	Number of cases
Austria	1
Estonia	1
Czech Republic	4
Belgium	1
Greece	1
Northern Spain	1
Germany	3
Sweden	4
USA (Washington , Maine , Connecticut , Carolina , New England , New Jersey ,	6
Northern Europe (unspecified)	2

Leptospirosis: (13)

Indigenous cases (9):

L. Icterohaemorrhagiae : M 44yr.

Leptospira spp: M 26yr; M 45yr; M 45yr; M27yr; M20yr; M54yr; M37yr; M43yr.

Infections acquired overseas (4):

L. Tasassovi : M44yr

L . Hebdomadis : F26yr who visited Sarawak/Penang

Leptospira spp : F27yr who visited Cambodia , Thailand , Viet Nam and Kenya ; M21yr who visited Thailand .

Pasteurella : (103)
Pasteurella haemolytica : (-)
Pasteurella multocida : (78)
Pasteurella pneumotropica : (4)
Pasteurella aerogenes : (1)
Pasteurella spp : (20)

Age group	Females	Males	Total
<10yr	3	1	4
10-14yr	1	2	3
15-24yr	3	3	6
25-44yr	9	11	20
45-64yr	19	12	31
>65yr	24	14	38
Not stated	1	0	1
Total	60	43	103

Nine patients reported dog bites and 3 patients reported cat bites and/or scratches ; a further 5 patients reported unspecified animal contact, and one patient was a diabetic with septic arthritis.

Toxocara : (nil report)

Toxoplasmosis: (15)
Toxoplasma gondii : (3)
Toxoplasma spp: (12)

Age group	Females	Males	Total
<1yr	0	1	1
15-24yr	2	0	2
25-44yr	9	1	10
45-64yr	1	1	2
Total	12	3	15

Coxiella burnetii : (18)

Age group	Females	Males	Total
15-24yr	0	2	2
25-44yr	0	5	5
45-64yr	2	5	7
65-79yr	1	2	3
Not stated	0	1	1
Total	3	15	18

Thirteen patients (3 with acute Q fever) were reported from Cheltenham and are associated with the ongoing outbreak. Other cases were reported from (Hereford (1), Barnstaple (1), Bishop Auckland (1), Coventry (1) and Manchester (1).

Chlamydia (Chlamydophila) psittaci : (10)

Age group	Females	Males	Total
15-24yr	0	2	2
25-44yr	1	0	1
45-64yr	1	2	3
65-79yr	1	2	3
>80yr	0	1	1
Total	3	7	10

Two patients reported bird contact, one of whom had introduced a cockatiel into the home within the previous month.

Capnocytophaga spp : (4)

Age group	Females	Males	Total
15-24yr	0	1	1
25-44yr	0	1	1
45-64yr	0	1	1
65-79yr	1	0	1
Total	1	3	4

One patient reported a dog bite to the left hand.

Mycobacterium marinum : (2)

Age group	Females	Males	Total
45-64yr	1	0	1
65-79yr	0	1	1
Total	1	1	2

Orf : (nil report)

Echinococcus granulosus : (nil report)