Health Protection Report
weekly report

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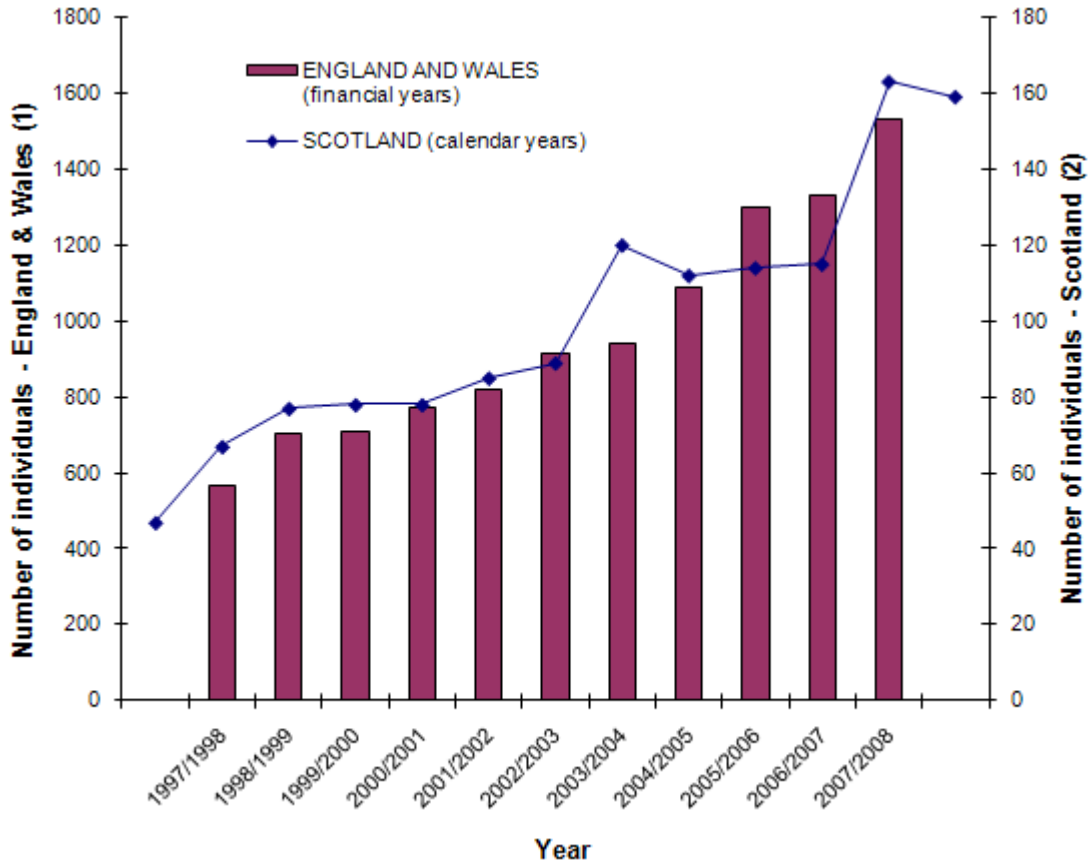
Hepatitis C diagnoses increasing across the UK

Increased public awareness of hepatitis C infection may have been partly responsible for the 6% increase in new laboratory-reported diagnoses of the infection in England (to 8,196) in 2008 compared with 2007. However, awareness campaigns need to be not only sustained but further enhanced if they are to have major impact on the numbers of people suffering from liver disease in the future, the HPA's 2009 report on hepatitis C (HCV) [1] stresses.

The report records several routine data sources – including HCV-related deaths, liver transplants and hospital admissions – that confirm that HCV-related morbidity and mortality continues to rise across the UK. In the case of hospitalisations of individuals with end-stage liver disease, there has been a steady year-on-year increase in England and Wales for more than a decade (see figure 1).

Annual number of individuals in England, Scotland and Wales hospitalised with hepatitis HCV-related end-stage liver disease (ESLD) and HCV-related hepatocellular carcinoma (HCC)



1. Refers to individuals in England and Wales hospitalised with HCV-related ESLD and HCV-related HCC.
2. Refers to individuals diagnosed with hepatitis C and admitted to hospital for the first-time with either ESLD or HCC (including cases both with and without mention of hepatitis C on the hospital record).
Data sources: Hospital Episode Statistics, England; Health Protection Scotland, in association with the Information Services Division; Patient Episode Database for Wales (PEDW) 2009.

It is estimated that currently around 185,000 individuals in the UK are chronically infected with the virus (142,000 in England and Wales, 39,000 in Scotland and 4,000 in Northern Ireland) – all at risk of developing serious liver disease. Much of the prevalent infection is concentrated in marginalised populations – with injecting drug users (IDUs) at greatest risk of acquiring infection. More recent evidence suggests that some minority ethnic populations are also at increased risk of infection.

The report summarises the progress of UK action plans that are in place to help tackle HCV infection in England, Scotland and Northern Ireland (a Welsh Action Plan is due to be implemented). These all comprise activities under four main headings: preventing new infections; increasing awareness of the infection amongst the public and healthcare professionals; increasing diagnosis; and getting diagnosed individuals into treatment and care.

The future HCV-related burden on the health service will be substantial if awareness, diagnosis and treatment do not increase, the report notes.

The work of the Health Protection Agency includes monitoring trends in hepatitis C at a national level and working with other agencies through a network of local leads to improve services for the prevention, diagnosis and treatment of hepatitis.

References

1. *Hepatitis C in the UK - 2009 report.* Downloadable at: www.hpa.org.uk/hepC2009.

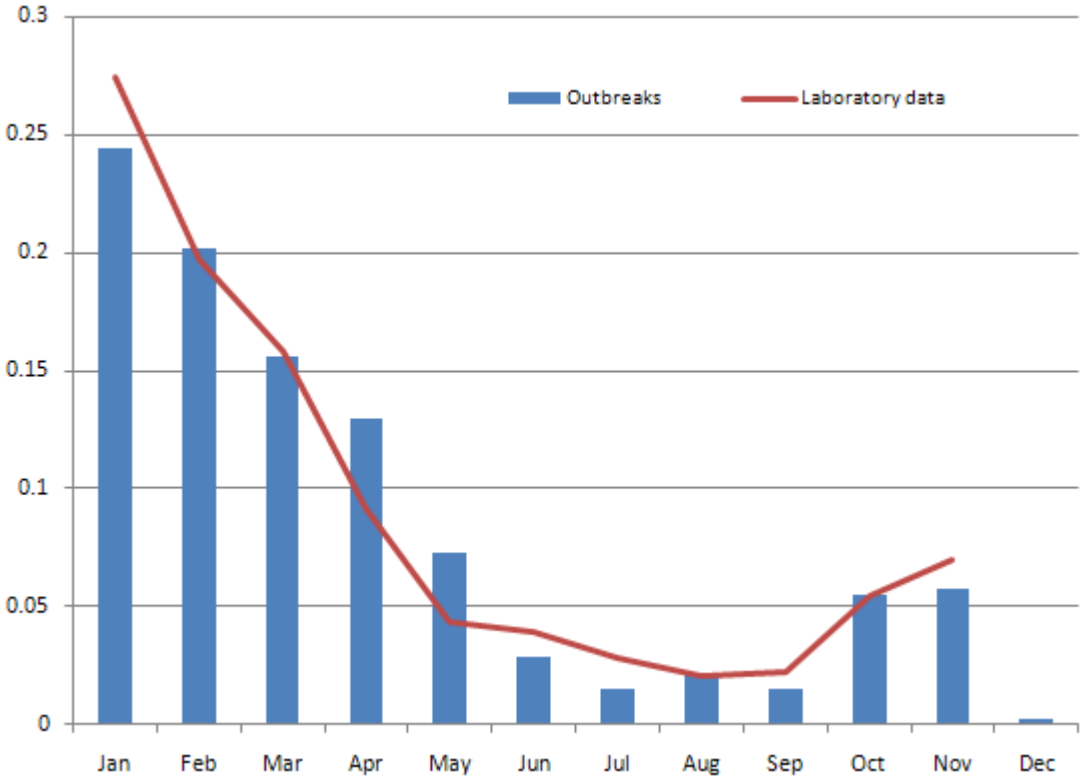
Interim report on first year of the norovirus in hospitals reporting scheme

Since 1 January 2009 the HPA has been coordinating a reporting system for norovirus outbreaks in hospitals. The scheme, developed in consultation with the Infection Prevention Society, has now been running for nearly a year. Infection control teams based in acute trusts enter data directly into a web based system, accessed via the web address: http://www.hpa-bioinformatics.org.uk/noroOBK/. Reporting to the system is voluntary; however, there has been a good response. The first report published data from the first six months of reporting to the end of June, showed that 350 outbreaks were reported between January and June this year. Norovirus activity increases during the winter months coinciding with increased activity in respiratory infections and childhood diarrhoea, increasing pressures on acute services and competing demand for beds. The mainstay of norovirus outbreak control is ward closure which is highly disruptive and in itself leads to increased pressures on bed demand. This interim report is to update users of the system to the current situation on norovirus outbreaks reported in trusts to the beginning of December (to the end of week 48), and to heighten awareness of the reporting system.

Outbreak reporting pattern

Four hundred and fifty eight outbreaks were reported by 61 trusts in England since the beginning of January. Sixty percent of outbreaks reported occurred between January and March this year and declined during the spring and summer months. Outbreak reports are now beginning to rise again. Figure 1 shows outbreaks and laboratory reports in each month as a proportion of the annual total reported in each system.

Figure 1. Proportion of all outbreak and laboratory reports by month of outbreak occurrence



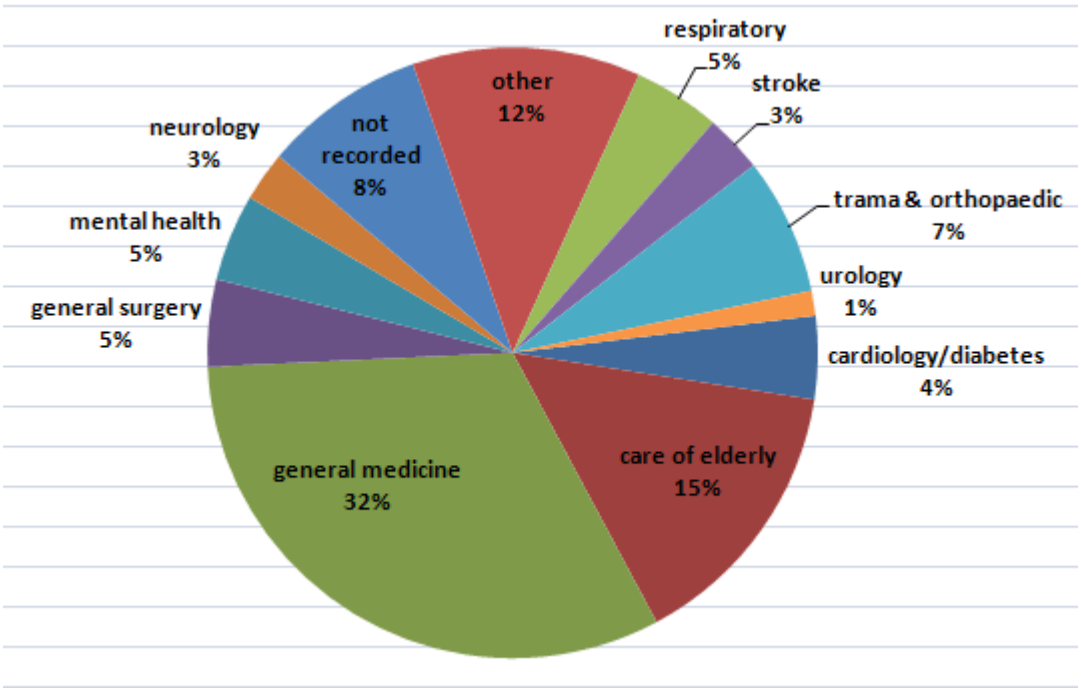
Trusts from all regions in England reported outbreaks, the highest numbers were reported from the North West and South West regions (see table 1). Eighty three percent of outbreaks involved ward closures with wards being closed on average for seven days (range 0-54 days) leading to a total of 6352 reported bed days lost (range 0-173 average 24 per outbreak). Sixty nine percent of reported outbreaks were laboratory confirmed as norovirus.

Table 1. The number of suspected and confirmed norovirus outbreaks reported by region 01/01/2009-01/12/2009

HPA Region	Outbreaks reported (n)
East	23
East Midlands	33
London	10
North East	47
North West	102
South East	59
South West	89
West Midlands	47
Yorkshire and Humberside	48
Total	**458**

Outbreaks affected a range of wards, the most commonly affected are general medicine (32%) and care of the elderly (15%) other wards including stroke, oncology and cardiac care wards were also affected (see figure 2). A total of 4481 patients and 1265 staff were affected, on average, each outbreak affected ten patients (range 0-34) and three staff (range 0-21) per outbreak.

Figure 2. Breakdown of wards affected by outbreaks



Discussion

The previous report highlighted that the outbreaks reported to this scheme were likely to be an underestimate. We have not estimated the scale of under-reporting for the purpose of this update. The data from laboratory reports does indicate that there is now an upturn in norovirus infections and the data on reported outbreaks correlates very well with this. The reporting system does not record how long affected staff are off ill. However, it is possible to make estimates based on the usual clinical pattern of norovirus. Assuming illness lasts two days and staff are off sick from day one, and allowing for 48 hours after symptoms subsided before staff can return to work, we can assume that illness lasts for four days. Allowing for a working week of 37.5 hours and staff working 5/7 days per week: days of work lost = 4 x 5/7 = 2.86. Given that there were a reported 1265 staff involved in outbreaks, this would have led to around 2.86 x 1265 = 3618 working days lost to the NHS in England due to norovirus outbreaks.

In summary norovirus continues to be a common cause of outbreaks in hospitals in England with considerable impact to both patients and staff. In order to continue to be able to provide accurate estimates of this impact we would encourage people to report outbreaks to the reporting scheme.

Food-borne outbreaks of *Campylobacter* (associated with poultry liver dishes) in England

Campylobacter is the most common bacterial cause of food poisoning in England and Wales. While the incidence of *Salmonella* infections has steadily declined since the late 1990s those caused by *Campylobacter* are showing an upward trend with a marked increase observed during 2009 [1]. The epidemiology of campylobacteriosis is complex, with meat, unpasteurised milk, and untreated water all contributing. There is however strong evidence that the handling of raw chicken, and eating undercooked chicken is the most common cause of illness [2].

Of note there have been 11 foodborne outbreaks of *Campylobacter* in England reported to the Health Protection Agency (HPA) so far this year. Ten of these were associated with catering premises (restaurants, functions), one with a school, and in all a total of 259 persons were affected. Nine (82%) of the 11 outbreaks at catering premises were linked to poultry liver parfait or pâté consumption (8 and 1 prepared from chicken and duck livers, respectively) and the school outbreak linked to chicken curry consumption. Evidence from the catering outbreaks showed that poultry liver parfait or pâté were prepared by deliberate undercooking (searing by flash frying) of chicken livers or inadequate cooking of the blended duck livers in a bain marie used in the preparation of this dish. The proportion of foodborne outbreaks of *Campylobacter* linked to poultry liver parfait or pâté reported to the HPA has increased since 2007 (2007-2009 to date, 75% (15/20); 1992-2006, 9.5% (9/95)) ($P<0.0001$). *Campylobacter* outbreaks linked to pâté consumption have also been recently reported in Scotland [3, 4].

The widespread contamination of raw poultry meat and animal livers with *Campylobacter* is well documented [5, 6, 7]. Studies have also shown that pathogens such as *Campylobacter* may be present both on the outside and the inside of chicken liver and inadequate cooking can result in viable pathogens remaining in the end product [8]. This reinforces the need to cook poultry livers and other varieties of animal offal until a safe internal temperature is reached. Pâté dishes made from meat have also been associated with *Salmonella* and *Listeria* infections. Caterers and consumers need to be aware of these hazards, adopt appropriate control measures, and follow advice provided by the Food Standards Agency in order to reduce the risk of infection, ie preventing cross-contamination when handling raw meats, cooking thoroughly all animal offal, including poultry livers, before consumption (to a core temperature of 70°C for at least 2 minutes or equivalent) [9], and keeping foods properly refrigerated.

References

1. Health Protection Agency. Increased Campylobacter cases in 2009. *Health Protection Report* **3**(31); 7 August 2009. http://www.hpa.org.uk/hpr/archives/2009/news3109.htm#camp09.

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3. Forbes KJ, Gormley FJ, Dallas JF, Labovitiadi O, MacRae M, Owen RJ, et al (2009). *Campylobacter* immunity and coinfection following a large outbreak in a farming community. *Journal of Clinical Microbiology* **47**: 111-116.

4. Health Protection Scotland (2009). Surveillance Report. Gastro-intestinal and foodborne infections (General outbreaks of infectious intestinal disease reported to HPS in the third quarter of 2009). http://www.hps.scot.nhs.uk/giz/wrdetail.aspx?id=43393&wrtype=6.

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6. Food Standards Agency (2009). FSA report for the UK survey of *Campylobacter* and *Salmonella* contamination of fresh chicken at retail sale. http://www.foodbase.org.uk/admintools/reportdocuments/351-1-676_B18025.pdf

7. Little CL, Richardson JF, Owen RJ, de Pinna E, Threlfall EJ (2008). Prevalence, characterization and antimicrobial resistance of *Campylobacter* and *Salmonella* in raw poultrymeat in the United Kingdom, 2003 to 2005 . *International Journal of Environmental Health Research* **18**: 403-414.

8. Whyte R, Hudson JA, Graham C (2006). *Campylobacter* in chicken livers and their destruction by pan frying. *Letters in Applied Microbiology* **43**: 591-595.

9. Food Standards Agency (2009). Eat Well, Be Well – Cooking. http://www.eatwell.gov.uk/keepingfoodsafe/cooking/.

Pandemic influenza: UK situation at 10 December 2009

The Health Protection Agency's Weekly National Influenza Report of 10 December (week 50) [1] described the UK (and international) situation as follows:

> Pandemic influenza activity is decreasing across the UK;
> In week 49 (ending 6 December), the weekly influenza/influenza-like illness (ILI) consultation rate increased slightly in England, Wales and Northern Ireland and remained stable in Scotland;
> The National Pandemic Flu Service (NPFS) continued to issue antiviral drugs to people in England with the number of assessments and antiviral collections The number of assessments and antiviral collections through this service have decreased over the past week;
> Interpretation of data to produce estimates on the number of new cases continued to be subject to a considerable amount of uncertainty. HPA modelling gave an estimate of 11,000 (range 6,000 – 24,000) new cases in England in week 49. The estimated number of new cases decreased in all regions and age groups;
> An increase in respiratory syncytial virus detections has been observed in recent weeks, which may account for increases in some respiratory indicators for children aged less than five years.
> The main influenza virus circulating in the UK continued to be the pandemic (H1N1) 2009 strain, with few influenza H1 (non-pandemic), H3 and B viruses detected. Twenty-five of 4229 pandemic viruses tested have been confirmed to carry a mutation which confers resistance to the antiviral drug oseltamivir; three are phenotypically resistant to the drug but retain sensitivity to zanamivir;
> The majority of pandemic influenza cases continued to be mild. The cumulative number of deaths reported due to pandemic (H1N1) 2009 in the UK was 282. There was a total of 1223 new patients hospitalised in England with suspected pandemic influenza in the week from 3 to 9 December, a decrease from 1384 in the previous week. The hospitalisation rates have decreased in most age groups, including the under-5's;
> The UK pandemic influenza vaccination programme continues in people at high risk for severe disease and in health-care workers. For further information see the Department of Health website;
> According to the World Health Organisation (4 November), pandemic influenza activity continues to intensify across central Europe and parts of central, eastern and southern Asia. In North America and much of western and northern Europe, activity has peaked. Many tropical areas are reporting declining activity and there is evidence of continued co-circulation of pandemic and seasonal (H3N2) influenza viruses in parts of Africa.

Reference

1. HPA. Weekly National Influenza Report: week 50 (10 December 2009, PDF 445 KB), HPA website: www.hpa.org.uk/swineflu/surveillance&epidemiology.

Infection reports

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Enteric

General outbreaks of foodborne illness in humans, England and Wales: weeks 01-04/2009

Preliminary information has been received about the following outbreaks

Health Protection Unit	Organism	Location of food prepared or served	Month of outbreak	Number ill	Cases positive	Suspect vehicle	Evidence
Cheshire & Merseyside - (Merseyside team)	*Salmonella* Enteritidis PT14b	Restaurant	Nov-09	3	3	n/a	n/a
West Yorkshire HPU	Campylobacter	Restaurant	Nov-09	4	4	n/a	n/a
North East HPU - Northumberland (Tyne and Wear HP team)	*Escherichia coli* O157	Bakery	Nov-09	19	9	Chicken liver pate	D, M
South West Peninsula HPU (Cornwall and Isles of Scilly team)	Norovirus	Restaurant	Nov-09	3	3	n/a	n/a
North Yorkshire & Humber HPU	Norovirus	Restaurant	Nov-09	88	3	n/a	n/a
Thames Valley HPU	Unknown	Caterer	Nov-09	12	–	n/a	n/a
Bedfordshire & Hertfordshire	Unknown	Function	Nov-09	27	–	n/a	n/a

M = microbiological (ie identification of an organism of the same type from cases and in the suspect vehicle, or vehicle ingredient(s), or detection of toxin in faeces or food).
D = descriptive (ie a significant statistical association between consumption of the suspect vehicle and being a case).

Common gastrointestinal infections, England and Wales, laboratory reports: weeks 45-48/08

Laboratory reports	Number of reports received				Total reports	Cumulative total	
	45 /09	46 /09	47 /09	48 /09	45-48/09	01- 48/09	01- 48/08
Campylobacter	1196	954	987	702	3839	52483	47362
***Escherichia coli* O157 ***	14	20	21	34	89	944	908
Salmonella †	193	139	103	28	463	8321	9534
Shigella sonnei	9	8	10	7	34	902	799
Rotavirus	49	44	36	33	162	15080	13663
Norovirus	103	136	145	91	475	6177	5628
Cryptosporidium	172	129	126	86	513	4325	3906
Giardia	81	81	57	51	270	3102	3160

*Vero cytotoxin–producing isolates (data from Health Protection Agency's Laboratory of Enteric Pathogens (LEP).
† Data from Health Protection Agency's Laboratory of Enteric Pathogens.

Suspected and laboratory-confirmed reported norovirus outbreaks in hospitals, with regional breakdown: outbreaks occurring in weeks 45-48/2009

The norovirus outbreaks in hospitals reporting scheme recorded 26 suspected and confirmed norovirus outbreaks occurring between weeks 45 and 48. This is an increase on the number reported in the previous two periods.

Suspected and laboratory-confirmed reported norovirus outbreaks in hospitals, with regional breakdown: outbreaks occurring in weeks 45-48

	Outbreaks between weeks 45-48/09			Total outbreaks 01-48/09		
	Outbreaks	Ward closure	Lab-confirmed	Outbreaks	Ward closure	Lab-confirmed
East of England	–	–	–	23	21	18
East Midlands	2	1	2	33	27	28

London	–	–	–	10	7	3
North East	10	9	6	46	35	29
North West	4	4	2	102	76	74
South East	2	2	2	58	56	22
South West	4	4	2	89	83	68
West Midlands	2	2	2	47	41	40
Yorkshire & Humberside	2	1	2	46	34	31
Total	**26**	**23**	**18**	**454**	**380**	**313**

Comparison of laboratory data on hospital norovirus reports in 2008 and 2009

The data in the above report (columns 2-4, outbreaks during the calendar weeks 45-48 of 2009) cover the fifth month of the current 2009/2010 norovirus season*.

The total number of laboratory reports to week 48/09 since the beginning of the current season was 1263, which is a 26% decrease compared to the same week of the 2008/2009 season (1702).

* The norovirus season runs from July to June (week 27 in year one to week 26 in year two) in order to capture the winter peak in one season.

Salmonella infections (faecal specimens) England and Wales, reports to the HPA (salmonella data set): October 2009

Details of 1037 serotypes of Salmonella infections recorded in October are given in the table below. In November 2009, 469 Salmonella infections were recorded and preliminary infection was received about .. outbreaks mentioned in the table below.

Organism	Cases: October 2009
S. Enteritidis PT4	67
S. Enteritidis (other PTs)	460
S. Typhimurium	182
S. Virchow	24
Others (typed)	304
Total salmonella (provisional data)	1037

Final information on general outbreaks of foodborne illness: April to June 2009

Health Protection Unit	Organism	Location of food prepared or served	Number ill	Cases positive	Suspect vehicle	Evidence
North East HPU - Northumberland, (Tyne and Wear HP team)	Campylobacter	Restaurant	6	3	n/a	n/a
North East HPU - Northumberland, (Tyne and Wear HP team)	Campylobacter	Hall	4	3	n/a	n/a
Essex HPU	Campylobacter	Reception	26	6	Chicken liver parfait	D,M
Thames Valley HPU	Escherichia coli O157 PT 2	BBQ	2	2	Beef mince	D, M
South Yorkshire HPU	Norovirus	Hall	51	19	n/a	n/a
North East HPU - Northumberland, (Tyne and Wear HP team)	Norovirus	Hotel	37	6	n/a	n/a
Yorkshire & Humber HPU	Scombrotoxin	Retail	2	–	Fresh tuna steaks	D
Bedfordshire & Hertfordshire HPU	Scombrotoxin	Studio	2	–	Tuna steaks	D, M
North West London HPU	Staphylococcus aureus	Hall	20	–	Paella	D, M

M = microbiological (ie identification of an organism of the same type from cases and in the suspect vehicle, or vehicle ingredient(s), or detection of toxin in faeces or food).
D = descriptive (ie a significant statistical association between consumption of the suspect vehicle and being a case).

Salmonella serotypes recorded in the Health Protection Agency salmonella data set: July to September 2009 (provisional)

All serotypes recorded in the HPA salmonella data set in the third quarter of 2009 are listed below. There were more than ten reports of 26 serotypes, two to ten reports of 74 serotypes, and one report of 62 serotypes.

More than 10 reports of the following serotypes were received: July to September 2009

Serotype	No. of reports
S. Agona	30
S. Anatum	20
S. Arizonae	11
S. Bareilly	12
S. Braenderup	21
S. Bredeney	14
*S.*Corvallis	19
S. Enteritidis	1916
S. Hadar	31
S. Haifa	23
S. Heidelberg	16
S. Infantis	63
S. Java	42
S. Kentucky	62
S. Mbandaka	22
S. Muenchen	16
S. Newport	51
S. Oranienburg	19
S. Poona	13
S. Saint-Paul	40

S. Schwarzengrund	13
S. Senftenberg	22
S. Stanley	41
S. Typhimurium	645
S. Unnamed	133
S. Virchow	71

Between two and 10 reports of each of the following serotypes were received: July to September 2009

Serotype	Reports	Serotype	Reports
S. Abony	6	*S.* Javiana	8
S. Adelaide	2	S. *S.* Kedougou	5
S. Agama	8	*S.* Kisarawe	2
S. Agbeni	2	*S.* Kottbus	9
S. Ajiobo	3	*S.* Larochelle	2
S. Albany	2	*S.* Litchfield	3
S. Altona	3	*S.* Livingstone	3
S. Arechavaleta	2	*S.* London	7
S. Augustenborg	2	*S.* Malstatt	2
S. Binza	3	*S.* Manhattan	4
S. Blockley	4	*S.* Meleagridis	2
S. Bovis-Morbificans	9	*S.* Mikawasima	7
S. Brandenburg	9	*S.* Mississippi	5
S. Butantan	2	*S.* Montevideo	8
S. Cerro	2	*S.* Muenster	2
S. Chester	6	*S.* Napoli	4
S. Coeln	2	*S.* Nima	5

S. Colindale	4	*S*. Ohio	2
S. Concord	3	*S*. Oslo	4
S. Cotham	2	*S*. Panama	3
S. Derby	8	*S*. Potsdam	2
S. Drypool	2	*S*. Reading	5
S. Dublin	2	*S*. Richmond	10
S. Durban	3	*S*. Rissen	4
S. Durham	8	*S*. Rubislaw	3
S. Eastbourne	3	*S*. San-Diego	3
S. Emek	8	*S*. Singapore	2
S. Florida	2	*S*. Sofia	2
S. Fluntern	2	*S*. Stanleyville	3
S. Gaminara	4	*S*. Szentes	2
S. Give	3	*S*. Tel-El-Kebir	7
S. Glostrup	2	*S*. Tennessee	4
S. Gold-Coast	9	*S*. Thompson	8
S. Havana	7	*S*. Uganda	3
S. Herston	2	*S*. Umbilo	3
S. Hvittingfoss	5	*S*. Weltevreden	6
S. Indiana	5	*S*. Zanzibar	3

One report of each of the following serotypes were received: July to September 2009

S. Aba, *S.* Adamstown, *S.* Amager, *S.* Anecho, *S.* Ardwick, *S.* Badagry, *S.* Bangkok, *S.* Bardo, *S.* Bellevue, *S.* Bochum, *S.* Bonariensis, *S.* Bournemouth, *S.* Chandans, *S.* Charity, *S.* Cholerae-Suis, *S.* Chomedy, *S.* Colorado, *S.* Dar-Es-Salaam, *S.* Eimsbuettel, *S.* Ekotedo, *S.* Enugu, *S.* Freetown, *S.* Galiema, *S.* Gambia, *S.* Gatow, *S.* Gatuni, *S.* Georgia, *S.* Grumpensis, *S.* Hartford, *S.* Hato, *S.* Hindmarsh, *S.* Hofit, *S.* Ibadan, *S.* Isangi, *S.* Johannesburg, *S.* Kaapstad, *S.* Kalamu, *S.* Kintambo, *S.* Kirkee, *S.* Kisangani, *S.* Kua, *S.* Kuessel, *S.* Leiden, *S.* Louisiana, *S.* Minnesota, *S.* Nchanga, *S.* New-Haw, *S.* Nienstedten, *S.* Obogu, *S.* Plymouth, *S.* Ramat-Gan, *S.* Regent, *S.* Stendal, *S.* Stockholm, *S.* Takoradi, *S.* Tarshyne, *S.* Tilene, *S.* Wassenaar, *S.* Westhampton, *S.* Wilhelmsburg, *S.* Worthington, *S.* Yoruba.

Zoonoses

- **Common animal-associated infections, England and Wales: laboratory reports 27-39/09**
- ***Toxoplasma gondii* infections diagnosed by the Toxoplasma Reference Unit, England and Wales, January to September 2009**

Common animal-associated infections, England and Wales: laboratory reports 27-39/08

Organism	Total reports for weeks 27-39		Cumulative totals for weeks 01- 39	
	2009*	2008	2009*	2008
Borrelia burgdorferi *,#	507	513	714	670
Leptospira hardjo **,##	-	3	-	4
Leptospira icterohaemorrhagiae **,##	3	6	5	14
Leptospira other **, ##	10	16	19	23
Pasteurella haemolytica	-	3	3	4
Pasteurella multocida	103	100	263	265
Pasteurella pneumotropica	3	4	9	8
Pasteurella other/ spp	29	19	77	71
Toxocara canis	-	1	-	2
Toxocara other/ spp	-	-	-	-
Toxoplasma gondii §	25	23	67	64
Coxiella burnetii	3	10	17	35
Chlamydia (Chlamydophila) psittaci	14	19	49	47
Capnocytophaga spp	4	6	13	20
Mycobacterium marinum	5	3	14	9
Orf virus	-	2	-	4
Echinococcus granulosus	2	5	8	16
Brucella melitensis	1	1	7	3
Brucella spp	-	-	-	-

* Provisional data; ** By specimen date; # Lyme Diagnostic Unit and CDSC; ## Leptospira Reference Unit and CDSC; § Toxoplasma reports to LabBase only.

Commentary

Borrelia burgdorferi (Lyme borreliosis): (507)

Age group	Female	Male	Unknown	Total: weeks 27-39/2009	Cumulative total: weeks 01-39/2009
<10	1	2	-	3	**3**
10-14	6	7	-	13	**16**
15-24	43	44	-	87	**104**
25-44	61	65	-	126	**164**
45-64	75	89	-	164	**218**
≥65	47	67	-	114	**165**
Not stated	-	-	-	-	-
Total weeks 27-39/2009	**233**	**274**	**-**	**507**	n/a
Cum. total weeks 01-39/2009	**322**	**384**	–	n/a	**670**

Country visited (Second quarter reports)	Number of cases
France	4
Germany	2
Sweden	4
Czech Republic	3
USA (Eastern seaboard)	5
Finland	1
Poland	1
Slovenia	1
Slovakia	1
Austria	1

Leptospirosis: (13)

Indigenous cases (9):

Age group	Female	Male	Unknown	Total: weeks 27-39/2009	Cumulative total: weeks 01-39/2009
<10	-	-	-	-	-
10-14	-	1	-	1	**1**
15-24	1	2	-	3	**3**
25-44	-	1	-	1	**1**
45-64	1	3	-	4	**9**

≥65	-		-	-	**3**
Not stated	-		-	-	-
Total weeks 27-39/2009	**2**	**7**	**-**	**9**	n/a
Cum. total weeks 01-39/2009	**5**	**12**	–	n/a	**17**

Region of report

Region	Reports (weeks 27-39/2009)	Reports (weeks 1-39/2009)
East Midlands	2	3
East		1
London	2	2
North East	-	1
North West	-	3
South East	-	1
South West	2	3
West Midlands	1	1
Wales	2	2
Yorks & Humber	-	-
Total	**9**	**17**

Reported serovars

Serovars	Weeks 27-39/2009	Weeks 01-39/2009
Not determined	5	11
Icterohaemorrhagiae	3	5
Saxkoebing	1	1

Overseas acquired infections (4):

Age group	Female	Male	Unknown	Total: weeks 27-39/2009	Cumulative total: weeks 01-39/2009
<10	-	-	-	-	-
10-14	-	1	-	1	**1**
15-24	-	1	-	1	**2**
25-44	1	-	-	1	**2**
45-64	-	1	-	1	**2**
≥65	-	-	-	-	-
Not stated	-	-	-	-	-
Total weeks 27-39/2009	**1**	**3**	**-**	**4**	n/a
Cum. total weeks 01-39/2009	**2**	**5**	–	n/a	**7**

Serovars	Weeks 27-39/09	Weeks 01-39/09
Not determined	2	4
Cynopteri	1	1
Australis	1	1
Ballum	–	1

The following table lists countries visited during 2009 by patients diagnosed with overseas-acquired leptospirosis.

Country visited	Weeks 27-39/09	Weeks 01-39/09*
Antigua	–	1
Grenada	–	1
Samoa		1
Borneo	1	1
Costa Rica	1	1
Thailand/SE Asia	2	2
Columbia	–	1

* Some patients may report visiting more than one country

During this reporting period, 2 cases (2 indigenous infections) were reported by NHS laboratories to the national surveillance system and 2 statutory notifications (NOIDS).

Pasteurella: (135)
Pasteurella haemolytica: (–)
Pasteurella multocida: (103)
Pasteurella pneumotropica: (3)
Pasteurella aerogenes: (–)
***Pasteurella* spp:** (29)

Age group	Female	Male	Unknown	Total: weeks 27-39/2009	Cumulative total: weeks 01-39/2009
<10	3	5	-	8	**17**
10-14	1	1	-	2	**3**
15-24	6	2	-	8	**21**
25-44	10	16	-	26	**70**
45-64	24	17	-	41	**111**
≥65	29	21	-	50	**129**
Not stated	-	-	-	-	**1**
Total weeks 27-39/2009	**73**	**62**	-	**135**	n/a
Cum. total weeks 01-39/2009	**189**	**161**	**2**	n/a	**352**

Two patients reported infected dog bites and 6 patients reported cat bites and/or scratches.

Region	Reports (weeks 27- 39/2009)	Reports (weeks 01-39/2009)
East Midlands	18	38
East	19	42
London	13	34
North East	3	10
North West	27	62
South East	8	23
South West	11	38
West Midlands	1 5	47
Wales	9	19
Yorks & Humber	12	39
Total	**135**	**352**

***Toxocara*:** Nil report

Toxoplasmosis: See *Toxoplasma* Reference Laboratory.

Coxiella burnetii: (3)

Age group	Female	Male	Unknown	Total: weeks 27-39/2009	Cumulative total: weeks 01-39/2009
<10	-	-	-	-	-
10-14	-	-	-	-	-
15-24	-	-	-	-	-
25-44	-	1	-	1	**1**
45-64	2	-	-	2	**11**
≥65	-	-	-	-	**5**
Not stated	-		-	-	-
Total weeks 27-39/2009	**2**	**1**	**-**	**3**	n/a
Cum. total weeks 01-39/20098	**3**	**14**	**–**	n/a	**17**

Region of report

Region	Reports (weeks 27- 39/2009)	Reports (weeks 01-39/2009)
East	-	1
North West	-	1
South west	1	13
West Midlands	1	1
Wales	1	1
Total	**3**	**17**

Chlamydia (Chlamydophila) psittaci: (14)

Age group	Female	Male	Unknown	Total: weeks 27-39/2009	Cumulative total: weeks 01-39/2009
<10	1	-	-	1	**3**
10-14	-	-	-	-	**-**
15-24	-	1	-	1	**4**
25-44	-	2	-	2	**15**
45-64	1	5	-	6	**21**
≥65	1	3	-	4	**6**
Not stated	-	-	-	-	**-**
Total weeks 27-39/2009	**3**	**11**	**-**	**14**	n/a
Cum. total weeks 01-39/2009	**19**	**29**	**1**	n/a	**49**

Region of report

Region	Reports (weeks 27-39/2009)	Reports (weeks 01-39/2009)
East Midlands	-	1
East	1	2
London	-	4
North West	1	1
South East	-	5
South West	5	21
West Midlands	5	9
Wales	-	3
Yorks & Humber	2	3
Total	**14**	**49**

***Capnocytophaga* spp**: (4)

Age group	Female	Male	Unknown	Total: weeks 27-39/2009	Cumulative total: weeks 01-39/2009
<10	-	-	-	-	-
10-14	-	-	-	-	**1**
15-24	1	-	-	1	**2**
25-44	-	-	-	-	**2**
45-64	-	2	-	2	**7**
≥65	1	-	-	1	**1**
Not stated	-	-	-	-	-
Total weeks 27-39/2009	**2**	**2**	**-**	**4**	n/a
Cum. total weeks 01-39/2009	**5**	**8**	**–**	n/a	**13**

No clinical or epidemiological details were reported.

Region of report

Region	Reports (weeks 27-39/2009)	Reports (weeks 01-39/2009)
East Midlands	1	1
East	-	-
London	1	4
North West	-	1
South East	1	2
South West	-	1
West Midlands	-	1
Wales	-	1
Yorks & Humber	1	-
Total	**4**	**13**

***Mycobacterium marinum*:** (5)

Age group	Female	Male	Unknown	Total: weeks 27-39/2009	Cumulative total: weeks 01-39/2009
<10	-	-	-	-	-
10-14	-	-	-	-	-
15-24	-	-	-	-	-
25-44	1	-	-	-	**2**
45-64	3	1	-	3	**9**
≥65	-	-	-	2	**3**
Not stated	-	-	-	-	-
Total weeks 27-39/2009	**4**	**1**	**-**	**5**	n/a
Cum. total weeks 01-39/2009	**6**	**8**	**–**	n/a	**14**

Region of report

Region	Reports (weeks 27-39/2009)	Reports (weeks 01-39/2009)
East Midlands	1	2
East	-	-
London	1	3
North West	-	3
North East	1	1
South East	-	2
South West	2	3
West Midlands	-	-
Wales	-	-
Yorks & Humber	-	-
Total	**5**	**14**

Orf: Nil report

Echinococcus granulosus: (2)

Age group	Female	Male	Unknown	Total: weeks 27-39/2009	Cumulative total: weeks 01-39/2009
<10	-	-	-	-	**-**
10-14	-	-	-	-	**-**
15-24	-	-	-	-	**2**
25-44	-	1	-	-	**2**
45-64	-	1	-	-	**-**
≥65	-	-	-	-	**1**
Not stated	-	-	-	-	**4**
Total weeks 27-39/2009	**-**	**2**	**-**	-	n/a
Cum. total weeks 01-39/2009	**1**	**3**	**5**	n/a	**9**

Region of report

Region	Reports (weeks 27-39/2009)	Reports (weeks 01-39/2009)
East Midlands	-	-
East	-	-
London	-	5
North West	-	-
North East	2	2
South East	-	1
South West	-	1
West Midlands	-	-
Wales	-	-
Yorks & Humber	-	-
Total	**2**	**9**

Brucellosis: (1)

Age group	Female	Male	Unknown	Total: weeks 27-39/2009	Cumulative total: weeks 01-39/2009
<10	-	-	-	-	**1**
10-14	-	1	-	1	**1**
15-24	-	-	-	-	-
25-44	-	-	-	-	**3**
45-64	-	-	-	-	**1**
≥65	-	-	-	-	**1**
Not stated	-	-	-	-	-
Total weeks 27-39/2009	**-**	**1**	**-**	**1**	n/a
Cum. total weeks 01-39/2009	**1**	**6**	–	n/a	**7**

Toxoplasma gondii infections diagnosed by the Toxoplasma Reference Unit, England and Wales (January to September 2009)

The Health Protection Agency, in collaboration with the National Public Health Service for Wales (NPHSW), review the number of cases of *Toxoplasma gondii* infection diagnosed by the Toxoplasma Reference Unit (TRU) in Swansea [1]. The total figures for the first three quarters of 2009 are reported by region below. The cumulative total for weeks 1-39/2009 is 337 this compares with last year's 1-39/2008 total of 313. A detailed analysis of the complete dataset for 2009 will be available in the Zoonoses quarterly report in the *HPR* next year.

Table 1: *Toxoplasma gondii* diagnoses by HPA region, Toxoplasma Reference Unit, England and Wale 2009

HPA Region	Total weeks 1-13/2009	Total weeks 14-26 /2009	Total weeks 27-39 /2009	Cumulative Total weeks 1-39/2009	Cumulative Total weeks 1-39 /2008
East Midlands	2	2	4	8	4
East of England	16	12	7	35	29
London	35	48	27	110	138
North East	5	2	5	12	9
North West	4	12	12	28	21
South East	12	18	22	52	34
South West	16	17	17	50	27
Wales	2	2	3	7	5
West Midlands	5	7	7	19	17
Yorkshire & Humber	6	7	3	16	21
Unknown	-	-	-	-	8
Total	**103**	**127**	**107**	**337**	313

Reference

1. National Public Health Service for Wales website. Toxoplasma Reference Unit. Available at: http://www.wales.nhs.uk/sites3/page.cfm?orgId=457&pid=25359.