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News

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New report published on travel-associated illness

The Health Protection Agency has published its third report on travel-associated illness *Foreign travel-associated illness, England, Wales, and Northern Ireland – 2007* [1]. The report gives an overview of the global epidemiology of various travel-associated infections together with a summary of the burden of travel-associated illness in England, Wales, and Northern Ireland in 2004 and 2005. Each chapter links with relevant sources of information for travellers and their health advisers on pre-travel advice. The report follows on from the reports *Foreign travel-associated illness, England, Wales, and Northern Ireland: annual report 2005* [1] and *Illness in England, Wales, and Northern Ireland associated with foreign travel – a baseline report to 2002* [2].

In line with the international trend, travel abroad by United Kingdom (UK) residents continued to increase in 2004 and 2005. There were 66.4 million visits abroad made by UK residents in 2005, more than two-thirds of which were to countries within the European Union. Travel to more tropical destinations also continued to rise, increasing the chance that travellers may be exposed to infections that are less likely to occur in the UK.

Gastro-intestinal infections remained the most reported travel-associated infection in 2005, though reports of *Salmonella* spp, *Campylobacter* spp, and hepatitis A associated with travel continued to decline. This must however be interpreted with caution, since the report highlights that it was due in part to the persistently poor capture of travel history in routine laboratory data for a range of infections. Cases of enteric fevers and malaria increased, and for both these diseases (for which enhanced surveillance systems exist) those visiting friends and relatives (VFRs) are at highest risk. Routine surveillance needs to be improved in order to improve our understanding of illness acquired abroad and better identify particular risk groups. The current development of NHS information systems represents an important opportunity to do this.

Many travellers are not adequately prepared for their trip overseas, and there needs to be increased awareness among travellers of the sources of advice (on both security and health issues) that are freely available to them and their travel health advisers. Sources of advice for UK residents travelling abroad are detailed at the back of the report and are available on the travel health page of the Agency's website at http://www.hpa.org.uk/infections/topics_az/travel/travel_advice.htm. One of the biggest challenges for travel medicine and public health professionals is, however, to reach VFRs, who may not perceive that their health is at risk from travel to countries familiar to them or their families, and who may therefore not seek medical advice when planning their trip.

The TMHS continues to work with the National Travel Health Network and Centre (NaTHNaC) in order to contribute to the evidence base on which travel health advice can be developed for health professionals. More information about NaTHNaC is available on their website at <http://www.nathnac.org/>.

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2. Health Protection Agency (HPA). *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/publications/PublicationDisplay.asp?PublicationID=78>>.

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Radiation doses due to medical x-rays continue to fall

The amount of radiation to which patients in the United Kingdom (UK) are exposed when they have medical x-rays is continuing to fall, according to the Health Protection Agency's latest five-yearly review [1] of the National Patient Dose Database which has just been published. There has been an average reduction in dose over the last five years in routine x-ray examinations of between 10 and 20%. This is mainly due to the increasing sensitivity of x-ray equipment. There is also greater awareness of exposure levels in patient doses since the introduction of national reference doses in the early 1990s. This degree of awareness needs to be maintained, particularly in relation to digital imaging systems which are increasingly being introduced.

The National Patient Dose Database was established in 1992 to collate the doses received by patients during routine x-ray examinations in hospitals throughout the UK. Previous reviews [2,3] were published in 1996 and 2002, and the latest report looks at data collected between January 2001 and February 2006. About 288,000 dose measurements have been analysed for medical x-ray examinations and therapeutic procedures, such as insertion of a pacemaker, in which x-rays are used. The information in the latest review has been contributed by radiology departments in 316 hospitals across the UK.

The review provides national reference doses for 38 different x-ray procedures carried out on adults and four types of x-ray examinations on children. The aim is to enable hospitals to check where their x-ray dose levels sit on the national scale. The reference doses presented in the latest review are on average about 16% lower than those in the 2000 review, and have more than halved over the last 20 years.

For the first time the review includes analysis of doses from dental x-ray examinations. These were gathered from more than 3000 dental practices throughout the UK. National reference doses are presented in this review for x-ray examinations of the full set of teeth and for x-rays of single teeth.

In producing this review, the Agency worked closely with hospital physicists and radiology department staff who supplied patient dose data, and with the Dental X-ray Protection Service who supplied dental dose data [4].

References

1. Hart D, Hillier MC, Wall BF. *Doses to patients from radiographic and fluoroscopic x-ray imaging procedures in the UK – 2005 review*. HPA-RPD-029. Chilton: HPA, 2007. Available at <http://www.hpa.org.uk/radiation/publications/hpa_rpd_reports/2007/hpa_rpd_029.htm>.
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3. Hart D, Hillier MC, Wall BF. *Doses to patients from medical x-ray examinations in the UK – 2000 review*. NRPB-W14, 2002. Chilton: NRPB, 2002.. Available at <http://www.hpa.org.uk/radiation/publications/w_series_reports/2002/nrpb_w14.htm>
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Immunisation

- ▶ Invasive meningococcal infections, England and Wales, laboratory reports: weeks 26-30/2007
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Invasive meningococcal infections, England and Wales, laboratory reports: weeks 26-30/2007

	Method of diagnosis			Total reports	Cumulative*
	CSF and blood Culture	Non-culture	Other sites	26-30/2007	Total to week 30/2007
Group A	–	–	–	–	–
B	38	42	5	85	689
C	1	2	–	3	25
W135	2	2	–	4	20
X	–	–	–	–	1
Y	2	–	–	2	25
Z/29E	–	–	–	–	–
Ungroupable	–	–	–	–	2
Ungrouped	–	4	–	4	43
Total	43	50	5	98	805

*Latex antigen, microscopy, polymerase chain reaction combined Health Protection Agency Centre for Infections data and Meningococcal Reference Unit data.

Laboratory reports of *Haemophilus influenzae* by age group and serotype, England and Wales: April to June 2007 (2006)

Type	Age					Total
	<1y	1-4y	5-14y	15+	nk	
b	1 (1)	8 (6)	2 (3)	8 (12)	– (–)	19 (22)
nc	10 (6)	2 (4)	2 (1)	41 (65)	– (–)	55 (76)
a,e,f	– (–)	1 (–)	– (2)	6 (12)	– (–)	7 (2)
not typed	3 (1)	2 (–)	– (2)	43 (27)	4 (–)	52 (30)
Total	14 (8)	13 (10)	4 (8)	98 (116)	4 (–)	133 (142)

Laboratory reports of hepatitis A infection in England and Wales: 2006

In 2006, 396 (table 1) laboratory reports of confirmed hepatitis A virus infection in England and Wales were made to the Health Protection Agency compared to 460 in 2005 and 671 in 2004.

Table 1 Quarterly laboratory reports of hepatitis A infection by age group and sex: 2006

Age Group (Years)	Q1 Jan-Mar			Q2 Apr-Jun			Q3 Jul-Sept			Q4 Oct-Dec			Total
	M	F	NK	M	F	NK	M	F	NK	M	F	NK	
<1	–	1	–	–	–	–	–	–	–	–	–	–	1
1-4	2	–	–	3	1	–	1	4	–	7	4	–	22
5-9	2	1	–	4	10	–	7	9	–	7	9	–	49
10-14	–	–	–	1	3	–	4	6	–	2	4	–	20
15-24	6	5	2	16	9	–	15	10	2	7	4	–	76
25-34	6	6	–	7	8	–	17	2	–	7	2	–	55
35-44	9	4	–	6	3	–	7	4	1	10	6	–	50
45-54	8	5	–	4	1	–	11	1	–	6	1	–	37
55-64	7	3	–	1	7	–	7	4	–	5	3	–	37
≥65	9	6	1	5	6	–	6	8	–	2	6	–	49
nk	–	–	–	–	–	–	–	–	–	–	–	–	–
Total	49	31	3	47	48	–	75	48	3	53	39	–	396

This continues the downward trend in the overall number of hepatitis A cases reported annually. This downward trend is most notable in men aged from 15 to 44 years. In 2006, 46% of cases of hepatitis A were in those aged from 15 to 44 years compared to 49% in 2005 and 51% in 2004. The ratio of male to female cases of HAV infection in 2006 was 1.3:1 and has been consistently above 1 since the early 1990s (figure 1). In 2006 the North West region and the West Midlands region accounted for the majority of reports, 18% and 16% of the total respectively (table 2).

Figure 1 Ration of male to female cases of hepatitis A in England and Wales: 1992 to 2006

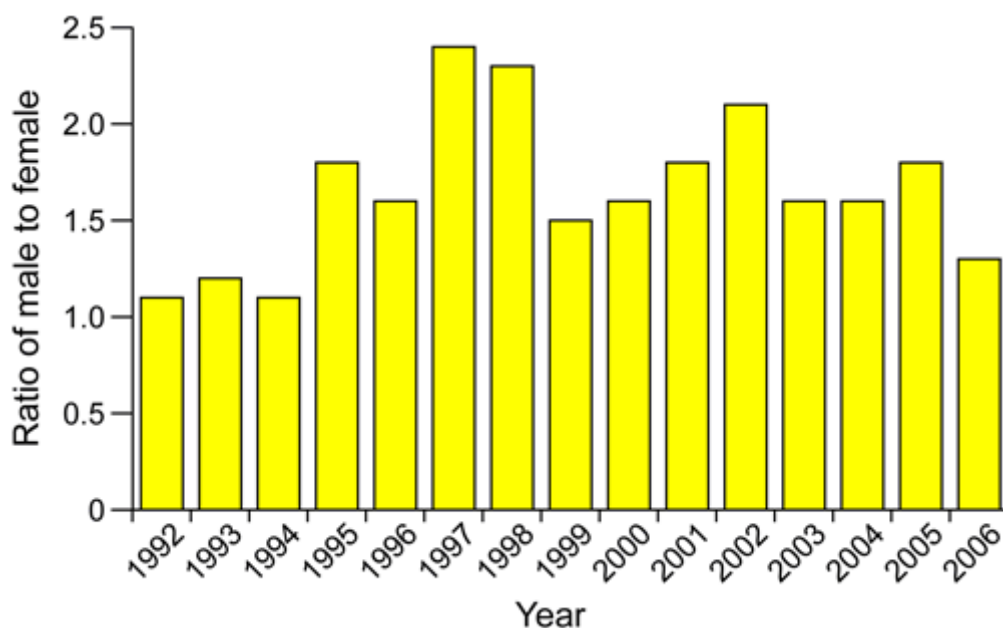


Table 2 Laboratory reports of hepatitis A infection in England and Wales: 2004 to 2006

Country/Region	Laboratory reports (Year)			
	2004	2005	2006	Total
East Midlands	71	23	13	107
Eastern	46	34	39	119
London	64	25	46	135
North East	28	33	12	73
North West	102	133	71	306
South East	68	28	32	128
South West	65	51	39	155
West Midlands	71	52	65	188
Yorkshire & Humberside	134	66	55	255
Wales	22	15	24	61
Total	671	460	396	1527

Over the years, there has been an increasing proportion of hepatitis A reports containing no information on risk factors. This is reflected in the fact that in 2005 and 2006, only 0.9% and 0.8% of reports respectively had information on a recent history of travelling abroad being associated with hepatitis A acquisition. In the early part of the decade there had been a number of outbreaks of hepatitis A that were associated with injecting drug use and homelessness.

Improved reporting of risk factor information is required as it is not possible to draw any major conclusions when the majority of reports lack risk factor information.

Laboratory reports of hepatitis C infection in England and Wales: 2006

There were 8765 reports of hepatitis C infection in 2006 (table 3) higher than the 7929 and 8240 cases of hepatitis C reported in 2005 and 2004 respectively [1]. The data for 2006 is provisional data as hepatitis C laboratory reports are subject to late reporting. Further hepatitis C confirmed laboratory cases for 2006 are expected to be reported throughout the remainder of the year. Of those reported, the majority of cases (64%) were in individuals aged from 25 to 44 years, the same proportion reported in 2005. The number of cases reported in males exceeded those reported in females in each quarter of 2006 and the annual male to female ratio was 2.2:1. Laboratory reports confirm that most infections were in young adult males. Laboratory reports are not reliable in differentiating acute from long-standing infections. Laboratory reports of confirmed hepatitis C therefore reflect current laboratory testing patterns.

Table 1 Quarterly laboratory reports of hepatitis C infection by age group and sex: 2006

Age Group (Years)	Q1 Jan-Mar			Q2 Apr-Jun			Q3 Jul-Sept			Q4 Oct-Dec			Total
	M	F	NK	M	F	NK	M	F	NK	M	F	NK	
<1	-	-	-	-	-	-	-	-	-	-	-	-	-
1-4	2	2	-	1	3	-	3	3	-	7	3	-	24
5-9	-	-	-	1	2	1	2	1	-	1	-	-	8
10-14	1	1	-	1	1	-	-	-	-	-	1	1	6
15-24	92	73	3	84	93	1	103	77	2	78	61	4	671
25-34	463	195	13	469	232	16	505	251	19	396	193	14	2766
35-44	450	156	12	542	181	21	545	187	18	509	152	15	2788
45-54	255	105	3	272	120	8	295	105	11	273	121	5	1573
55-64	73	42	1	84	40	4	79	42	4	93	49	-	511
≥65	38	41	-	36	41	5	48	43	7	34	43	3	339
nk	12	5	10	12	2	1	12	6	6	6	4	3	79
Total	1386	620	42	1502	715	57	1592	715	67	1397	627	45	8765

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1. Hepatitis C laboratory reports by age group 1990-2005. [Health Protection Agency website][online] Available at http://www.hpa.org.uk/infections/topics_az/hepatitis_c/data_lab_age.htm.