

IN THE NEWS

Mumps – Ireland

There has been an upsurge in mumps cases in the South East over the past 3 months. Thirty five cases of mumps were reported between April 1st and July 11th, 2008 compared with 3 cases for the same period in 2007. It is very important that person(s) with clinical mumps should stay away from work/school for 9 days post disease onset and that contacts not previously fully vaccinated (i.e. 2 MMR) up to 30 years of age should be offered vaccination. When recovered, unvaccinated cases should receive the MMR to prevent Measles and Rubella.

Measles endemic – UK

The Health Protection Agency (HPA) has reported that 14 years after the local transmission of measles was halted in the UK, the disease has now once again become endemic. The HPA has stated that this is entirely due to a decade of low MMR vaccination coverage, and urge that MMR vaccination be offered to all children who have not received two doses.

New Immunisation guidelines

The new immunisation guidelines document was launched on 24th July. See www.immunisation.ie. Once printed copies will be sent directly to GPs, hospital clinicians, public health depts and other groups.

New Childhood Vaccination Schedule

The new childhood vaccination schedule will start on 1st September 2008 (for children born since 1st July 2008). This will add hepatitis B and pneumococcal vaccine to the schedule.

Sexually Transmitted Infection Foundation Course

A sexually transmitted infection foundation course aimed at doctors, nurses and health advisors will be held in Waterford on 7th/8th November 2008. The course fee is €400. (see newsletter insert). e.mail: dr.dennehy@hse.ie

Crimean-Congo Haemorrhagic fever – Greece

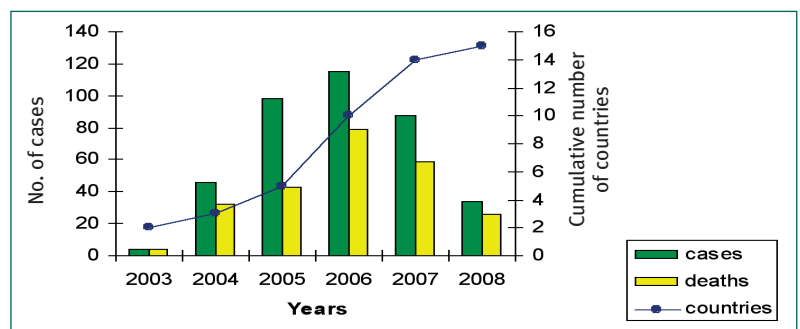
Greece reported through the European Early Warning and Response System (EWRS) the death of a 46yr woman due to Crimean-Congo Haemorrhagic fever (CCHF). CCHF is endemic in the Balkans, Turkey, Bulgaria and Albania and is a tick borne viral disease with considerable potential of human to human transmission. We would recommend that GPs advise any travelling patients to this area to protect themselves against biting ticks and use a propriety tick repellent.

Imported Marburg Haemorrhagic fever

The Netherlands reported through the EWRS of a confirmed case of Marburg in a woman returning from Uganda after visiting 2 caves in the Maramagabo forest where she was exposed to fruit bats. For more information on Marburg, please see: Ebola and Marburg Haemorrhagic fever - filoviruses factsheet (ECDC website).

Human Avian influenza

The cumulative number of laboratory confirmed human cases of avian influenza A/(H5N1) reported to WHO as of 19 June 2008 is as follows: Since 2003 there have been 385 reported cases from 15 countries. 243 of these cases have been fatal. The chart right shows the overall picture of cases of human avian influenza over the last 6 years.



Publications since the last newsletter

- Surveillance, Diagnosis and management of Clostridium difficile-associated disease in Ireland www.HPSC.ie
- Healthcare-Associated infection and Antimicrobial resistance-related data from acute public hospitals in Ireland 2006-2007 www.HPSC.ie

Hepatitis B and Hepatitis C

Hepatitis B infection- Key points

- Hepatitis B is very infectious – 100 times more infectious than HIV. It can last up to 7 days in the environment. Invisible contamination of surfaces or instruments can occur.
- Incubation period is usually 6 weeks to 6 months.
- Most people (>50%) who get the infection have no symptoms in the acute or early stage. This especially applies to children (>90%).
- While 90-98% of adults resolve the infection, those most at risk of long term effects (i.e. development of chronic liver disease or liver cancer) are those infected as children, especially those infected at birth or in early life, usually from family contacts. Over 90% of babies infected go on to develop chronic disease.
- There is increasing evidence that there is a risk that those who resolve hepatitis B infection can reactivate if their immune system is severely compromised, such as from immunosuppressive agents.
- There is an increased incidence in Ireland in the past 10 years. In this country:
 - Acute symptomatic cases are most commonly seen in adults and in those with a sexual or intravenous drug risk factor.
 - Chronic disease is most common in immigrants from countries of high or intermediate prevalence (Figure 1). This is mainly due to infection in childhood, which is often asymptomatic. They may be unaware of their infection until tested. All people with chronic infection should be seen in a specialised unit.
- Hepatitis B is vaccine preventable. It is especially important to vaccinate those at high risk
 - Babies born to hepatitis B positive mothers;
 - Children of hepatitis B positive parents or likely to be positive – such as from high prevalence countries or injecting drug users;
 - Household or sexual contacts of cases.Check vaccine efficacy by serology testing if risk is on-going.

Hepatitis B vaccination is included in the new childhood vaccination schedule.

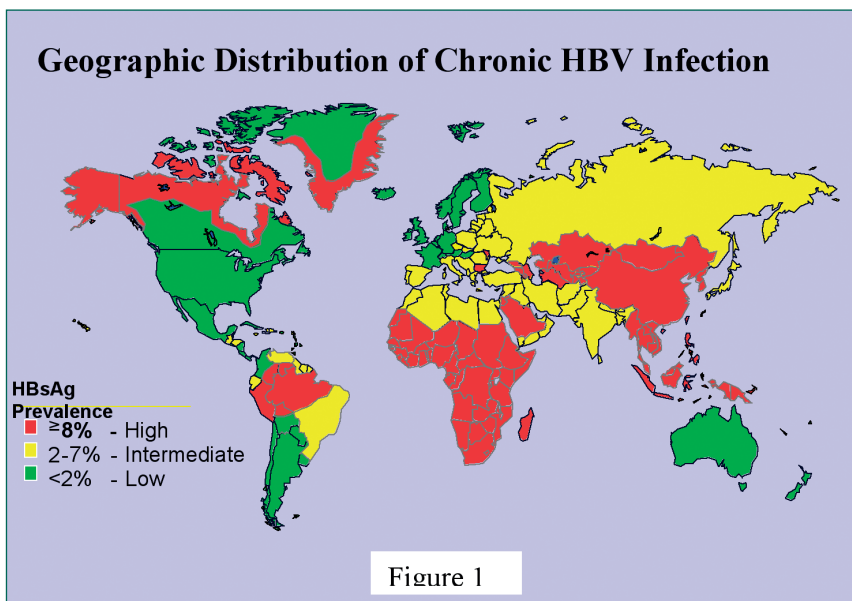


Figure 1

Prior to 2004, country of infection was not recorded for hepatitis B cases. For 2005-2007 country of infection was recorded for 42 cases in the South East. Where country of infection was recorded, an average of 58% were born in countries where hepatitis B is endemic.

Hepatitis C infection – key points

- First identified in 1989, the cause of most of what was previously known as ‘non-A, non-B hepatitis’.
- Not as infectious as hepatitis B, although still transmitted by exposure to blood or blood products.
- Mother-to-baby, sexual or occupational transmission less common than for hepatitis B. Most people infected due to intravenous drug use or having received unscreened blood or blood products.
- Areas of higher prevalence include countries in the Far East, Mediterranean countries and certain areas in Africa and eastern Europe
- Most people (>90%) do not have symptoms in the early or acute phase.
- There is high rate of progression to chronic infection (50-80%).
- There is currently no vaccine available against hepatitis C infection.

Notifications of Hepatitis B and C infection in South East, 2004-2007

Hepatitis B notifications in both the South East and nationally have increased between the year 2004 and 2005 with a decrease in 2006 and further increase in 2007 as seen in Table 1. An average of 7% of the national notifications during the period 2004-2007 were from the South East. Where the status of hepatitis B infection was known, 89% of hepatitis B cases notified in the South East between 2004 and 2007 were chronic (11% acute).

Table 1: Hepatitis B Notifications 2004-2007

Year	National Cases	CIR [†]	South East Cases	CIR [†]
2004	717	16.9	53	11.5
2005	883	20.8	60	13.0
2006	811	19.1	52	11.3
2007*	862	20.3	58	12.6

[†] CIR – Crude Incidence Rate per 100,000 population. Data extracted from CIDR on 2nd July 2008

* provisional data

Table 2: Hepatitis C Notifications 2004-2007

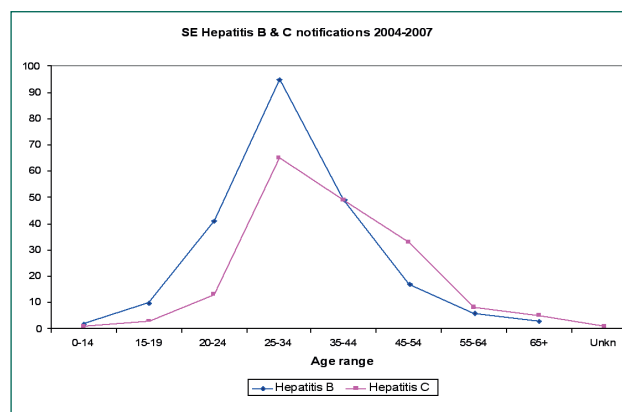
Year	National Cases	CIR [†]	South East Cases	CIR [†]
2004	1130	26.6	30	6.5
2005	1433	33.8	61	13.2
2006	1221	28.8	42	9.1
2007*	1559	36.9	44	9.5

[†] CIR – Crude Incidence Rate per 100,000 population. Data extracted from CIDR on 2nd July 2008

* provisional data

Hepatitis C notifications increased by over 100% between 2004 and 2005 in the South East and decreased in 2006 and 2007 (Table 2).

Figure 2: Age range of all hepatitis B and hepatitis C cases in the South East from 2004-2007



The age profile for hepatitis B and hepatitis C infections is similar (figure 2) with the highest notifications rates in the 25-34 age group. Forty three percent of hepatitis B and 37% of hepatitis C cases were aged between 25-34 years

Hepatitis B and contact tracing

Following a notification of hepatitis B, contact tracing should be carried out in order to identify contacts of the patient who might benefit from vaccination or to identify contacts who may have contracted the illness but may be unaware of this. The steps involved in contract tracing include:

- Discussion with clinician and decision to be made as to who will do contact tracing. Either the public health department or the clinician can do this.
- Information leaflet is provided to contacts (in appropriate language. Download from www.hpsc.ie)
- Screen contacts were appropriate
- Decide on appropriate vaccination schedule.
- If at on-going risk, do anti-HBs titre after 3rd dose of vaccine, to check vaccine efficacy.

See 'Immunisation Guidelines for Ireland 2008' at www.immunisation.ie for further information.

Acute Hepatitis B

Where a patient has acute hepatitis B, it is important that contacts are identified early. If less than 7 days has elapsed since their last exposure, contacts may benefit from hepatitis B immune globulin (HBIG).

Interpreting Serological Markers

The laboratory diagnosis of infection with hepatitis B virus (HBV) involves the demonstration of various serological markers in body fluids, predominantly blood samples. Typical serological profiles for hepatitis B infection are summarised in table 3. Table 4 explains what each serological marker is, and outlines the usefulness of serology.

Table 3: Serological markers for hepatitis B

	HBsAg	HBeAg	Anti HBcAg	Anti HBcIgM	Anti HBs	Anti HBe
Acute Infection	+	+/-	+	+	-	+/-
Persistent carrier – Chronic infection	+	+/-	+	-	-	+/-
Recovery/immunity	-	-	+	-	+	+
Immunity due to vaccine	-	-	-	-	+	-

Table 4: Interpreting the use of serological markers for hepatitis B

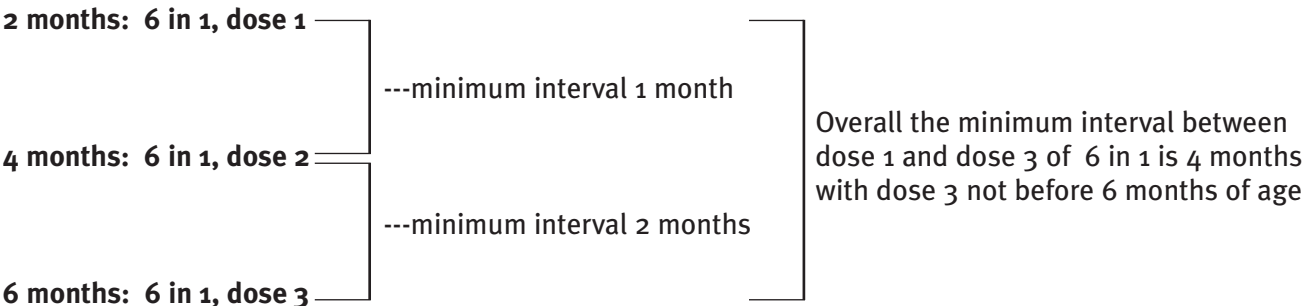
Factor to be Tested	Hep B Virus Antigen or Antibody	Use
HBsAg	Hep B surface antigen	Detection of acutely or chronically infected persons [†]
Anti-HBs	Antibody to HBsAg	Identify persons who have resolved infections with HBV; determine immunity after immunization
HBeAg	Hepatitis B e antigen	Identify infected persons at increased risk for transmitting HBV
Anti-HBe	Antibody to HBe	Identify infected persons who may be at lower risk for transmitting HBV
Anti-HBc	Antibody to HBcAg	Identify persons with acute, resolved, or chronic HBV infection (not present after immunization)
IgM anti-HBc	IgM antibody to HBcAg	Identify acute or recent HBV infections

[†] In the first 1-2 weeks after a patient contracts hepatitis B infection, there may be insufficient viral antigen in the blood to be identified by routine testing. People at high risk of very recent infection should be advised that an initial negative HBsAg result does not absolutely rule out infection and that the test may have to be repeated.

Vaccination of at risk babies

The recommended immunisation schedule for babies of HBsAg positive mothers, born after 1st July 2008 will be:

At Birth: Hepatitis B Vaccine + HBIG (Hepatitis B immune globulin)



Infants should be tested 2-4 months after last 6 in 1 to determine the outcome of the immune globulin and vaccine.

Statutory Notification of Infectious diseases

The table below shows cases of infectious diseases notified in the HSE/SE area only under Infectious Disease (Amendment No.3) Regulations 2003 (S.I. No. 707 of 2003).

With the exception of STI, TB, Staphylococcus aureus bacteraemia, E. coli infection (invasive) and Enterococcal bacteraemia, data has been extracted from CIDR (computerized infectious disease reporting).

Clinical notifications are notifications received directly from clinicians. Laboratory notifications are those received from the clinical director of a diagnostic laboratory. STI figures are shown for clinical notifications only.

Disease	2006 Weeks 1-26	2007 Weeks 1-26	2008 Weeks 1-26†	2008 Weeks 1-26	
	Cases	Cases	Cases	Notification Source*	
				Lab	Clinical
Acute infectious gastroenteritis‡	224	376	340	311	99
Ano-genital warts	2	2	4	0	4
Bacterial meningitis (not otherwise specified)	3	5	1	0	1
Brucellosis	1	0	0	0	0
Campylobacter infection	99	99	70	69	23
Chlamydia trachomatis infection (genital)	18	29	28	0	28
Clostridium Perfringes	0	0	0	0	0
Cryptosporidiosis	39	51	40	63	35
E. coli infection (invasive)	54	52	85	85	0
Enterococcal bacteraemia	22	15	27	27	0
Enterohaemorrhagic E. coli	1	3	2	2	2
Giardiasis	1	4	3	3	3
Gonorrhoea	0	0	1	0	1
Haemophilus influenzae disease (invasive)	3	4	3	3	2
Hepatitis A Acute	1	3	3	3	3
Hepatitis B Acute	5	1	4	36	21
Hepatitis B Chronic	21	29	26		
Hepatitis C	25	15	23	23	8
Herpes simplex (genital)	0	1	5	0	5
Influenza	26	31	22	18	10
Legionellosis	0	0	0	0	0
Leptospirosis	1	1	1	1	1
Listeriosis	0	1	0	0	0
Malaria	1	2	3	3	0
Measles	3	5	3	5	0
Meningococcal disease	11	12	14	5	14
Mumps	13	7	37	22	42
Non-specific urethritis	0	0	0	0	0
Noroviral infection	59	53	54	51	5
Paratyphoid	0	0	0	0	0
Pertussis	4	4	1	1	1
Rubella	0	1	5	0	5
Salmonellosis	10	15	15	16	15
Shigellosis	0	0	1	1	1
Staphylococcus aureus bacteraemia	53	44	51	51	0
Streptococcus group A infection (invasive)	2	5	5	5	4
Streptococcus pneumoniae infection (invasive)	50	65	49	49	9
Syphilis	3	3	3	0	3
Toxoplasmosis	0	7	2	2	0
Tuberculosis	30	17	18	§	18
Typhoid	1	0	0	0	0
Viral Encephalitis	0	1	0	0	0
Viral Meningitis	2	3	4	2	2
Total	788	966	953	852	365

† Provisional data

* Cases may be notified from a clinical source or a lab source or from both sources (multiple notifications included). Therefore figures for clinical and lab notifications may not equal the total number of cases.

‡ Since May 1st 2008 acute infectious gastroenteritis also now include Clostridium difficile cases

§ Although TB is also notified by the lab, this information is not quantified



There were no notified cases of tetanus, diphtheria, acute anterior poliomyelitis, anthrax, cholera, ornithosis, plague, rabies, smallpox, typhus, viral haemorrhagic disease, or yellow fever.

Immunisation uptake in the HSE- SE and in Ireland

Immunisation uptake rates for children at 12 months and 24 months of age.

	% Uptake at 12 months of age						
	BCG	D3	P3	T3	Hib3	Polio3	MenC3
HSE SE Q4 2007	91	86	86	86	86	86	85
CW/KK	89	83	83	83	83	83	83
TS	93	87	87	87	87	87	86
WD	90	86	86	86	86	86	85
WX	93	87	87	87	87	87	87
National Q4 2007	93	88	88	88	87	88	87
HSE SE Q4 2006	93	88	88	88	88	88	87

	% Uptake at 24 months of age						
	D3	P3	T3	Hib3	Pol3	MenC3	MMR1
HSE SE Q4 2007	92	92	92	91	91	90	88
CW/KK	93	93	93	92	93	91	90
TS	92	92	92	90	92	89	89
WD	90	90	90	91	90	90	85
WX	91	91	91	90	91	90	89
National Q4 2007	93	93	93	92	93	92	88
HSE SE Q4 2006	92	92	92	92	92	91	87

Uptake of primary immunisations in the South East at 12 months of age decreased by 2% for Q4 2007 compared with the same period in 2006. For children aged 24 months of age in the South East in Q4 2007, uptake of MMR1 increased 1% compared with Q4, 2006. There was no change in uptake of D3, P3 and T3, and uptake of Hib3, Pol3 and MecC3 at 24 months decreased by 1% over the same time period. The target uptake rate of $\geq 95\%$ has not been achieved in the South East.

This report is produced with the data provided by the Senior Medical Officers, Environmental Health Officers, Waterford Regional Hospital Laboratory, Hospital Clinicians, Regional STI Clinics and General Practitioners.

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