

SURVEILLANCE of INFECTIOUS INTESTINAL (IID), ZOO NOTIC AND VECTORBORNE DISEASE, and OUTBREAKS of INFECTIOUS DISEASE



A quarterly report by the Health Protection Surveillance Centre in collaboration with the Departments of Public Health

Quarter 3–2006

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This is the third quarterly report for 2006 produced by the Gastroenteric Unit of the Health Protection Surveillance Centre.

The production of this quarterly report would not be possible without the valuable input and commitment from the Directors of Public Health, Specialists in Public Health Medicine, Surveillance Scientists, Clinical Microbiologists, General Practitioners, Hospital Clinicians, Infection Control, Environmental Health and laboratory personnel, and other professionals who provide the data for the HPSC's surveillance

Note: Data are collected and analysed using the Computerised Infectious Disease Reporting (CIDR) system. The data in this report are provisional and will not be regarded as final until all returns are received and data have been validated.

OUTBREAK SURVEILLANCE

Table 1. Outbreaks of Infectious Intestinal Disease (IID) in Quarter 3, 2006

Month	HSE region	Type of outbreak	Location	No.ill	No. Hosp	Date Onset	Suspect mode of transmission	Disease
Jul	S	Family	Private house	2	-	11-Jun-2006	P-P and WB	Cryptosporidiosis
Jul	M	Family	Private house	2	0	24-May-2006	Not Specified	Campylobacter infection
Jul	E	General	Hospital	13	13	29-Jun-2006	Unknown	AIG
Jul	S	General	Other	28	-	4-Jun-2006	FB and WB	Cryptosporidiosis
Jul	NE	Family	Private house	2	1	9-Jun-2006	Not Specified	EHEC
Jul	M	General	Hospital	-	-	8-Jul-2006	P-P and Airborne	Noroviral infection
Jul	NE	Family	Residential institution	8	0	-	Person-to-person	Noroviral infection
Jul	E	Family	Private house	2	0	1-Jul-2006	Unknown	EHEC
Jul	E	Family	Travel related	3	1	5-Jul-2006	Foodborne	Salmonellosis
Jul	W	Family	Not Specified	2	-	11-Jul-2006	Person-to-person	Campylobacter infection
Jul	E	Family	Private house	1	1	-	Not Specified	Salmonellosis
Jul	NW	General	Hospital	15	-	-	Person-to-person	Noroviral infection
Aug	M	Family	Private house	2	1	23-Jul-2006	Foodborne	Campylobacter infection
Aug	NW	General	Comm. Hosp/Long-stay unit	8	0	28-Mar-2006	Person-to-person	AIG
Aug	NW	General	Hospital	5	5	29-Mar-2006	Person-to-person	Noroviral infection
Aug	E	General	Restaurant / Cafe	13	0	29-Jul-2006	Unknown	Noroviral infection
Aug	W	Family	Not Specified	-	-	21-Jul-2006	Not Specified	EHEC
Aug	NW	General	Comm. Hosp/Long-stay unit	42	-	6-Apr-2006	Person-to-person	Noroviral infection
Aug	W	Family	Not Specified	1	-	30-May-2006	Not Specified	EHEC
Aug	NW	General	Comm. Hosp/Long-stay unit	22	-	2-May-2006	Person-to-person	Noroviral infection
Aug	NW	General	Hospital	6	6	5-May-2006	Person-to-person	Noroviral infection
Aug	MW	Family	Private house	1	1	10-Jul-2006	Person-to-person	EHEC
Aug	NE	Family	Private house	3	1	24-Jul-2006	Unknown	EHEC
Aug	NW	General	Comm. Hosp/Long-stay unit	15	0	11-May-2006	Person-to-person	AIG
Aug	NW	General	Hospital	23	23	21-May-2006	Person-to-person	Noroviral infection
Aug	NW	General	Hospital	13	13	27-May-2006	Person-to-person	Noroviral infection
Aug	NW	General	Comm. Hosp/Long-stay unit	16	0	11-Jun-2006	Person-to-person	Noroviral infection
Aug	NE	Family	Private house	1	1	28-Jul-2006	Not Specified	EHEC
Aug	S	Family	Private house	2	1	6-Jul-2006	Unknown	Salmonellosis
Aug	SE	Family	Travel related	2	0	23-Jun-2006	FB and Animal	Salmonellosis
Aug	SE	Family	Travel related	2	1	7-Jul-2006	Foodborne	Salmonellosis
Aug	E	General	Other	3	0	3-Aug-2006	Unknown	EHEC
Aug	MW	General	Residential institution	3		14-Aug-2006	Person-to-person	Clostridium difficile
Aug	M	Family	Private house	1	1	4-Aug-2006	Foodborne	EHEC
Aug	M	Family	Private house	4	1	12-Aug-2006	Unknown	Salmonellosis
Aug	E	General	Hospital	17	-	-	Person-to-person	Noroviral infection
Aug	M	General	Hospital	4	4	12-Aug-2006	Not Specified	AIG
Aug	S	General	Private house	5	1	12-Aug-2006	Person-to-person	Shigellosis

Aug	W	Family	Not Specified	2	-	20-Jul-2006	Not Specified	EHEC
Aug	SE	General	Hospital	6	0	21-Aug-2006	P-P and Airborne	AIG
Aug	E	Family	Private house	2	2	10-Jun-2006	P-P and FB	EHEC
Aug	MW	Family	Private house	1	1	5-Aug-2006	Person-to-person	EHEC
Sep	M	Family	Private house	2	0	5-Aug-2006	Person-to-person	Salmonellosis
Sep	W	Family	Not Specified	1	-	2-Aug-2006	Not Specified	EHEC
Sep	E	General	Creche	30	0	24-Aug-2006	Unknown	AIG
Sep	E	General	Travel related	2	-	-	Unknown	Salmonellosis
Sep	M	Family	Private house	2	0	22-Aug-2006	P-P and WB	EHEC
Sep	E	General	Other	3	-	6-Sep-2006	Unknown	AIG
Sep	NE	Family	Private house	1	-	10-Aug-2006	P-P and FB	EHEC
Sep	E	Family	Private house	2	-	-	Foodborne	Campylobacter infection
Sep	E	General	Comm. Hosp/Long-stay unit	13	0	17-Sep-2006	Unknown	Noroviral infection
Sep	NW	Family	Private house	7	-	-	Not Specified	EHEC
Sep	S	Family	Private house	4	1	23-Aug-2006	P-P and FB	EHEC
Sep	M	Family	Private house	2	-	3-Sep-2006	Foodborne	Salmonellosis
Sep	NE	Family	Travel related	5	0	30-Aug-2006	Foodborne	Salmonellosis
Sep	NE	Family	Private house	2	1	23-Aug-2006	Person-to-person	Cryptosporidiosis
Sep	NE	Family	Travel related	3	1	27-Aug-2006	Unknown	Salmonellosis
Sep	M	Family	Private house	2	0	10-Sep-2006	Foodborne	Salmonellosis

P-P denotes Person-to-Person transmission, FB denotes foodborne, WB denotes waterborne
AIG = Acute Infectious Gastroenteritis; EHEC = Enterohaemorrhagic *Escherichia coli*

Table 2. Non-IID Outbreaks in Quarter 3, 2006

Month	HSE region	Type of outbreak	Location	No. ill	No. Hosp.	Date Onset	Suspect mode of transmission	Organism
Jul	S	General	Creche	5	-	-	P-P and Airborne	Coxsackie Virus
Jul	W	General	Residential institution	7	0	-	Person-to-person	ESBL <i>E. coli</i>
Jul	E	General	Travel related	-	-	-	Waterborne	Legionellosis
Jul	NW	Family	Private house	4	4	-	Not Specified	Viral meningitis (Enterovirus)
Aug	M	Family	Private house	2	2	11-Jul-2006	Person-to-person	Pertussis
Aug	NW	General	Residential institution	19	-	21-Jun-2006	Airborne	<i>S. pneumoniae</i> infection (invasive)
Sep	S	Family	Unknown	2	0	-	Unknown	Hepatitis B (acute and chronic)
Sep	E	Family	Travel related	2	1	-	Unknown	Hepatitis A (acute)

P-P denotes Person-to-Person transmission

Since July 2001, outbreaks have been reported to HPSC. Initial information is provided by a public health professional using a preliminary notification form (by fax or email). A full report is then forwarded by the lead investigator once more complete data are available. The data requested includes information on the source of reporting of the outbreak, the extent of the outbreak, mode of transmission, location, pathogen involved, laboratory investigation, morbidity and mortality data, suspect

vehicle and factors contributing to the outbreak. The data provided on final reports is crucial in providing information on the reasons why the outbreak occurred, the factors that lead to the spread of disease and the lessons that can be learnt to prevent further such outbreaks.

Since the 1st January 2004, with the amendment to the Infectious Diseases Regulations (2003), there is a statutory requirement for medical practitioners and clinical directors of a diagnostic laboratory to notify to

the medical officer of health ‘any unusual clusters or changing patterns of any illness, and individual cases thereof, that may be of public health concern’.

Table 1 shows a line listing of all general and family IID outbreaks reported to the HPSC in the third quarter of 2006. There were 58 IID outbreaks reported during this period, resulting in at least 383 people being ill. The most common cause of IID outbreaks was Enterohaemorrhagic *Escherichia coli* (EHEC), with 17 outbreaks (29% of all outbreaks) caused by this organism. Most outbreaks were transmitted person-to-person (37%). Twelve outbreaks were associated with foodborne transmission (20%) and 3 outbreaks were suspected waterborne transmission. 18 outbreaks (31%) were reported to have occurred in healthcare settings, i.e. hospitals or residential institutions, during this period. There were 6 travel related IID outbreaks during this quarter. Salmonellosis was the causative agent in all 6 of the outbreaks, resulting in 20 people being ill. Twenty-four outbreaks of IID occurred in private houses – 3 *Campylobacter*, 2 *Cryptosporidium*, 1 Shigellosis, 6 *Salmonella* and 12 *E. coli*.

There were 8 non-IID outbreaks (1 Coxsackie virus, 1 ESBL *E. coli*, 1 Legionellosis, 1 Viral Meningitis, 1 Pertussis, 1 *Streptococcus pneumonia* infection, 1 Hepatitis A and 1 Hepatitis B) reported during Quarter 3 - see Table 2.

Table 3. No of IID outbreaks per HSE region

HSE Area	No of IID outbreaks	Rate per 100,000 population
E	13	0.9
M	10	4.4
MW	3	0.9
NE	8	2.3
NW	11	5.0
SE	3	0.7
S	5	0.9
W	5	1.3
Total	58	-

NOTIFICATIONS OF INFECTIOUS INTESTINAL, ZONOTIC AND VECTORBORNE DISEASE

The number of notifications of infectious intestinal, zoonotic and vectorborne disease by HSE-Area for the third quarter of 2006 is shown in Table 4.

Table 4. Intestinal Infectious, Zoonotic and Vectorborne Disease Notifications Quarter 3 2006 by HSE-Area

Infectious Intestinal Disease	E	M	MW	NE	NW	SE	S	W	Total
Acute infectious gastroenteritis (incl. rotavirus)	53	16	2	3	28	17	28	21	168
<i>Bacillus cereus</i> foodborne infection/intoxication	0	0	0	0	0	0	0	0	0
Botulism	~	~	~	~	~	~	~	~	1
Campylobacter infection	218	36	32	23	26	52	62	47	496
Cholera	0	0	0	0	0	0	0	0	0
<i>Clostridium perfringens</i> (type A) food-borne disease	0	0	0	0	0	0	0	0	0
Cryptosporidiosis	1	2	13	5	2	5	15	16	59
Enterohaemorrhagic <i>Escherichia coli</i>	12	8	10	15	8	3	6	10	72
Giardiasis	6	0	1	1	0	2	3	1	14
Listeriosis	0	0	0	0	1	0	0	0	1
Noroviral infection	35	64	9	7	18	4	11	0	148
Paratyphoid	0	0	0	0	0	0	0	0	0
Salmonellosis	54	22	11	8	14	20	22	11	162
Shigellosis	7	1	2	2	0	0	7	1	20
Staphylococcal food poisoning	0	0	0	0	0	0	0	0	0
Typhoid	~	~	~	~	~	~	~	~	1
Yersiniosis	0	0	0	0	0	0	0	0	0
Zoonotic Disease	E	M	MW	NE	NW	SE	S	W	Total
Anthrax	0	0	0	0	0	0	0	0	0
Brucellosis	0	0	4	0	0	1	1	0	6
Echinococcosis	0	0	0	0	0	0	0	0	0
Leptospirosis	2	0	1	0	1	0	0	0	4
Plague	0	0	0	0	0	0	0	0	0
Q Fever	0	0	1	1	0	0	0	0	2
Rabies	0	0	0	0	0	0	0	0	0
Toxoplasmosis	9	0	4	1	0	1	0	0	15
Trichinosis	0	0	0	0	0	0	0	0	0
Typhus	0	0	0	0	0	0	0	0	0
Vectorborne Disease	E	M	MW	NE	NW	SE	S	W	Total
Malaria	19	3	2	2	3	0	3	2	34

SALMONELLA ENTERICA

Human salmonellosis (*S. enterica*) is a notifiable disease. The National Reference Laboratory for Salmonella (NSRL) in Ireland was established in 2000 in the Dept. of Medical Microbiology, University College Hospital, Galway. This laboratory accepts *S. enterica* isolates from all clinical and food laboratories in Ireland for serotyping, phage typing and antimicrobial sensitivity testing. Table 5 shows the number of salmonellosis notifications by HSE-Area and month for the third quarter of 2006. Comparison of trends with previous years is shown in Figure 1 below.

Figure 1. Seasonal Distribution of Human Salmonellosis Notifications, 2003-2005 and to end Q3 2006

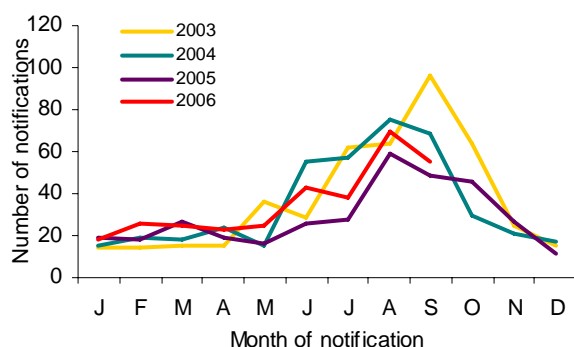


Table 5. Salmonellosis Notifications by HSE-Area and Month, Q3 2006

Salmonellosis	E	M	MW	NE	NW	SE	S	W	Total
July	17	0	1	2	0	7	6	5	38
Aug	23	14	6	1	6	6	11	3	70
Sep	14	8	4	5	8	7	5	3	54
Total	54	22	11	8	14	10	22	11	162

Table 6 shows the *S. enterica* isolates typed by the NSRL in the third quarter of 2006 (n=161). The commonest human serotypes isolated were *S. Enteritidis* (n=67 [42%]) and *S. Typhimurium* (n=41 [25%]).

40 (25%) *S. enterica* isolates typed by the NSRL were reported to be associated with travel outside of Ireland during this quarter.

S. Typhi and S. Paratyphi

There were 2 cases of typhoid reported during Quarter 3, 2006.

Outbreaks of salmonellosis

There were 12 outbreaks of salmonellosis reported in Q3, 2006 (see Table 1).

Table 6. Serotypes of *S. enterica* referred to NSRL in Quarter 3, 2006 (Data are provided courtesy of Prof. Martin Cormican and Dr Geraldine Corbett-Feeney, NSRL).

Serotype	E	M	MW	NE	NW	SE	S	W	Total
Agona	0	0	1	0	0	1	0	0	2
Athinani	1	0	0	0	0	0	0	0	1
Bareilly	1	0	0	0	0	0	0	0	1
Braenderup	0	1	0	0	0	0	0	0	1
Bredeney	1	1	0	0	0	0	0	0	2
Corvallis	1	0	0	0	0	0	0	0	1
Derby	1	0	0	0	0	0	0	0	1
Dublin	0	0	0	0	0	0	1	0	1
Enteritidis	26	5	4	3	8	5	10	6	67
Hadar	1	0	0	0	0	0	3	1	5
Haifa	1	0	0	0	0	0	0	0	1
Heidelberg	1	0	0	0	0	0	0	0	1
Infantis	2	1	0	1	0	0	0	1	5
Kentucky	0	0	0	2	1	0	0	0	3
Manhattan	0	1	0	0	0	0	0	0	1
Mikawasima	3	0	0	0	0	0	0	0	3
Muenchen	0	1	0	0	0	0	0	0	1
Newport	1	0	0	1	0	0	0	0	2
Oranienburg	0	0	1	0	0	0	0	0	1
Panama	0	0	0	0	0	0	1	0	1
Saintpaul	1	0	1	0	0	0	0	1	3
Schwarzengrund	0	0	1	0	0	1	0	0	2
Tennessee	1	0	0	0	0	0	0	0	1
Thompson	0	0	0	0	0	1	1	0	2
Typhi	1	0	0	1	0	0	0	0	2
Typhimurium	11	9	2	1	4	5	5	4	41
Unnamed	2	0	0	0	0	1	0	0	3
Virchow	2	1	0	0	0	1	1	0	5
Wien	0	0	1	0	0	0	0	0	1
Total	58	20	11	9	13	15	22	13	161

VEROTOXIGENIC *E. COLI* (VTEC)

Illness caused by enterohaemorrhagic *E. coli* (EHEC) became a notifiable disease on January 1st 2004. Under EHEC, all verotoxin positive *E. coli*, and *E. coli* of serogroups O157, O26, O111, O103, O145 regardless of whether verotoxin producers, are reported. Previously, VTEC were notified under the category of 'Food Poisoning (bacterial other than Salmonella)'.

The number of EHEC notified in Q3 2006 is shown in Table 4. Under the legislation, it is required that information on EHEC be gathered and reported. However, because of their clinical and public health significance, it is important to distinguish between those isolates that are verotoxin-producers and those that are not.

Seventy-two EHEC were notified in this quarter, 67 of which are VTEC (65 confirmed and 2 probable -Table 7). This compares with 50 VTEC cases notified in Q3 2005 and 29 in Q3 2004 (Figure 2). Table 7 shows the number of VTEC cases reported by serogroup and month, Q3 2006.

Table 7. Confirmed and Probable VTEC Notified by Serogroup and Month, Q3 2006

VTEC	O157	O26	O115	Total
July	11	2	0	13
Aug	26	5 ^a	1	32
Sep	16 ^a	6	0	22
Total	53	13	1	67

^aIncludes one probable case

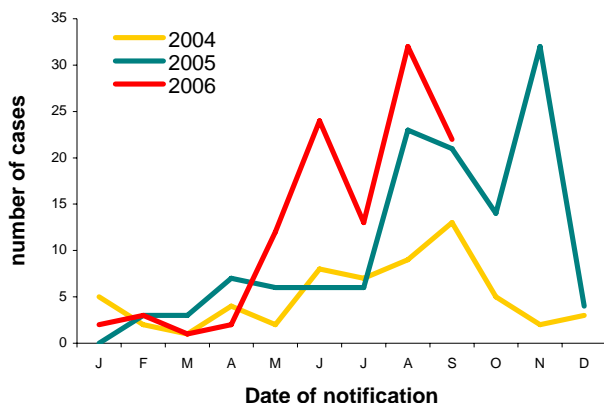


Figure 2. Seasonal distribution of confirmed and probable VTEC cases notified 2004-2005, and to Q3 2006

Enhanced information is provided by HSE-Area personnel on all VTEC cases. Seven VTEC cases (Six confirmed and 1 probable) notified in this quarter developed HUS. Five were due to *E. coli* O157 and 2 to *E. coli* O26.

The HSE DML Public Health Laboratory at Cherry Orchard Hospital, Dublin provides a national *E. coli* O157 and non-O157 diagnostic service for clinical samples, including *E. coli* serotyping, verotoxin detection and VTEC molecular typing. Tables 8 and 9 show the phage types and VT types of VTEC isolates referred to this laboratory in Q3 2006.

Table 8. Phage Types of VTEC O157 isolates referred to the HSE DML Public Health Laboratory, Cherry Orchard Hospital in Q3 2006. (Data are provided courtesy of Dr. Eleanor McNamara and Dr. Anne Carroll).

Phage type	Number of isolates
32	20
21/28	16
8	6
51	3
14	3
RDNC ^a	2
Not yet available	2
Total	52 ^b

^aRDNC reacts with the panel of phages but does not conform to a designated type.

^bNote: no isolate available for probable case

Table 9. Verotoxin typing results of VTEC isolates referred to the HSE DML Public Health Laboratory, Cherry Orchard Hospital in Q3 2006. (Data are provided courtesy of Dr. Eleanor McNamara and Dr. Anne Carroll).

Serogroup	Vt1	Vt2	Vt1+Vt2	Total
<i>E. coli</i> O157	0	41	11	52 ^a
<i>E. coli</i> O26	8	2	2	12 ^a
<i>E. coli</i> O115	1	0	0	1
Total	8	45	12	65

^aNote: no isolates available for probable cases

Outbreaks of VTEC infection

During this quarter, 16 family outbreaks and one general outbreak of VTEC infection were reported. Fifteen were due to *E. coli* O157 and 2 due to *E. coli* O26 (see Table 1).

CAMPYLOBACTER

Human campylobacteriosis became a notifiable disease on January 1st 2004. Prior to this, human campylobacter infection was notified under the category of 'Food Poisoning (bacterial other than Salmonella)'. The notifications for the third quarter of 2006 are shown in Table 10. The seasonal trend is broadly similar to the same period for the last year as depicted in Figure 3.

Table 10. Campylobacter Notifications by HSE-Area and Month, Q3 2006

Campylobacter Infection	E	M	MW	NE	NW	SE	S	W	Total
July	69	4	9	9	5	18	19	15	148
Aug	74	18	17	8	7	17	24	19	184
Sep	75	14	6	6	14	17	19	13	164
Total	218	36	32	23	26	52	62	47	496

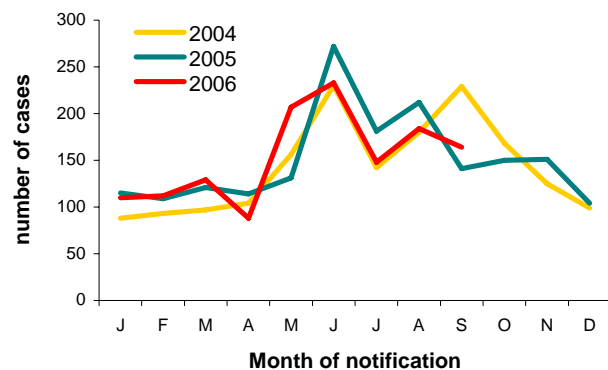


Figure 3. Seasonal distribution of Campylobacter notifications 2004, 2005 and to end Q3 2006

Outbreaks of Campylobacter infection

Three family outbreaks of Campylobacter infection were reported in Q3 2006 (Table 1).

CRYPTOSPORIDIUM

Human cryptosporidiosis became a notifiable disease on January 1st 2004. Prior to this, cryptosporidiosis was notifiable in Ireland only in young children under the category 'Gastroenteritis in Children Under 2'. In Q3 2006, 59 cases of cryptosporidiosis were notified (Table 11), compared to 74 in same period last year and 86 in Q3 2004 (Figure 4).

Table 11. Cryptosporidiosis Notifications by HSE-Area and Month, Q3 2006

Cryptosporidiosis	E	M	MW	NE	NW	SE	S	W	Total
July	0	1	2	2	2	0	5	7	19
Aug	0	1	5	0	0	5	7	3	21
Sep	1	0	6	3	0	0	3	6	19
Total	1	2	13	5	2	5	15	16	59

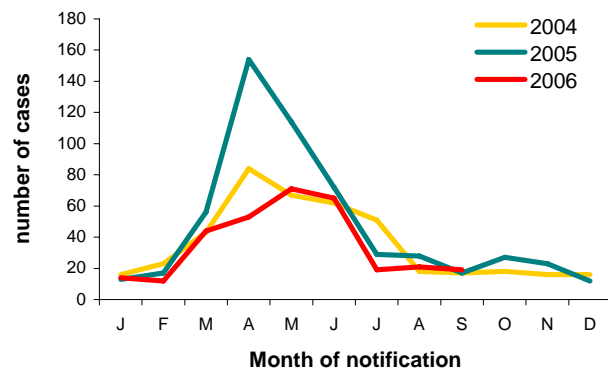


Figure 4. Seasonal distribution of cryptosporidiosis notifications 2004, 2005 and to end Q3 2006

Outbreaks of cryptosporidiosis

In quarter 3, there were 2 family outbreaks and one general outbreak of cryptosporidiosis reported (Table 1).

NOROVIRUS

Human noroviral infection became a notifiable disease on January 1st 2004. There were 148 cases reported in the third quarter of 2006, as shown in Table 12. These data are certainly an under-ascertainment of the true burden of disease due to this pathogen.

Table 12. Norovirus Notifications by HSE-Area and Month, Q3 2006

Noroviral Infection	E	M	MW	NE	NW	SE	S	W	Total
July	11	62	3	3	8	1	7	0	95
Aug	18	2	5	2	8	2	4	0	41
Sep	6	0	1	2	2	1	0	0	12
Total	35	64	9	7	18	4	11	0	148

Norovirus outbreaks

Norovirus or suspect viral aetiology is the commonest cause of outbreaks of acute gastroenteritis in Ireland. In the third quarter of 2006 there were 13 outbreaks confirmed or suspected as being caused by this virus, involving at least 193

people becoming ill, as outlined in Table 1. This compares with 2 outbreaks for the same period last year and 6 outbreaks in Q3 2004 (Figure 5). 12 of the 13 outbreaks (92%) reported in this quarter occurred in healthcare settings.

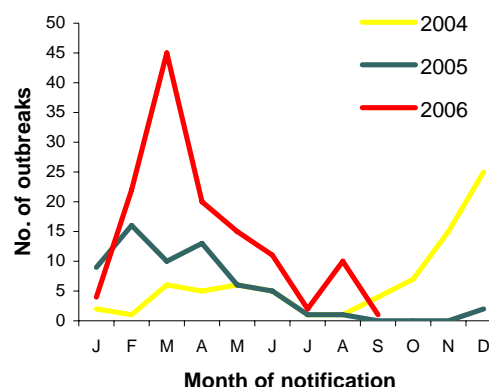


Figure 5. Seasonal distribution of Norovirus Outbreaks, 2004, 2005 and to end Q3 2006

LISTERIA

Human listeriosis became a notifiable disease on January 1st 2004. Prior to this, listeriosis was notified under the category of 'Food Poisoning (bacterial other than Salmonella)' or 'Bacterial Meningitis' as appropriate.

There was 1 case of listeriosis notified in Q3 2006, compared to 5 in the same period 2005 and 4 in Q3 2004.

SHIGELLA

On January 1st 2004, infection with *Shigella* spp. became notifiable as 'Shigellosis'. Prior to this, it was notifiable as 'Bacillary Dysentery'.

During Q3 2006, 20 cases of shigellosis were notified (Table 4). This compares with 16 cases notified as shigellosis in Q3 in 2005 and 21 in Q3 2004.

Sixteen cases were reported as *S. sonnei*, one as *S. flexneri* and three as *Shigella* sp.

GIARDIA

Human giardiasis became a notifiable disease on January 1st 2004. Prior to this, giardiasis was notifiable in Ireland only in young children under the category 'Gastroenteritis in Children Under 2'.

During Quarter 3 2006, 14 cases of giardiasis were notified (Table 4); this compares with 17 cases notified in Q3 2005 and 16 in Q3 2004.

FOODBORNE INTOXICATIONS

Bacillus cereus foodborne infection/intoxication, botulism, *Clostridium perfringens* (type A) foodborne disease and staphylococcal food poisoning became notifiable diseases on January 1st 2004. Prior

to this, these diseases were notified under the category of 'Food Poisoning (bacterial other than Salmonella)'.

There was one case of botulism notified in Q3 2006 (Table 4).

ACUTE INFECTIOUS GASTROENTERITIS incl. ROTAVIRUS

Since 1st January 2004, there is a notifiable disease category termed 'Acute Infectious Gastroenteritis'. This includes all unspecified causes of gastroenteritis and also specifically, gastroenteritis due to rotavirus. It should be noted that acute infectious gastroenteritis is now notifiable in all age groups, unlike the former notifiable disease category of 'Gastroenteritis in children under 2 years'.

During Quarter 3 2006, there were 168 notifications of acute infectious gastroenteritis. 118 were reported as rotavirus (Table 13) and 73% of these were in children under 2 years of age.

Table 13. Rotaviral Infections Notified under the Category of 'Acute Infectious Gastroenteritis' by HSE-Area and Month, Q3 2006

Rotaviral Infection	E	M	MW	NE	NW	SE	S	W	Total
July	27	7	2	2	9	6	12	4	69
Aug	11	3	0	0	3	10	10	3	40
Sep	4	2	0	1	0	0	1	1	9
Total	42	12	2	3	12	16	23	8	118

NON-IID ZONOTIC DISEASES

Non-IID zoonoses now notifiable include: anthrax, brucellosis, echinococcosis, leptospirosis, plague, Q Fever, toxoplasmosis, trichinosis, typhus and rabies. The Q3 2006 notifications of these zoonotic diseases are reported by HSE-Area in Table 4.

Fifteen cases of toxoplasmosis were notified in this quarter. This compares with twelve cases notified in the same period in 2005 and eight cases in Q3 2004.

There were six cases of brucellosis reported during this quarter compared with twelve in Q3 2005 and sixteen in Q3 2004.

Four cases of leptospirosis were notified in Q3 2006; this compares with five in Q3 2005 and one in Q3 2004.

There were also two cases of Q fever notified this quarter, compared to three in Q3 in 2005 and one in Q3 2004.

MALARIA

Malaria is a notifiable disease for many years. The Q3 2006 notifications are reported in Table 4 by HSE-Area.

Thirty-four cases of malaria were notified in Q3 2006. This compares with 12 cases reported in Q3 2005 and 9 in Q3 2004.

Twenty-six cases were reported as *P. falciparum*, three as *P. ovale*, two as *P. vivax* and for three notifications, the species was not specified.

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