COMMUNICABLE DISEASES

Monthly Report

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This edition commences with a feature on norovirus. There is currently considerable norovirus activity in England and Wales but in Northern Ireland activity is much less compared to the same period in previous years. Nevertheless a number of outbreaks in health care facilities have been reported in December and these have led to ward closures as part of outbreak control measures.

By the end of November 69% of those aged over 65 years had received their seasonal influenza vaccination and, as there were some late returns, the true vaccination uptake level will be higher. Thus the majority of the elderly population should have protection against seasonal flu viruses. Until the New Year consultation rates for 'flu/flulike illness from sentinel GPs were generally low with only six influenza A detections reported this winter – a very different picture from the increased activity noted this time last year. However during the first week of January consultation rates significantly increased with a greater proportion of clinical influenza cases reported and this may mark the start of a period of increased influenza activity. Further information on influenza surveillance is available in the weekly influenza bulletin available from the CDSC website (http://www.cdscni.org.uk/).

Reference is also made to the annual recruitment of fellows for the European Programme for Intervention Epidemiology Training otherwise known as EPIET. The aim of EPIET is to train a European cohort of field epidemiologists by providing training and practical experience at the national centres for surveillance and control of communicable diseases in the European Union.

Happy New Year

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Regional Epidemiologist

Health Protection Agency

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Laboratory Reports

NOROVIRUS

Norovirus is the most common cause of infectious gastroenteritis. While it is also called “winter vomiting disease” it occurs throughout the year. The incubation period is typically short (24-48 hours) and it causes vomiting, which can be sudden and projectile, diarrhoea and fever. Most people make a full recovery in 1-2 days. The very young and the elderly may get dehydrated and require hospital admission. All ages are vulnerable to norovirus infection and infection does not confer any significant immunity.

However, because of its low infective dose, it can spread rapidly in closed communities such as households, hotels, cruise ships, schools and healthcare facilities. Usually it is spread from person to person, but it can also be spread through the consumption of contaminated food or water or by contact with contaminated surfaces or objects.

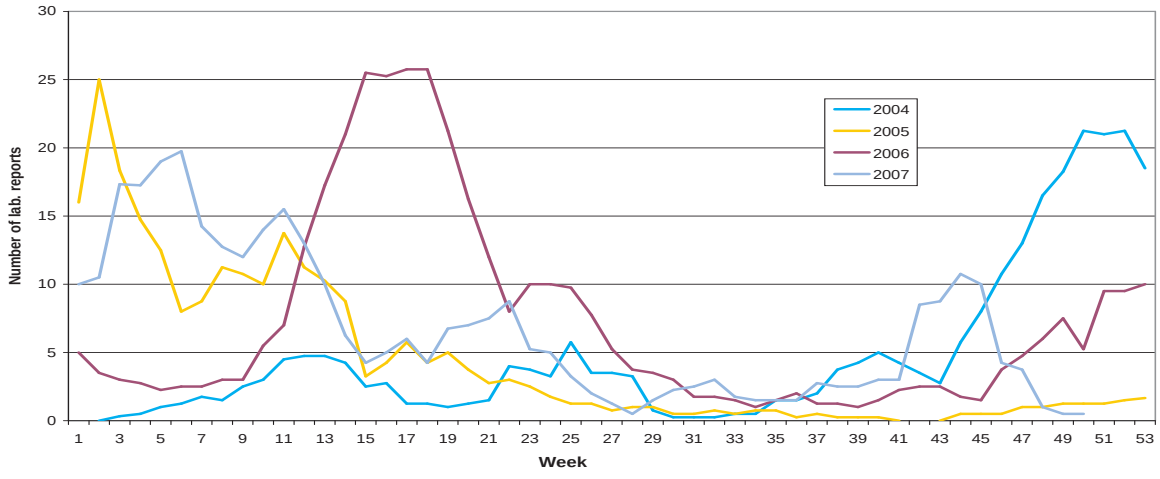
Norovirus outbreaks are difficult to control because it spreads so readily from person to person and its survival in the environment. Over 50% of those susceptible may develop infection. Control measures include: closing hospital wards to admission; disinfecting contaminated areas; and thorough and regular hand washing. Those infected should be isolated until they have been symptom free for 48 hours.

As it is of short duration those affected would generally not contact their GP and, even then, it would be unusual for the GP to request stool samples to confirm the diagnosis as the result is unlikely to influence patient management. Therefore positive reports of norovirus generally arise from patients in hospital. In a hospital or ward outbreak it would not normally be necessary to test all patients with similar symptoms of infectious gastroenteritis once norovirus had been confirmed on the ward. Therefore published reports of norovirus detections considerably underestimate the incidence of this infection.

In Northern Ireland the annual number of norovirus detections have been increasing. This is mainly due to increased case ascertainment through the introduction in 2000 of PCR molecular testing methodologies which have replaced electron microscopy as the main method of diagnosis. In 2006 there were 385 norovirus reports from the Regional Virus Laboratory and this compares with a provisional total of 319 to week 50 in 2007.

Figure 1 compares weekly reports of norovirus (by specimen date) from 2004 to 2007 (week 50). The seasonal influence is very apparent.

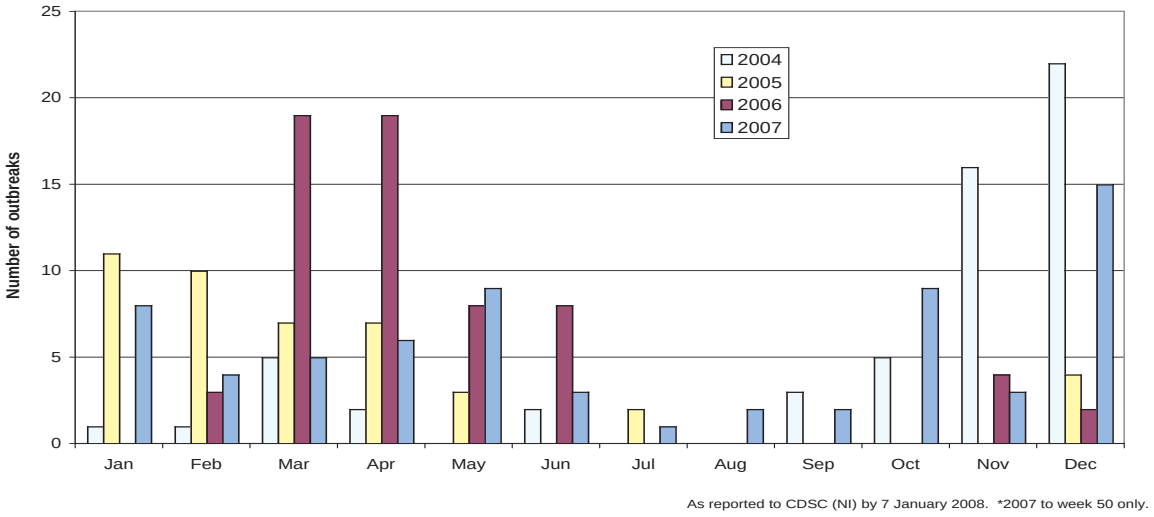
Figure 1: Weekly laboratory reports of Norovirus in Northern Ireland, 2004-2007*, rolling 4 week average



As reported to CDSC (NI) by 7 January 2008. *2007 to week 50

Provisional information for 2007 reveals there were 67 confirmed norovirus outbreaks reported to CDSC (NI) – all within healthcare facilities with the majority in hospitals. These occurred throughout the year with fewer over the June to September period. Figure 2 shows the number of outbreaks as reported to CDSC (NI) by 7 January 2007.

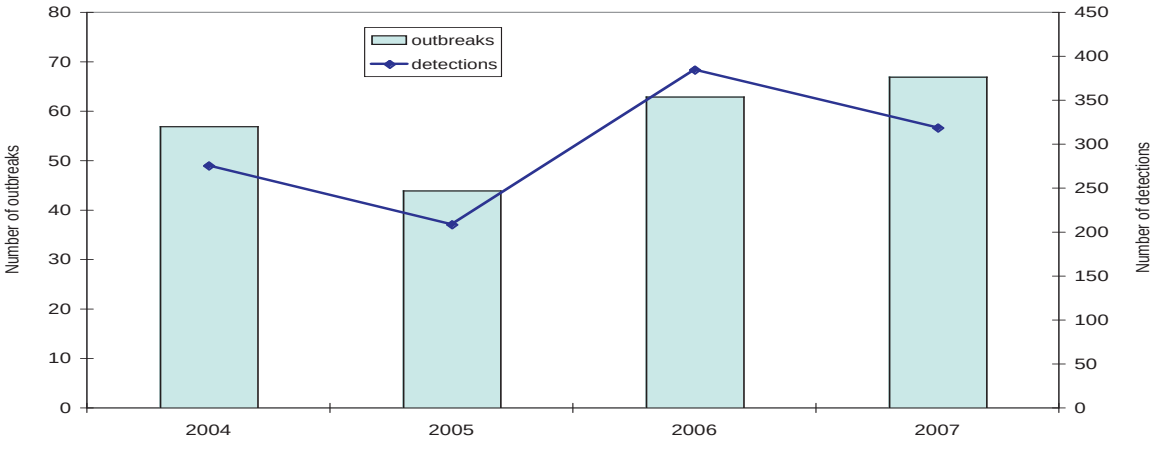
Figure 2: Number of confirmed Norovirus outbreaks reported to CDSC (NI) 2004-2007* by month



As reported to CDSC (NI) by 7 January 2008. *2007 to week 50 only.

In the last 4 years the overall increase in the number of outbreaks of confirmed norovirus has been reflected in an increase in the number of detections of the organism as indicated by Figure 3.

Figure 3: Total number of confirmed outbreaks against total number of detections reported to CDSC (NI) 2004-2007*



As reported to CDSC (NI) by 7 January 2008. *2007 to week 50 only.

References

1. Health Protection Agency Website
http://www.hpa.org.uk/infections/topics_az/norovirus/menu.htm
2. Guidance on the management of norovirus infection in cruise ships
http://www.hpa.org.uk/publications/2007/cruiseliners/cruiseliners.pdf
3. Management of hospital outbreaks of gastroenteritis due to norovirus
http://www.hpa.org.uk/infections/topics_az/norovirus/hospital_norovirus.pdf

Influenza vaccination

Interim uptake data from the seasonal influenza vaccination programme to 30 November is now available.

The uptake rate among those aged 65 years and over was 69.1% a slight increase compared to 67.3% for the same period last year. The uptake rate for those deemed “at risk” and aged under 65 years was 60.8% (64.5% for the comparable period last year).

By 31 November 264,975 individuals had received influenza vaccine from their general practitioner. This excludes those who may have received influenza vaccine from occupational health departments. As there were some late data returns the true uptake for 30 November will be higher.

It is worth noting that the “at risk” population to receive influenza vaccine has increased by 1.1% in the past year (from 397870 to 402716). Therefore to meet the DHSSPS uptake targets of 70% in those aged 65 years and over and 60% in the under 65 years “at risk” groups additional individuals require to be vaccinated.

The next interim uptake results will be for the period ending 31 December and should be available by February.

TRAINING FELLOWSHIPS FOR INTERVENTION EPIDEMIOLOGY IN EUROPE

The European Programme for Intervention Epidemiology Training started in 1995. The programme is funded by the European Centre for Disease Prevention and Control and by various EU member states as well as WHO, Switzerland and Norway. Subject to agreement for another round of funding, the fourteenth cohort of fellows is planned, starting in September 2008. The programme invites applications for up to sixteen fellowships for this 24-month training programme in communicable disease field epidemiology.

Fellowships

Applicants for the fellowship of the 2008 cohort must be nationals of a EU member country, Iceland, Liechtenstein or Norway and should have experience in public health, a keen interest in fieldwork and be pursuing a career involving public health infectious disease epidemiology. They should have a good knowledge of English and of at least one other official language of the European Union, and be prepared to live abroad for a period of 24 months.

Aim of the Training

The aim of the training is to enable the fellow to assume service responsibilities in communicable disease epidemiology. The in-service training will focus on outbreak investigations, disease surveillance, applied research, and communications with decision makers, the media, the public and the scientific community.

Fellows will attend a three-week intensive introductory course and then be located in a host institute in one of the 25 participating European countries, Switzerland and Norway. Further training modules are organised during the two-year programme, normally in one of the participating national institutes with responsibility for communicable disease surveillance.

Detailed information about the EPIET programme can be obtained from the EPIET programme website at www.epiet.org. Vacancy notice for application can be found on the European Centre for Disease Prevention and Control at http://www.ecdc.europa.eu/Recruitment.html **Applications must be submitted electronically by 10 February 2008 24:00 CET** to ecdc.epietfellow@ecdc.europa.eu.

Foodborne and gastrointestinal tract infections: Laboratory reports, weeks 45-48

	Number of Reports received		Cumulative total	
	07/45-48	06/45-48	07/01-48	06/01-48
Campylobacter	65	73	843	884
C. difficile Toxin	124	95	1250	1391
C. perfringens	4	1	19	25
E. coli O 157	5	4	56	48
Salmonella total	10	9	325	391
S. enteritidis (PT 4)	2 (0)	1 (0)	45 (3)	91 (13)
S. typhimurium (DT 104)	4 (0)	4 (2)	37 (0)	43 (10)
Salmonella other	4	4	243	257
Shigella	3	0	18	9
Yersinia sp.	0	0	2	3
Cryptosporidium	3	8	85	132
Giardia	1	0	5	15
Adenovirus (faeces)	14	14	130	193
Enterovirus (faeces)	2	2	35	13
Rotavirus	2	5	359	425
Norovirus	4	24	319	347

Salmonella (other than *enteritidis* or *typhimurium*):

S. spp	2
S. unnamed	2

Comment:

The following were associated with foreign travel:

Female, age 46 years, *Shigella Sonnei*, Malawi; female, age 70 years, *Campylobacter sp*, Crete; female, age 37 years, *Campylobacter*, Mauritius; female, age 37 years, *Salmonella Typhimurium*, Mauritius.

Respiratory tract infections: Laboratory reports, weeks 37-48

	Number of Reports received			Cumulative Total	
	07/37-40	07/41-44	07/45-48	07/01-48	06/01-48
Coxiella burnetii	0	0	0	4	13
Mycoplasma pneumoniae	0	0	0	5	58
Respiratory *Chlamydia*	1	0	0	13	53
Adenovirus (excluding faeces)	0	2	9	35	53
RSV	2	16	36	233	550

Monthly surveillance figures for Creutzfeldt-Jakob Disease

Referrals of Suspect CJD		Deaths of Definite and Probable CJD						
Year	Referrals	Year	Sporadic	Iatrogenic	Familial	GSS	vCJD	Total Deaths
1990	[53]	1990	28	5	0	0	-	**33**
1991	75	1991	32	1	3	0	-	**36**
1992	96	1992	45	2	5	1	-	**53**
1993	78	1993	37	4	3	2	-	**46**
1994	118	1994	53	1	4	3	-	**61**
1995	87	1995	35	4	2	3	3	**47**
1996	133	1996	40	4	2	4	10	**60**
1997	162	1997	60	6	4	1	10	**81**
1998	154	1998	63	3	3	2	18	**89**
1999	170	1999	62	6	2	0	15	**85**
2000	178	2000	50	1	2	1	28	**82**
2001	179	2001	58	4	4	2	20	**88**
2002	163	2002	72	0	4	1	17	**94**
2003	162	2003	79	5	4	2	18	**108**
2004	114	2004	50	2	4	1	9	**66**
2005	124	2005	66	4	8	5	5	**88**
2006	110	2006	64	1	6	3	5	**79**
2007*	100	2007*	44	2	4	1	4	**55**
Total Referrals	**2256**	**Total Deaths**	**938**	**55**	**64**	**32**	**162**	**1251**

* Definate and probable CJD cases in the UK:
As at 30 November 2007

Summary of vCJD cases

Deaths

Deaths from definite vCJD (confirmed):	114
Deaths from probable vCJD (without neuropathological confirmation):	47
Deaths from probable vCJD (neuropathological confirmation pending):	1
Number of deaths from definite or probable vCJD (as above):	162

Alive

Number of definite/probable vCJD cases still alive:	4
Total number of definite or probable vCJD (dead and alive):	**166**

Contributing Laboratories

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Antrim

Belfast City

Causeway

Craigavon

Greenpark

Mater

Regional Virus

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Tyrone County

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Comments and contributions are welcomed and should be sent to the Editor.

Monthly numbers are provisional and should not be used to indicate trends.