



Enhanced Surveillance of Influenza in Northern Ireland (ESINI)

Enhanced surveillance of influenza in Northern Ireland (ESINI) for the 2003-04 season commenced on 27th September 2003 (Week 40). Surveillance arrangements for this winter have been described previously (Monthly Report Vol 12 No 9).

Clinical Data

From the beginning of the current season to the end of Week 52 (26th December 2003), a total of 153 cases of clinical 'flu and 1336 cases of 'flu-like illness have been reported under the ESINI scheme. Between Weeks 40 and 45, GP consultation rates for 'flu-like illness rose sharply and, in Week 45, the combined GP consultation rate for 'flu and 'flu-like illness was higher than that recorded for any week since the ESINI scheme commenced (in October 2000). However, since Week 46, consultation rates have been falling once again. Similar patterns of weekly GP consultation data have also been seen in Scotland and, to a lesser extent, in both England and the Republic of Ireland. Co-Op call rates in NI between Week 40 and Week 47 were also consistently higher than those recorded during previous years. However, between Week 48 and Week 52, call rates returned to the level expected for the time of year

Virological Data

Based on historical data, influenza activity commenced some three months earlier than would, normally, be expected. Between Week 40 and Week 52, there were a total of 102 laboratory confirmed cases of influenza in NI. Thirty-seven originated from swabs submitted by sentinel GPs and 65 originated from hospitalised patients, of which 29 were from children under 1 year of age. All were identified as influenza A H3 and one was further characterised as influenza A/Fujian 411/2002 (H3N2)-like. The majority of those affected were babies, young children and young adults. As there has been very little 'flu in circulation over the past few years the opportunity for development of immunity has been restricted. Illness in these age groups was, therefore, not unexpected. Once influenza A was known to be circulating within the community, DHSSPSNI issued guidelines to clinicians on the use of oseltamivir.

In contrast to other parts of the UK and the Republic of Ireland, no deaths attributable to influenza

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have been recorded in NI since the beginning of the current season.

Although influenza A has been in circulation throughout the UK and Republic of Ireland for a number of weeks and cases of influenza B are now emerging, the total number of laboratory confirmed cases still remains low and GP consultation rates continue to fall. However, it is still too early to predict what the overall impact of influenza infection will be as the winter season progresses.

Weekly Influenza Bulletin

An Influenza Bulletin is issued each week during the 2003-04 season (Week 40 of 2003 to Week 20 of 2004). This is circulated to the Department of Health, Social Services and Public Safety, Boards and Trusts, participating GP practices and Co-Operatives, and other national influenza

surveillance centres. If you wish to be added to the mailing list for this bulletin, please contact Dr Hilary Kennedy on 028 90 263765 or by email hilary.kennedy@hpa.org.uk. Alternatively, current bulletins are posted on the website <http://>

www.cdscni.org.uk and may be downloaded directly from there.

In April 2002, Northern Ireland was admitted to the European Influenza Surveillance Scheme (EISS) as an associate member. At the last meeting of the Steering Committee,

held in September 2003, it was agreed that Northern Ireland should now be accorded full membership of EISS. Data, on the incidence of influenza throughout Europe, may be accessed via the EISS website <http://www.eiss.org>.

Figure 1: Combined consultation rates for influenza and 'flu-like illness in General Practice, Northern Ireland

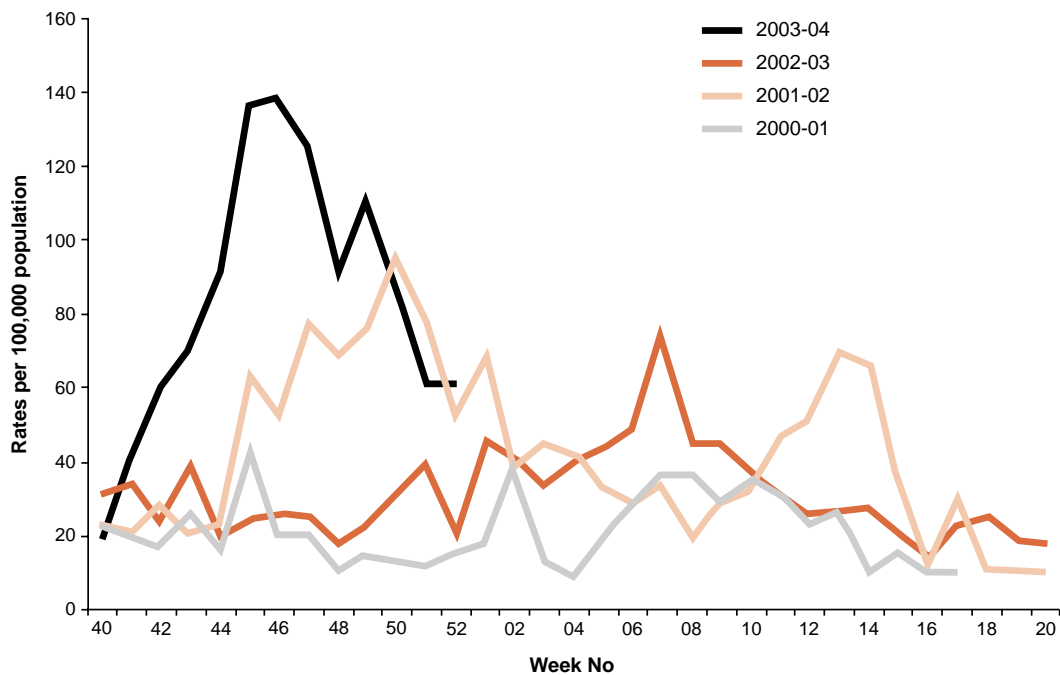
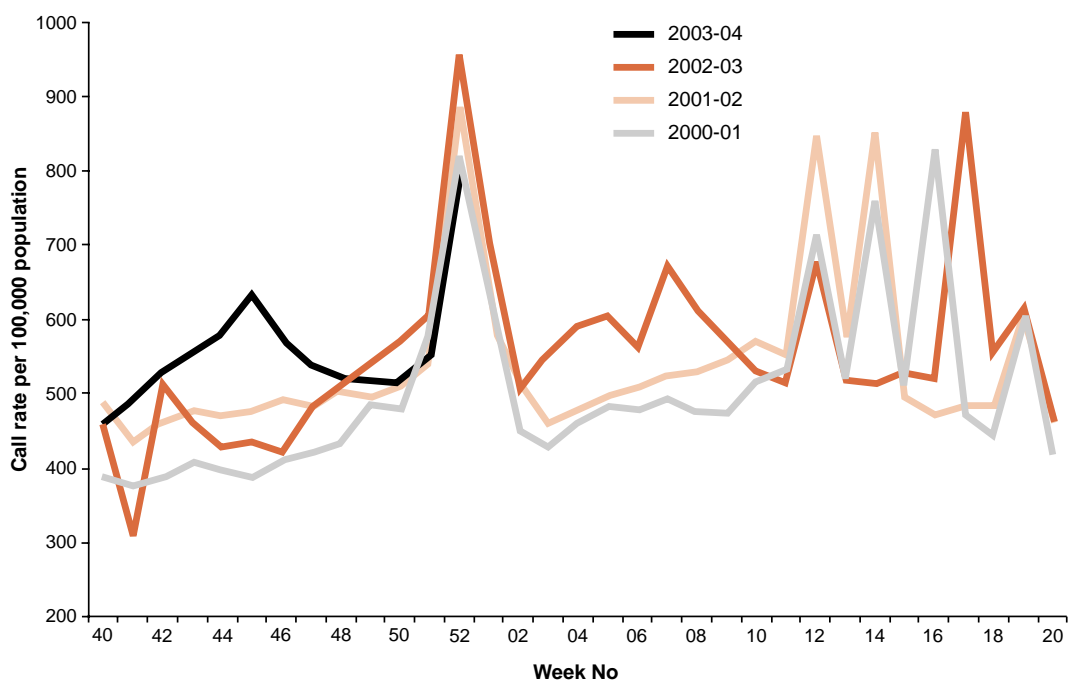


Figure 2: Total call rate for GP Co-Operatives, Northern Ireland



Influenza Vaccination Programme

winter 2003/04

The Department of Health, Social Services and Public Safety (DHSSPS) set a regional target of 70% influenza immunisation uptake among the over 65 population for winter 2003/04. By 30 November 2003, 163,812 individuals aged 65 years or more had received influenza immunisation. This is equivalent to an overall Northern Ireland uptake rate of 70.4% and is higher than that recorded for the equivalent time period of 2002 (69.5%), despite a 0.4% increase in the numbers of those aged over 65 between 2002 and 2003. Uptake rates by Health and Social Services Board ranged from 69.1% to 73.7%.

In addition to the immunisation of those aged over 65 years, a target of 60% influenza immunisation uptake among the under 65 “at risk” population was also set by DHSSPS for winter 2003/04. It is estimated that approximately 10% of the under 65 population fall into the “at risk” group. This group includes individuals with heart, renal or lung disease, diabetes, those who are immuno-suppressed through disease or chemotherapy and those living in residential homes. By 30 November 2003,

93,456 “at risk” individuals under 65 years of age had received influenza immunisation. The overall uptake rate in this group at 30 November 2003 was 61.3%, representing a considerable rise in the uptake recorded for the same period of 2002 (53.8%). This rise may be attributable, at least in part, to the circulation of influenza within the community much earlier this winter than would, normally, be expected. Uptake rates by Health and Social Services Board in “at risk” individuals under 65

years of age ranged from 59.4 % to 65.7%.

The total number of individuals receiving influenza immunisation by 30 November was 257,268 (Table 1). By this date, uptake targets in both the over 65 and under 65 “at risk” groups had been met, and exceeded. The total above also excludes those not in either of the above risk groups, who may have received influenza immunisation as a result of workplace initiatives.

Final influenza immunisation uptake figures will be collected at the end of the 2003/04 campaign and a detailed report, including clinical risk profile of vaccinated individuals, will be prepared. CDSC(NI) appreciates the efforts of all those involved in the timely supply of vaccination uptake data from each Health and Social Service Board.

Table 1: Influenza Vaccination Coverage Data to November 2003, Northern Ireland

Board	EHSSB	NHSSB	SHSSB	WHSSB	NI TOTAL
No of practices	147	81	76	59	363
No of Practices which made return by specified date	136	81	72	59	348
No of 65+ individuals vaccinated by 30 Nov	69,745	40,570	28,869	24,628	163,812
Registered 65+ population	100,872	56,979	41,473	33,430	232,754
Vaccination uptake rate among 65+ population	69.1%	71.2%	69.6%	73.7%	70.4%
Presumed “at risk” population under 65 (10% of registered population under 65 years)	61,277	33,773	30,152	27,340	152,542
Total number of “at risk” individuals under 65 vaccinated by 30 Nov	36,408	22,187	17,263	17,598	93,456
Vaccination uptake rate among “at risk” under 65 population	59.4%	65.7%	57.3%	64.4%	61.3%
Total number of patients (all ages) who have received influenza vaccine by 30 Nov	106,153	62,757	46,132	42,226	257,268

Enhanced Surveillance of Meningococcal Disease (ESMD)

During the month of December 2003, six cases of invasive meningococcal disease were notified through the ESMD scheme. To date, three of these have been confirmed as serogroup B infection. Two of these three cases occurred in adults over 25 years of age. The remaining serogroup B infection, which presented as septicaemia, resulted in the death of a child aged 3 years.

Between 1 January 2003 and 31 December 2003, CDSC (NI) received 110 notifications of invasive meningococcal disease through the enhanced surveillance of meningococcal disease (ESMD) scheme (Table 2), 23 fewer than for

the same period last year. To date, 77 of these 110 notifications (70%) have been laboratory confirmed: 67 (87%) were identified as serogroup B, 3 (4%) as serogroup C and 7 (9%) were ungrouped or identified as other serogroups.

During 2003, there were three deaths due to invasive meningococcal disease. All occurred in children aged 3 years or under who presented with septicaemia and had serogroup B infection.

Meningococcal infection occurs most frequently between the months of November and March. Updates on disease activity will appear in Monthly Reports throughout the meningococcal season.

Table 2: Meningococcal disease by Health and Social Services Board, Northern Ireland, January to December 2003

HSSB	Confirmed			Not confirmed	Total
	B	C	Other and ungrouped		
E	17	0	1	7	25
N	29	0	4	4	37
S	13	2	0	8	23
W	8	1	2	14	25
Total	67	3	7	33	110

New Recommendations for Chickenpox (Varicella) immunisation for health care workers

The Department of Health, Social Services & Public Safety (DHSSPS) has issued new recommendations on varicella (chickenpox) vaccination for health care workers (HCWs). Varicella immunisation is now recommended for non-immune HCWs, working in primary care and hospitals, who have direct patient contact. These include, for example, ambulance personnel, ward domestic staff, catering staff, and receptionists in general practice, as well as medical,

nursing, dental and other professional staff. HCWs who have no previous history of chickenpox or shingles infection will require a blood test to check their immunity. Those who are seronegative (i.e. with no evidence of immunity) will be offered vaccination. The vaccination course involves two doses with an interval of approximately 8 weeks. This policy aims to protect susceptible HCWs and also vulnerable patients from acquiring chickenpox from an infected member of staff. Varicella

vaccine is not currently recommended for routine use in children. Full details of the policy and further information are available at: [http://www.dhsspsni.gov.uk/publications/2004/HSS\(MD\)01_2004.pdf](http://www.dhsspsni.gov.uk/publications/2004/HSS(MD)01_2004.pdf) and in a new "Green Book" chapter <http://www.doh.gov.uk/greenbook/greenbookpdf/ch34varicella.pdf>

(Reference: DHSSPS circular HSS(MD) 01/04)

Confirmed case of SARS in Guangdong Province, China

On 5 January 2004, World Health Organization (WHO) announced a new laboratory-confirmed case of SARS in Guangdong province in China. The case, a male 32-year-old television producer became unwell on 16 December and was subsequently hospitalised. He has now fully recovered. He had no known risk exposures for SARS. All contacts have been traced and reported to be healthy. This was the first reported community acquired confirmed case since the end of the outbreak in 2003. Since SARS was declared eliminated by WHO on July 5 2003, there have been two other isolated confirmed SARS cases in laboratory workers. As of 13 January, epidemiological and laboratory investigations are under way for two other suspect cases of SARS in Guangdong province. WHO considers these to be isolated cases and do not constitute an immediate public health risk. There is no evidence of secondary spread and travel to all areas of China including Guangdong Province is safe. According to the Health Protection Agency, the level of risk in the United Kingdom remains very low and current surveillance remains unchanged.

Further information is available from the WHO website at:
<http://www.wpro.who.int/public/press_release/Press_List.asp> or at:
<http://www.who.int/csr/don/2004_01_08/en/>

(Source: Health Protection Agency and WHO)

Rise in bacterial tracheitis among children in Northern Ireland

During September - November 2003, a significant increase in admissions of bacterial tracheitis to the regional paediatric intensive care unit (PICU) was observed, triggering an epidemiological investigation. The children presented to the accident and emergency (A&E) departments of different hospitals within Northern Ireland with barking cough, breathing difficulty, inspiratory stridor and high fever. They did not respond to the usual nebulised steroid treatment for croup and required emergency hospitalisation in PICU and intubation. Bronchoscopy showed erythema and pus in the trachea. Seventeen children met the case definition over this three month period compared to an expected five or six cases. Different bacteria were cultured and viruses were found in five of seven cases tested, including influenza A (H3) and parainfluenza type 2. Parainfluenza type 2 has not been isolated in Northern Ireland for almost 10 years. All cases have now fully recovered. Tracheitis is a rare bacterial infection of the trachea capable of producing airway obstruction in children and is potentially life threatening. The rise in cases may reflect seasonal increased influenza and respiratory viral activity. Active surveillance of new cases is being developed to monitor the trend over the remaining winter months and assess if further actions are required.

Further information is available at:
<http://www.eurosurveillance.org/ew/2004/040102.asp#1>

(contributed by Dr C Danis, EPIET Fellow, CDSC (NI))

Monthly Surveillance Figures for Creutzfeldt-Jakob Disease

Table 3 shows surveillance figures for definite and probable cases of Creutzfeldt-Jakob disease (CJD) in the United Kingdom up to 1 December 2003. To date in 2003, there have been 134 referrals to the

CJD Surveillance Unit with 16 confirmed as vCJD.

While this version of the table does not show figures for years prior to 1995 (the first year for which there

are vCJD confirmations), a more extended version can be accessed on the Department of Health website (http://www.doh.gov.uk/cjd/cjd_stat.htm).

Table 3: Deaths of definite and probable CJD cases in the UK from 1995 to 1 December 2003

Year	Referrals for investigation	Deaths					vCJD Probable still alive
		Sporadic	Iatrogenic	Familial	GSS*	vCJD confirmed	
1995	87	35	4	2	3	3	-
1996	134	40	4	2	4	10	-
1997	161	60	6	4	1	10	-
1998	154	63	3	4	1	18	-
1999	170	62	6	2	0	15	-
2000	178	49	1	2	1	28	-
2001	179	57	3	3	2	20	-
2002	163	73	0	4	1	17	-
2003	134**	53	4	1	1	16	6
Total	-	-	-	-	-	137	-

*Gerstmann-Straussler-Scheinker syndrome

**As at 1 December 2003

Notification of Infectious Diseases

Responsibility for collation of Notification of Infectious Diseases data (NOIDS) has transferred from Regional Information Branch of the Department of Health, Social Services and Public Safety to CDSC (NI) with effect from 29 December 2003. These statistics will be available by Health Board on our website and will be updated on a weekly basis. (<http://www.cdscni.org.uk/surveillance/noids/default.htm>)

Laboratory Reports

Reports of Positive blood cultures: Laboratory Reports, Weeks 01-48

	2003/01-48	2002/01-48
Gram negative bacteria		
<i>Acinetobacter</i> sp	36	38
<i>Aeromonas</i> sp	2	5
<i>Brucella</i> sp	9	18
<i>Campylobacter</i> sp	2	6
<i>Citrobacter</i> sp	21	12
<i>Enterobacter</i> sp	66	59
<i>Escherichia coli</i>	538	536
<i>Haemophilus influenzae</i>	15	21
<i>Haemophilus</i> sp	3	0
<i>Klebsiella</i> sp	139	131
<i>Legionella</i> sp	1	1
<i>Leptospira</i>	0	1
<i>Neisseria meningitidis</i>	67	64
<i>Neisseria</i> sp	1	2
<i>Proteus</i> sp	82	58
<i>Providencia</i> sp	5	4
<i>Pseudomonas aeruginosa</i>	63	62
<i>Pseudomonas</i> sp	38	40
<i>Salmonella</i> sp	6	4
<i>Serratia</i> sp	67	53
Other gram negative bacteria	29	47
Totals	1190	1162
Gram positive bacteria		
Corynebacterium sp & Diphtheroids	10	22
Staphylococci:		
<i>S. aureus</i>	471	449
coagulase negative	294	331
Streptococci and enterococci:		
group A	26	23
group B	43	37
group C	2	9
group G	7	11
<i>Enterococcus</i> sp	162	169
α- and non-haemolytic	57	95
<i>S. pneumoniae</i>	137	118
Other gram positive bacteria	12	17
Totals	1221	1281
Anaerobic bacteria		
Anaerobic cocci	5	7
<i>Bacteroides</i> sp	50	44
<i>Clostridium</i> sp	27	34
Other anaerobic bacteria	2	5
Totals	84	90
Grand Total	2495	2533

Foodborne and Gastro-intestinal Tract Infections: Laboratory Reports, Weeks 45-48

	Number of Reports received		Cumulative total	
	03/45-48	02/45-48	03/01-48	02/01-48
<i>Campylobacter</i>	33	73	671	773
<i>C. difficile</i> Toxin	94	65	901	865
<i>C. perfringens</i>	1	0	17	18
<i>E. coli</i> O157	1	2	50	26
<i>Salmonella</i> total	5	11	207	231
<i>S. enteritidis</i> (PT 4)	2 (1)	6 (4)	86 (17)	93 (30)
<i>S. typhimurium</i> (DT 104)	0	1	42 (10)	68 (15)
<i>Salmonella</i> other	3	4	79	70
<i>Shigella</i>	0	1	12	9
<i>Cryptosporidium</i>	5	5	136	122
<i>Giardia</i>	0	1	18	12
Adenovirus (faeces)	9	9	129	162
Enterovirus (faeces)	1	4	26	50
Rotavirus	3	4	552	376
SRSV	8	44	113	380

Comment:

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

S. sp 3

The following was associated with foreign travel:

Female, age 42, *Salmonella sp*, Dominican Republic.

To week 48 of 2003, the cumulative

number of laboratory reports of *Campylobacter*, *C. perfringens*, *Salmonella*, Adenovirus, Enterovirus and SRSV all exhibit a reduction compared to the same period of 2002; laboratory reports of *C. difficile* toxin, *E. Coli* O 157, *Shigella*, *Cryptosporidium*, *Giardia* and Rotavirus have risen.

A more detailed analysis will be available in the provisional summary for 2003, which will be published in March.

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Antrim	Musgrave Park
Belfast City	Regional Mycology
Belvoir Park	Regional Virus
Causeway	Royal Victoria
Craigavon	Tyrone County
Daisyhill Ulster	
Erne	

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

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