



# COMMUNICABLE DISEASES

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## **Legionnaires' Disease cluster in Bangor**

Three people (two middle aged males and an elderly female) were admitted to their local hospital with community acquired pneumonia during January. They had become unwell on 29 December 2004, 15 and 16 January 2005 and lived in the North Down and Ards area. All three cases had positive urinary antigen tests indicating *Legionella pneumophila* serogroup 1 infection.

The Eastern Health and Social Services Board established an Incident Control Team (ICT) involving other health and environmental health protection agencies. General practitioners within the Eastern Board were alerted as were hospitals receiving patients from the North Down area. As the potential exposure period straddled the Christmas and New Year holiday period, when visitors from GB or Ireland could have been with friends and relatives in North Down, an alert was issued to all Consultants in Communicable Disease Control in the UK/Ireland.

The ICT established that all three cases had either lived in or visited the same area of Bangor prior to becoming unwell. The Health and Safety Executive (NI) and Environmental Health Officers from the local Council undertook a survey of the surrounding area to identify and inspect premises which had the potential to produce water aerosols. Several sites were identified and appropriate cleaning and disinfection measures were immediately taken. *Legionella* species were subsequently cultured from water samples from one site which was upwind from the area visited by the three patients. There were no reports of unusual respiratory illness among workplaces in the affected area.

This is the second Legionnaires' cluster to have been reported in Northern Ireland in recent years. The last was in March/April 2002 when three patients from the Mallusk area of Glengormley developed Legionnaires' Disease. Legionnaires' Disease is a relatively uncommon cause of community acquired pneumonia in Northern Ireland. In 2004 there were four cases reported (provisional) and all were associated with European travel.

*(contributed by Dr Philip Donaghy, EHSSB on behalf of the ICT)*

#### **References**

**CDSC (NI) Monthly Report May 2002; 11 (3)**

## Mumps Outbreak

The mumps outbreak in Northern Ireland previously reported in earlier *Monthly Reports* <sup>1</sup> is on going with a marked rise in notifications since epidemiological week 46/04.

- 769 notifications were received in 2004 compared with 180 in 2003.
- 316 notifications have been received for the first three weeks of 2005.

As elsewhere in the UK, the outbreak is largely centred on those older teenagers and young adults, aged 14-22 years. This cohort was too old to have received two doses of mumps containing vaccine (MMR) in the routine schedule but young enough to have grown up in a period of low incidence and so have escaped acquiring mumps, and therefore natural immunity, as a child. Seventy five per cent of laboratory confirmed cases in Northern Ireland in 2003-2005 have had either no MMR vaccination or only one MMR vaccination. Six per cent have received two MMR vaccinations, with 19% having unknown vaccination status.

Current DHSSPS immunisation policy is that all children should have 2 doses of MMR. These data illustrate the need to continue to improve MMR vaccination uptake in this age group. A more detailed analysis of the mumps outbreak and the quarterly update on COVER vaccinations statistics will be included in the next routine *Monthly Report*.

<sup>1</sup> CDSC (NI) Monthly Report Weeks 17-14/04;13(5/6)

## Enhanced Surveillance of Influenza in Northern Ireland (ESINI)

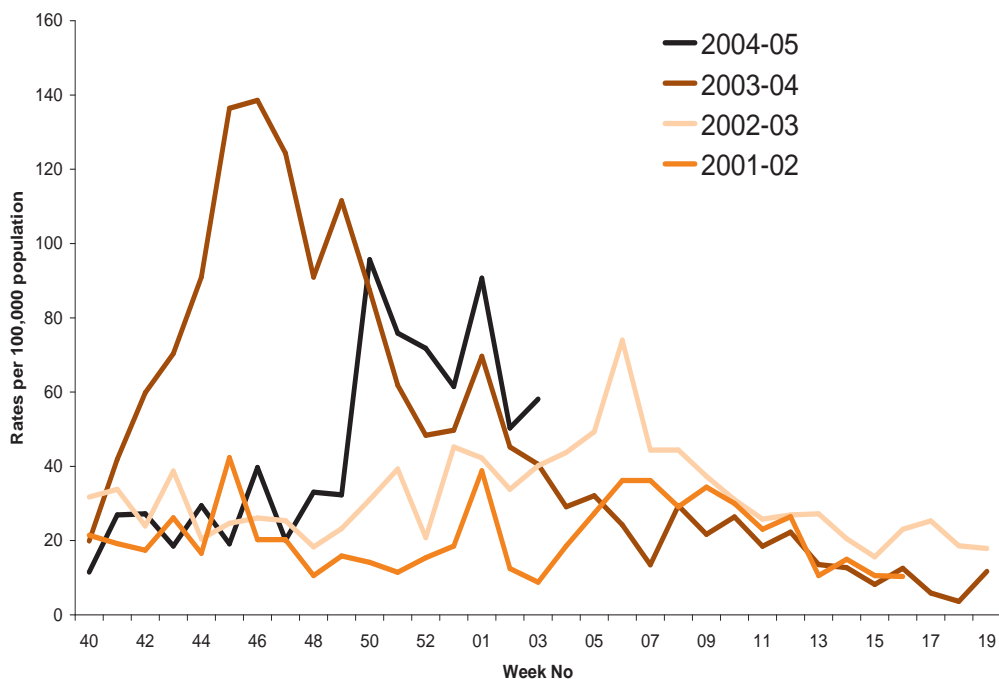
Enhanced surveillance of influenza in Northern Ireland (ESINI) for the 2004-05 season commenced on 25 September 2004 (Week 40). Surveillance arrangements for this winter have been described previously (Monthly Report Vol 13 No 9).

### Clinical Data

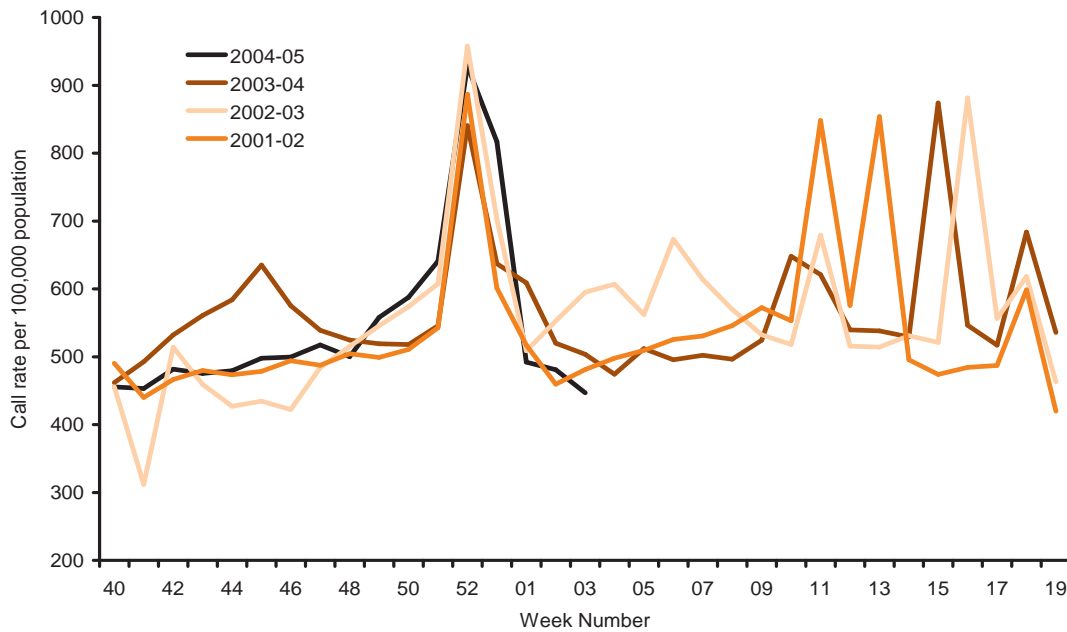
From the beginning of the current season to the end of Week 03 (28 January 2004), a total of 71 cases of clinical 'flu and 968 cases of 'flu-like illness have been reported under the ESINI scheme. These figures are much lower than for the same period of the 2003-04 season, when 169 cases of clinical 'flu and 1545 cases of 'flu-like illness were reported.

Between Week 49 and Week 50 of 2004, the GP combined consultation rate for 'flu and 'flu-like illness rose sharply (Figure 1). Overall, however, rates have remained well below those recorded for the 2003-04 season. Co-Op call rates in NI since Week 40 of 2004 have followed a similar pattern to those recorded in previous years (the exception being the early part of the 2003-04 season) - with a sharp rise over the Christmas and New Year holiday period (Figure 2). At present, Co-Op call rates remain as expected for the time of year.

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



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



## **Virological Data**

Influenza activity for the 2004-05 season commenced somewhat earlier (Week 45) than historical data would have predicted. However, this is still one month later than the onset of influenza activity during the 2003-04 season. Between Week 40 of 2004 and Week 03 of 2005, there have been a total of 30 laboratory confirmed cases of influenza in NI. This compares with 107 confirmed cases during the same period last year. Of the 30 positive samples to date this season, 4 originated from patients registered with a sentinel GP. The remaining 26 originated from hospitalised patients, of which 16 were from children aged 1 year and under. All have been identified as influenza A (12 influenza AH3; 5 influenza AH1 and 13 influenza A unsubtype). To date, no cases of influenza B have been confirmed in Northern Ireland.

## **Weekly Influenza Bulletin**

An Influenza Bulletin is issued each week during the 2004-05 season (Week 40 of 2004 to Week 20 of 2005). 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 90263765 or by email [hilary.kennedy@hpa.org.uk](mailto: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.

Northern Ireland is a member of the European Influenza Surveillance Scheme (EISS). Data, on the incidence of influenza throughout Europe, may be accessed via the EISS website <http://www.eiss.org>

## **Influenza Vaccination Programme: winter 2004/05**

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 2004/05. By 30 November 2004, 157,606 individuals aged 65 years or more had received influenza immunisation. This is equivalent to an overall Northern Ireland uptake rate of 66.9%. Uptake rates by Health and Social Services Board ranged from 63.9% to 69.7%. Although this rate is slightly lower than that recorded for the equivalent time period in 2003 (70.4%), it reflects problems with vaccine supply experienced throughout the UK in the first few weeks of the 2004/05 campaign and delayed receipt of vaccination returns from 28 practices. In addition, the number of individuals in NI aged over 65 years has increased by approximately 2,300 (1.4%) in the past 12 months. Despite these early difficulties, it is anticipated that the vaccination target set for this age group will, once again, be exceeded by the end of the campaign.

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 2004/05. 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 immunosuppressed through disease or chemotherapy and those living in residential homes. In addition, the Joint Committee on Vaccination and Immunisation have also recommended that all children who have previously been admitted to hospital for lower respiratory tract disease should be included in the risk groupings for influenza and should be offered vaccination. By 30 November 2004, 89,801 "at risk" individuals under 65 years of age had received influenza immunisation. The overall uptake rate in this group at 30 November 2004 was 57.7%, compared to 61.3% for the same period of 2003. Uptake rates by Health and Social Services Board in "at risk" individuals under 65 years of age ranged from 53.6% to 63.1%.

The total number of individuals receiving influenza immunisation by 30 November was 247,407 (Table 1). By this date, overall uptake targets in both the over 65 and under 65 "at risk" groups were close to being met. This total excludes those not in either of the above risk groups, who may have received influenza immunisation as a result of workplace initiatives.

**Table 1: Influenza Vaccination Coverage Data to end November 2004, Northern Ireland**

Board	EHSSB*	NHSSB	SHSSB*	WHSSB*	NI TOTAL*
No of Practices	148	83	76	59	366
No of Practices which made return by specified date	124	83	74	57	338
No of 65+ individuals vaccinated by 30 Nov 2004	65,017	40,586	28,852	23,151	157,606
Registered 65+ population	101,793	58,228	41,707	34,019	235,747
Vaccination uptake rate among 65+ population	63.9%	69.7%	69.2%	68.1%	66.9%
Presumed "at risk" population under 65 (10% of registered population under 65 years)	61,201	36,662	30,272	27,465	155,600
Total number of "at risk" individuals under 65 vaccinated by 30 Nov 2004	32,817	23,147	17,353	16,484	89,801
Vaccination uptake rate among "at risk" under 65 population	53.6%	63.1%	57.3%	60.0%	57.7%
Total number of patients (all ages) who have received influenza vaccine by 30 Nov 2004	97,834	63,733	46,205	39,635	247,407

**\* Not all GP practices have submitted returns to Board by specified date**

**Uptake rates in both over 65's and under 65's "at risk" are calculated using the *total* number of registered patients in each group, in each Board, as the denominator. As a consequence, true uptake rates in EHSSB, SHSSB, WHSSB (and NI as a whole) at 30 November 2004 will be higher than figures above suggest**

Final influenza immunisation uptake figures will be collected at the end of the 2004/05 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.

## Enhanced surveillance of meningococcal disease (ESMD)

During the month of December 2004, sixteen cases of invasive meningococcal disease were notified through the ESMD scheme. To date, nine of these have been confirmed as serogroup B infection and one as serogroup C infection. Two further cases are confirmed but are, as yet, ungrouped. Five of the serogroup B infections occurred in children aged 2 years and under; two presented with meningitis and three with septicaemia. Three further serogroup B infections occurred in children under 10 years of age. The remaining serogroup B infection was identified in an elderly adult who presented with pneumonia and, subsequently died.

Between 1 January 2004 and 31 December 2004, CDSC (NI) received 110 notifications of invasive meningococcal disease through the enhanced surveillance of meningococcal disease (ESMD) scheme (Table 2), only 6 fewer than for the same period last year. To date, 70 of these 110 notifications (64%) have been laboratory confirmed: 57 (81%) were identified as serogroup B, 2 (3%) as serogroup C and 11 (16%) were ungrouped or identified as other serogroups. During 2004, five deaths were attributed to invasive meningococcal disease. Four occurred in children under 2 years of age. Two presented with septicaemia and two presented with both meningitis and septicaemia. Serogroup B infection was confirmed in three of these four children. The remaining death, in an elderly adult, is described above.

**Table 2: Meningococcal disease by Health and Social Services Board, Northern Ireland, January to December 2004**

HSSB	Confirmed			Not Confirmed	Total
	B	C	Other and Ungrouped		
E	18	1	4	16	39
N	15	0	3	4	22
S	12	0	1	6	19
W	12	1	3	14	30
Total	57	2	11	40	110

## 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 10 January 2005. In 2003, there were 162 referrals to the CJD Surveillance Unit with 18 confirmed as vCJD. To date in 2004 there have been 112 referrals to the unit with nine 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 (most easily at the Department's press release page <http://www.dh.gov.uk/PublicationsAndStatistics/PressReleases/fs/en>).

**Table 3: Definite and probable CJD cases in the UK from 1995 to 10 January 2005**

Year	Referrals for investigation	Deaths					vCJD confirmed	vCJD Probable still alive
		Sporadic	Iatrogenic	Familial	GSS*			
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	3	2	18	-	
1999	170	62	6	2	0	15	-	
2000	178	50	1	2	1	28	-	
2001	179	58	4	3	2	20	-	
2002	163	72	0	4	1	17	-	
2003	162	76	5	4	2	18	-	
2004	112	46	1	2	1	9	5	
<b>Total</b>						148		

\*Gerstmann-Straussler-Scheinker syndrome

**Five Nations Health Protection Conference**  
**Tuesday 10 May – Wednesday 11 May 2005**  
**HPA, Centre for Infections, Colindale, London**

Due to many conferences in the autumn the timing of the Five Nations Health Protection Conference has changed from November to May. For this year only the conference will be held over two days in Colindale. In 2006 it will be back to the customary three days and will be held in Wales in mid May.

Abstracts are invited for papers and posters on the following themes and should be submitted by **4 March**, using the template shown on the conference websites: [www.5nations.com](http://www.5nations.com) or [www.5nations.org.uk](http://www.5nations.org.uk)

Abstracts should be sent by email to [vivienne.fitch@hpa.org.uk](mailto:vivienne.fitch@hpa.org.uk)

- Lookback for incidents of bloodborne viruses
- Non-communicable disease and environmental health
- New and emerging infections
- Late breakers/hot topics
- Outbreaks of communicable disease – the essentials of health protection
- Infection control in the community

## Foodborne and Gastrointestinal Tract Infections: Laboratory Reports, Weeks 45-48

	Number of Reports received		Cumulative total	
	04/45-48	03/45-48	04/01-48	03/01-48
<i>Campylobacter</i>	48	46	799	703
<i>C. difficile</i> Toxin	86	104	1257	939
<i>C. perfringens</i>	0	1	11	18
<i>E. coli</i> O 157	1	2	18	53
<i>Salmonella</i> total	7	7	452	208
<i>S. enteritidis</i> (PT 4)	1 (1)	2 (2)	143 (93)	91 (18)
<i>S. typhimurium</i> (DT 104)	0	1	89 (16)	42
<i>Salmonella</i> other	6	4	220	75
<i>Shigella</i>	0	0	9	13
<i>Cryptosporidium</i>	9	5	131	137
<i>Giardia</i>	3	0	17	18
Adenovirus (faeces)	20	9	146	128
Enterovirus (faeces)	2	1	14	26
Rotavirus	10	3	455	552
SRSV	65	8	184	113

### Comment

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

<i>S. sp</i>	4
<i>S. newport</i>	1
<i>S. virchow</i>	1

The following was associated with foreign travel:

Female, aged 13 years, *S. enteritidis*, Spain; Male, age 2 years, *Cyclospora cayetanensis*, Bangladesh; Male, age 2 years, *S. virchow*, Bangladesh; Male, age 55 years, *Campylobacter* sp, Australia; Female, age 33 years, *Salmonella* sp, Indonesia.

To week 48 of 2004, the cumulative number of laboratory reports of *C. perfringens*, *E. coli* O 157, *Shigella*, *Cryptosporidium*, *Giardia*, Enterovirus and Rotavirus all exhibit a reduction compared to the same period of 2003; laboratory reports of *Campylobacter*, *C. difficile* toxin, *Salmonella*, Adenovirus and SRSV have risen.

A more detailed analysis will be available in the provisional summary for 2004, which will be published in April.

## **Notifications of Infectious Diseases (NOIDS)**

The Monthly Report no longer includes tables of notifications on a regular basis. The Northern Ireland NOIDS are available from the CDSC (NI) website (<http://www.cdscni.org.uk/surveillance/noids.default.htm>). NOIDS data are updated weekly.

**Contributing Laboratories:**

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

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