



Enhanced Surveillance of Influenza in Northern Ireland (ESINI)

Enhanced surveillance of influenza in Northern Ireland (ESINI) for the 2002-03 season commenced on 28 September 2002 (Week 40). Surveillance arrangements for this winter have been described previously (Monthly Report Vol 11 No 9).

Clinical Data

From Week 40 to Week 48 inclusive, a total of twenty cases of clinical 'flu have been reported under the ESINI scheme. From Week 40 to Week 44, GP consultation rates for 'flu-like illness were slightly higher than those observed for either the 2000-01 or 2001-02 season. However, consultation rates for Week 45 to Week 48 have been lower than those of previous years. Co-Op call rates from Week 40 to Week 48 are largely similar to those of previous years. From Week 42 to Week 45 inclusive a total of eight individuals, having symptoms consistent with complicated 'flu (influenza plus pneumonia), attended The Ulster Hospital A&E Department. These eight cases represent 0.2 % of all A&E attendances recorded during the same time period.

Virological Data

There have been no reports of isolations of influenza virus or detection of influenza viral antigens in Northern Ireland during the 2002-03 season to Week 48 – either through sampling by sentinel GPs or through normal laboratory testing (non-sentinel GPs and hospitalised patients). There has been one positive influenza B serology result recorded to Week 48 (specimen taken in Week 46). However, the Regional Virus Laboratory reports that this result is indicative of recent vaccination or previous infection. All indicators suggest that influenza is not yet circulating in Northern Ireland by the beginning of Week 49 (30th November 2002).

Weekly Influenza Bulletin

An Influenza Bulletin is issued each week during the 2002-03 season (Week 40 of 2002 to Week 20 of 2003). This is circulated to

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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 hkennedy@phls.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. Data, on the incidence of influenza throughout Europe, may be accessed via the EISS website <http://www.eiss.org>.

Figure 1: Consultation rates for influenza and 'flu-like illness (FLI) in General Practice, Northern Ireland

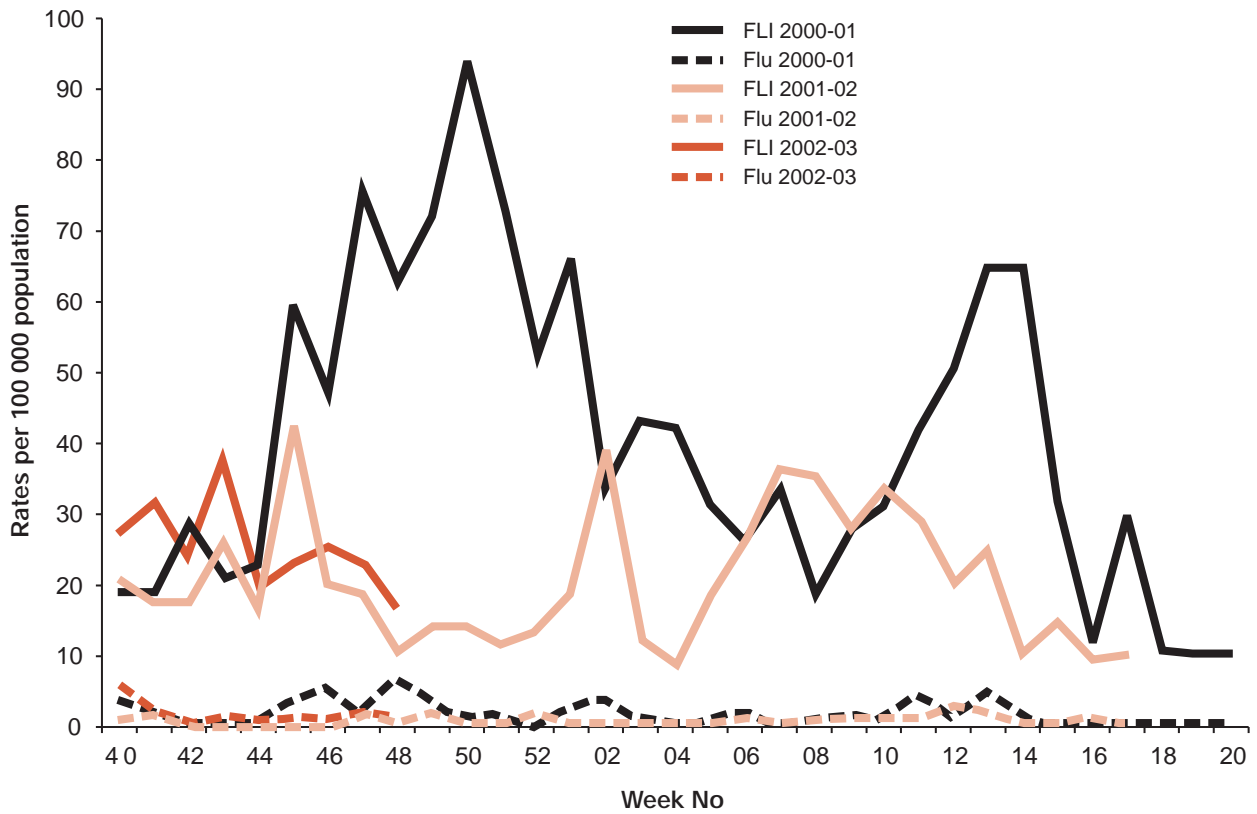
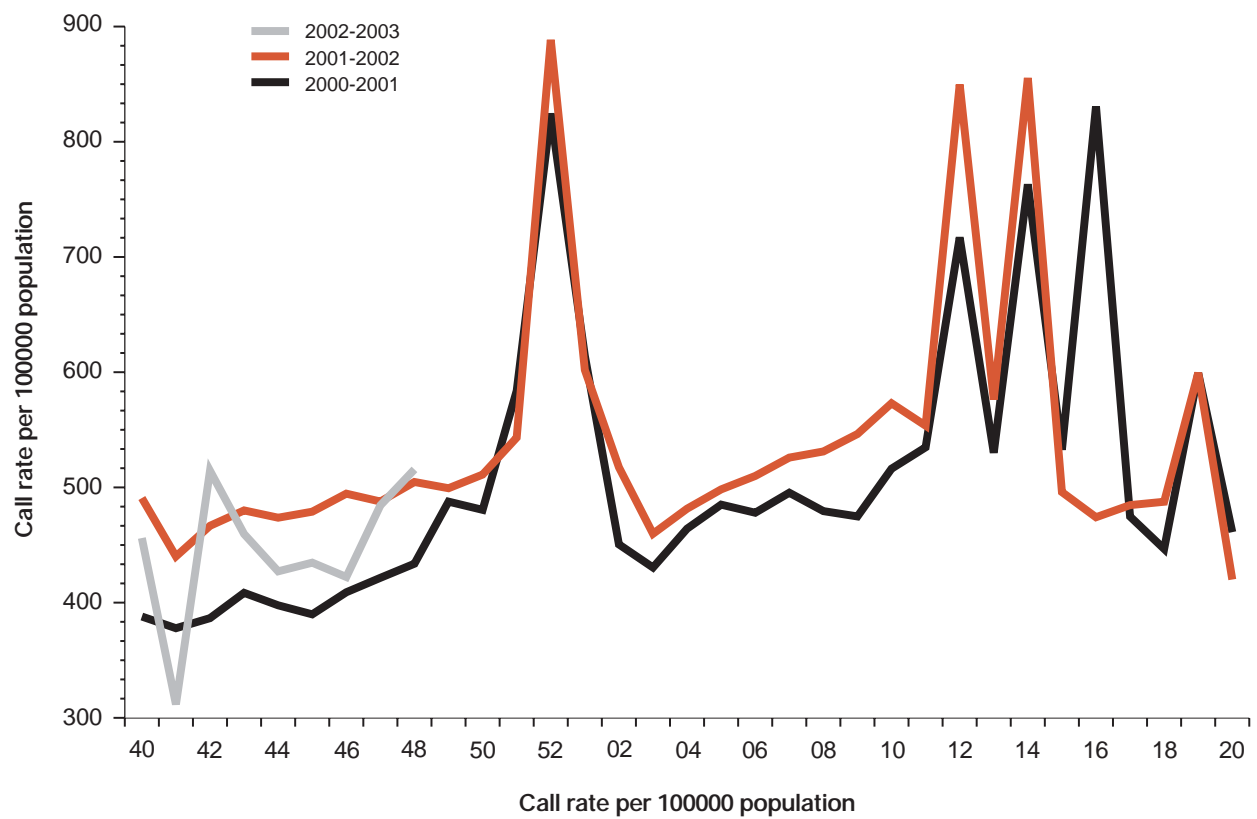


Figure 2: Total call rate for GP Co-Operatives, Northern Ireland



Enhanced Surveillance of Meningococcal Disease (ESMD)

During the month of November, ten cases of invasive meningococcal disease were notified through the ESMD scheme. Four of these have been identified as serogroup B and all occurred in children under 2 years of age. One case of serogroup C infection has been confirmed in a child aged 3 years who has received a full course of Men C vaccine. In addition, this child was previously notified with confirmed serogroup B infection during November 2000. The reason for two episodes of invasive meningococcal disease having occurred in the same patient within two years is, as yet, unclear and is being investigated. The five remaining cases are unconfirmed. One child aged 4 months died during the month of November (see Table 3), from laboratory confirmed serogroup B infection. This child was a household contact of a probable case notified during the month of October. Both of these linked cases were diagnosed clinically as septicaemia.

Between 1 January 2002 and 30 November 2002, CDSC (NI) received 122 notifications of invasive meningococcal disease through the enhanced surveillance of meningococcal disease (ESMD) scheme. Of these, seventy-four (61 %) were laboratory confirmed: 63 (85 %) were identified as serogroup B, 7 (9.5 %) as serogroup C and 4 (5.5 %) were ungrouped or identified as other serogroups.

Three cases of serogroup C infection occurred in children aged under 18 years. Two of these cases have been reported previously (Monthly Report Vol 11 No 7) and the third is described above. Of these 3 cases, 2 have developed serogroup C infection despite having received the Men C vaccine. The remaining 4 cases of serogroup C infection occurred in adults over 24 years of age who, under current

guidelines, do not receive Men C vaccine. To date, 7 deaths have occurred. Four of these have been in children less than 2 years of age. All 4 cases presented with septicaemia and all were confirmed as having serogroup B infection.

These figures are higher than for the same period last year, when 118 cases were notified and 5 deaths occurred. Seventy-one (60 %) cases were laboratory confirmed: 50 (70.5 %) were identified as serogroup B, 8 (11 %) as serogroup C and 13 (18.5 %) were ungrouped or identified as other serogroups. Five of the 8 cases of serogroup C infection occurred in adults over 24 years of age. The remaining 3 cases occurred in individuals aged under 24 years, none of whom had received Men C vaccine.

Table 1: Meningococcal disease by Health and Social Services Board, Northern Ireland, January to November 2002

HSSB	Confirmed			Not confirmed	Total
	B	C	Other and ungrouped		
E	18	1	1	10	30
N	20	2	3	11	36
S	16	4	0	7	27
W	9	0	0	20	29
Total	63	7	4	48	122

Table 2: Meningococcal disease: case and death by age, Northern Ireland, January to November 2002

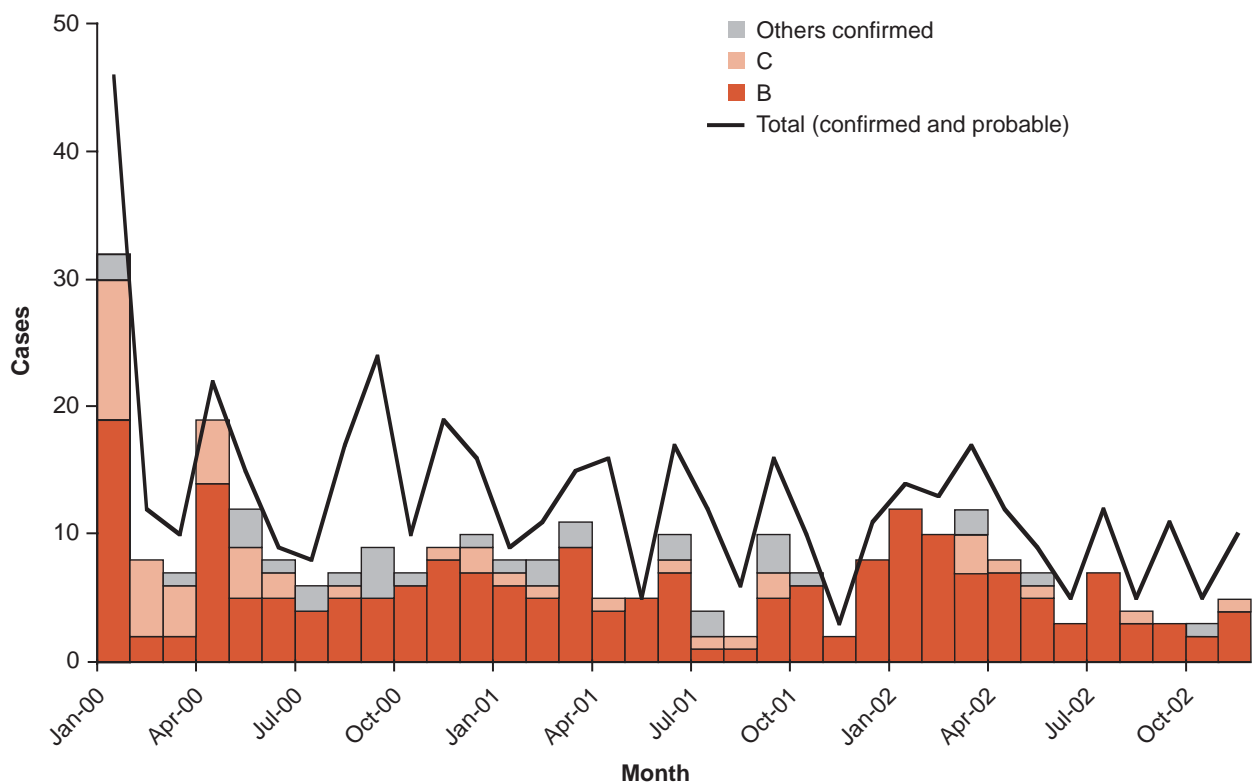
Age group	Confirmed			Not confirmed	Incidence per 100,000 population*	Death
	B	C	Other and ungrouped			
0-2	42	0	2	23	96.1	4
3-4	3	3	0	5	22.5	0
5-14	7	0	1	8	6.1	1
15-17	1	0	0	1	2.5	0
18-24	4	0	1	2	4.4	0
>24	6	4	0	5	1.4	2
?	0	0	0	4		0
Total	63	7	4	48	7.2	7

*age-specific incidence rate

Table 3: Meningococcal disease: case and death by age, Northern Ireland, for November 2002

Age group	Confirmed			Not confirmed	Total	Death
	B	C	Other and ungrouped			
0-2	4	0	0	2	6	1
3-4	0	1	0	1	2	0
5-14	0	0	0	0	0	0
15-17	0	0	0	0	0	0
18-24	0	0	0	0	0	0
>24	0	0	0	2	2	0
?	0	0	0	0	0	0
Total	4	1	0	5	10	1

Figure 3: Monthly cases of meningococcal disease from January 2000 to November 2002



Influenza Vaccination Programme: winter 2002/03

For winter 2002/03 the Department of Health, Social Services and Public Safety (DHSSPS) again set a regional target of 70% influenza immunisation uptake among the over 65 population. In addition, a target of 60% influenza immunisation uptake among the under 65 "at risk" population was also set. 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.

CDSC (NI), in liaison with Influenza Immunisation Co-ordinators, collates influenza immunisation statistics at intervals over the winter and at the conclusion of the winter influenza immunisation programme produces an annual report containing details of age and clinical risk profile of patients receiving immunisation.

By 31 October, 130,401 individuals aged 65 years or more had received influenza immunisation. Uptake rates

by Health and Social Services Board ranged from 53.6% to 58.9%. The overall Northern Ireland uptake rate for the over 65 population at 31 October 2002 was 56.3%. This figure is almost identical to that recorded for the same period last year (56.4%). The overall uptake rate for the under 65 "at risk" population at 31 October 2002 was 39.7% and uptake rates by Health and Social Services Board ranged from 38.6% to 42.5%. The total number of "at

risk" patients receiving influenza immunisation by 31 October was 191,668. This total excludes those not in the above risk groups who may have received influenza immunisation as a result of workplace initiatives.

Further influenza immunisation uptake rates will be collected on 30 November.

Once again, this is a very encouraging start to the annual winter influenza immunisation programme and reflects extensive planning involving the DHSSPS, Boards, Trusts and Primary Care.

Table 4: Vaccination coverage data to October 2002, Northern Ireland

Board	EHSSB	NHSSB	SHSSB	WHSSB	NI TOTAL
No of Practices	147	80	76	58	361
No of Practices which made return by specified date	144	80	75	57	356
No of 65+ individuals vaccinated by 31 Oct	56,531	30,653	23,888	19,329	130,401
Registered 65+ population	100,877	57,210	40,833	32,789	231,709
Vaccination uptake rate among 65+ population	56.0%	53.6%	58.5%	58.9%	56.3%
Presumed "at risk" population under 65 (10% of registered population under 65 years)	61,391	35,902	29,905	27,241	154,439
Total number of "at risk" individuals under 65 vaccinated by 31 Oct	23,668	14,456	11,562	11,581	61,267
Vaccination uptake rate among "at risk" under 65 population	38.6%	40.3%	38.7%	42.5%	39.7%
Total number of patients (all ages) who have received influenza vaccine by 31 Oct	80,199	45,109	35,450	30,910	191,668

CoSurv Update

Lewis Shilliday has taken up the appointment of Information Officer (I.T.) in CDSC (NI). He will primarily be responsible for the roll-out and support of CoSurv Laboratory and District modules throughout Northern Ireland.

Lewis has over 10 years experience working in the Eastern Health and Social Services Board (EHSSB) in both information and I.T. posts and

was awarded an MSc in Computing and Information Systems from the University of Ulster in 1999.

There are three laboratories sending information electronically to CDSC (NI), namely, Antrim, Erne and Tyrone County. Craigavon laboratory is in the final stages of completing the installation and we appreciate the work and assistance of staff in all labs for the CoSurv rollout. Discussions are currently

ongoing with the Ulster laboratory to confirm coding issues and timescales for the installation sometime in the New Year.

The District module has been installed in the Northern Health and Social Services Board (NHSSB) and training has been given to allow staff to receive electronic reports from Antrim lab and forward them to CDSC (NI). Initial work has started on installing the district module in EHSSB and it is anticipated that this work will be completed in early January.

Laboratory Reports

Foodborne and Gastro-intestinal Tract Infections: Laboratory Reports, Weeks 41-44

NB there has been a delay in receipt of a number of laboratory reports pertaining to this reporting period from one major laboratory. Cumulative figures may, therefore, increase by date of next publication.

Comment:

Laboratory reports of *Clostridium difficile* toxin, *Clostridium perfringens* and Adenovirus continue to show an increase of 15%, 50% and 21% respectively compared with the same period last year. Cumulative reports of SRSV have increased by 337% bringing the cumulative total in week 44 to 367. Ninety-seven cases (26%) have been due to outbreaks in hospitals and residential homes.

Reports of *Campylobacter*, *Escherichia Coli* O 157 and *Shigella* have declined by 19%, 56% and 43% respectively compared to the same period last year.

Cumulative reports of *Salmonella* maintain a decline with 208 laboratory confirmed cases reported to week 44 in 2002 – a reduction of 39%. *Salmonella enteritidis* PT4 reports continue to show a major drop of 72% compared to the same period in 2001. The rise in the more unusual phage types of *S. enteritidis* noted in England and

	Number of Reports received		Cumulative total	
	02/41-44	01/41-44	02/01-44	01/01-44
<i>Campylobacter</i>	35	77	633	786
<i>C. difficile</i> Toxin	35	18	313	273
<i>C. perfringens</i>	1	0	18	12
<i>E. coli</i> 0157	2	6	22	50
<i>Salmonella</i> total	16	18	208	342
<i>S. enteritidis</i> (PT 4)	6 (5)	7 (4)	82 (26)	173 (92)
<i>S. typhimurium</i> (DT 104)	4	5 (2)	55 (14)	73 (18)
<i>Salmonella</i> other	6	6	71	96
<i>Shigella</i>	2	6	8	14
<i>Cryptosporidium</i> sp	3	3	109	351
<i>Giardia</i>	1	2	9	14
Adenovirus (faeces)	8	7	141	116
Enterovirus (faeces)	2	2	46	79
Rotavirus	5	5	333	414
SRSV	102	10	367	84

Wales during 2002 (CDR Weekly 2002; 12 (45)) has not been observed in Northern Ireland.

Reports of *Cryptosporidium*, *Giardia*, Enterovirus and Rotavirus also exhibit a reduction compared to the same period last year.

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

S. hartford1
S. virchow1
S. sp4

Reports of positive blood cultures: Laboratory Reports, Weeks 01-40

	2002/01-40	2001/01-40
Gram negative bacteria		
<i>Acinetobacter sp</i>	29	25
<i>Aeromonas sp</i>	5	0
<i>Citrobacter sp</i>	10	12
<i>Enterobacter sp</i>	50	32
<i>Escherichia coli</i>	436	377
<i>Haemophilus influenzae</i>	17	15
<i>Haemophilus sp</i>	0	2
<i>Klebsiella sp</i>	100	86
<i>Neisseria meningitidis</i>	57	47
<i>Neisseria sp</i>	2	1
<i>Proteus sp</i>	61	60
<i>Providencia sp</i>	3	3
<i>Pseudomonas aeruginosa</i>	57	50
<i>Pseudomonas sp</i>	35	42
<i>Salmonella sp</i>	4	6
<i>Serratia sp</i>	39	46
<i>Brucella sp</i>	18	9
Other gram negative bacteria	26	22
Totals	949	835
Gram positive bacteria		
<i>Corynebacterium sp & Diphtheroids</i>	20	11
Staphylococci:		
<i>S. aureus</i>	363	317
coagulase negative	263	311
Streptococci and enterococci:		
group A	19	27
group B	28	37
group C	2	2
group G	2	13
<i>Enterococcus sp</i>	157	125
α - and non-haemolytic	71	68
<i>S. pneumoniae</i>	103	108
Other gram positive bacteria	13	15
Totals	1041	1034
Anaerobic bacteria		
Anaerobic cocci	4	4
<i>Bacteroids sp</i>	35	45
<i>Clostridium sp</i>	32	18
Other anaerobic bacteria	4	1
Totals	75	68
Grand Total	2065	1937

Mycobacteria: Laboratory Reports, Weeks 33-44

	Number of Reports received			Cumulative total	
	02/33-36	02/37-40	02/41-44	02/01-44	01/01-44
<i>M. avium-intracelluar</i> group	0	3	1	18	10
<i>M. bovis</i>	0	0	0	0	2
<i>M. celatum</i>	0	0	0	0	1
<i>M. chelonae</i>	0	0	0	2	2
<i>M. kansasii</i>	0	0	0	2	4
<i>M. malmoense</i>	0	0	0	2	4
<i>M. marinum</i>	0	0	0	0	1
<i>M. tuberculosis</i>	2	2	1	31	34
<i>M. xenopi</i>	0	0	0	0	1
<i>Mycobacterium sp</i>	0	0	0	1	0
Total	2	5	2	56	59

Comment:

There were 4 reports of *M. avium-intracelluar* during weeks 33 – 44 of 2002. Three were isolated from sputum and one was isolated from

blood. Two patients were male aged 54 and 56 years and two were of unknown sex aged 37 and 66 years.

Five cases of *M. tuberculosis* were reported during this twelve-week period. Four were isolated from sputum and one was isolated from pleura. All five cases were male aged between 39 and 82 years.

Hepatitis: Laboratory Reports Weeks 33-44

	Number of Reports received			Cumulative total	
	02/33-36	02/37-40	02/41-44	02/01-44	01/01-44
Hepatitis A	0	1	0	9	4
Hepatitis B	5	6	11	46	27
Hepatitis C	2	3	1	26 (3)	58 (13)

The figure in brackets represents those reports for which an association with intravenous drug use was noted on the laboratory request form

Comment:

Hepatitis A

There was one report of Hepatitis A during weeks 33 – 44 of 2002. The patient was female aged 35 years.

Hepatitis B

Twenty-two cases of Hepatitis B were reported during this twelve-week period. Eight were female aged between 0 – 45 years; eleven were male aged between 23 – 70 years and 3 were of unknown sex aged between 30 to 40 years.

Hepatitis C

There were six reports of Hepatitis C during weeks 33 – 44 of 2002. Four were male aged between 22 and 34 years and two were female aged 26 and 29 years. None were associated with intravenous drug use.

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

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