



## 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 48 (28<sup>th</sup> November 2003), a total of 103 cases of clinical 'flu and 968 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. 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 have also been consistently higher than those recorded during previous years. However, for Week 48, call rates have returned to the level expected for the time of year.

### Virological Data

Based on historical data, influenza activity has commenced some three months earlier than would,

normally, be expected. Between Week 40 and Week 46, there have been a total of 25 laboratory confirmed cases of influenza in NI. Twenty-one originated from swabs submitted by sentinel GPs and four originated from hospitalised patients. All have been identified as influenza A H3 and one has been further characterised as influenza A/Fujian 411/2002 (H3N2)-like. The majority of those affected have been 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 is, therefore, not unexpected. However, in contrast to other parts of the UK and the Republic of Ireland, no deaths attributable to influenza have been recorded in NI during the current season.

Although influenza A has now been in circulation throughout the UK and Republic of Ireland for a number of weeks, the number of laboratory confirmed cases remains low. It is, however, still too early to predict what the overall impact of influenza infection will be during the coming winter period.

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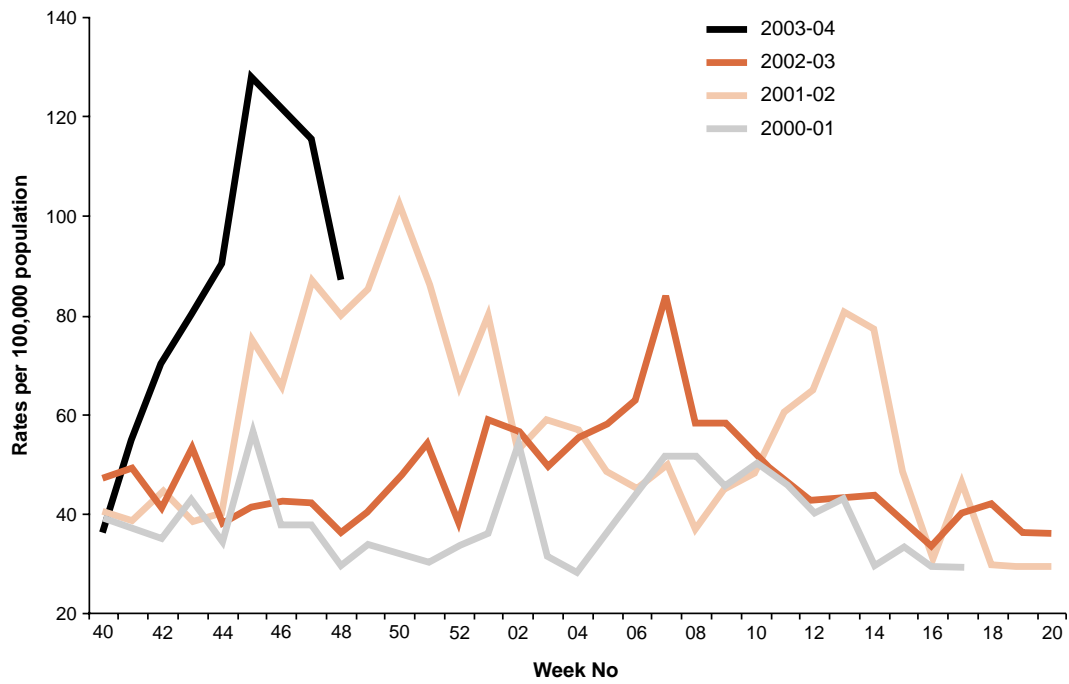
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### Weekly Influenza Bulletin

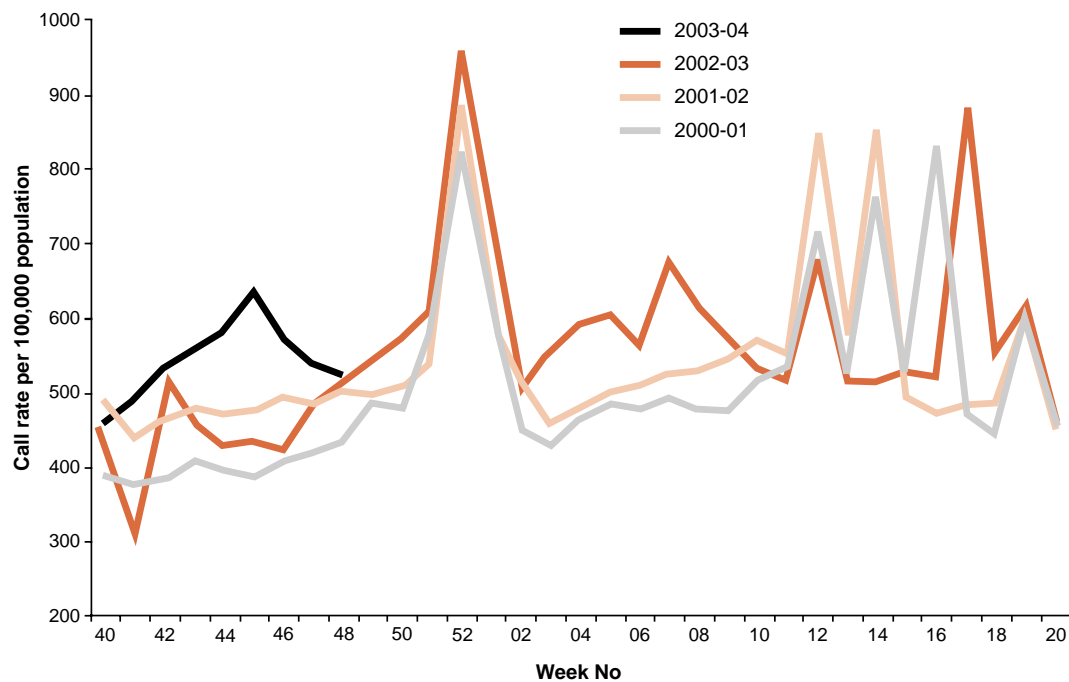
An Influenza Bulletin is issued each week during the 2003-04 season (Week 40 of 2003 to Week 20 of 2004). This is circulated to the Department of Health, Social Services and Public Safety, Boards and Trusts, participating GP practices and Co-Operatives, and other national influenza surveillance centres.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

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: 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

**For winter 2003/04 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. As in winter 2002/03, 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 immuno-suppressed 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 2003, 131,815 individuals aged 65 years or more had received influenza immunisation. Uptake rates by Health and Social Services Board ranged from 55.8% to 59.1%. The overall Northern Ireland uptake rate for the over 65 population at 31 October 2003 was 56.7%, a slight increase on the rate recorded for the same period last year (56.3%). The overall uptake rate for the under 65 “at risk” population at 31 October

2003 was 41.4% and uptake rates by Health and Social Services Board ranged from 39.6% to 43.9%. The total number of “at risk” patients receiving influenza immunisation by 31 October was 194,901. This total excludes those not in the above risk groups who may have received influenza immunisation as a result of workplace initiatives.

Influenza immunisation uptake rates, up to 30 November 2003, are being analysed at present and will be published in due course.

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 1: Vaccination Coverage Data to October 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	75	58	350
No of 65+ individuals vaccinated by 31 Oct	56,280	31,925	24,420	19,190	131,815
Registered 65+ population	100,872	56,978	41,308	33,430	232,588
Vaccination uptake rate among 65+ population	55.8%	56.0%	59.1%	57.4%	56.7%
Presumed “at risk” population under 65 (10% of registered population under 65 years)	61,277	33,544	30,116	27,340	152,277
Total number of “at risk” individuals under 65 vaccinated by 31 Oct	24,284	14,725	12,444	11,633	63,086
Vaccination uptake rate among “at risk” under 65 population	39.6%	43.9%	41.3%	42.5%	41.4%
Total number of patients (all ages) who have received influenza vaccine by 31 Oct	80,564	46,650	36,864	30,823	194,901

# Enhanced Surveillance of Meningococcal Disease (ESMD)

**During the month of November, seven cases of invasive meningococcal disease were notified through the ESMD scheme. Six of these have been identified as serogroup B and four occurred in children aged 2 years and under. The remaining case is, as yet, unconfirmed. There were no deaths from meningococcal disease during November 2003.**

Between 1 January 2003 and 30 November 2003, CDSC (NI) received 100 notifications of invasive meningococcal disease through the enhanced surveillance of meningococcal disease (ESMD) scheme. Of these 100 cases, seventy-three (73%) have been laboratory confirmed: 63 (86%) cases were identified as serogroup B, 3 (4%) as serogroup C and 7 (10%) were ungrouped or identified as other serogroups. Two of the three cases of serogroup C infection occurred in children aged under 18 years, both of whom had received Men C vaccine. The remaining case of serogroup C infection occurred

in an adult over 24 years of age who, under current guidelines, would not receive Men C vaccine. To date, there have been two deaths due to meningococcal disease. Both occurred in children aged 2 years or under who presented with septicaemia and had serogroup B infection.

These figures are 18% lower than for the same period last year, when 122 cases were notified. Seventy-four (61%) cases 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. Seven deaths occurred

between January and November 2002. Four of these were in children less than 2 years of age. All 4 cases presented with septicaemia and all were confirmed as having serogroup B infection.

Meningococcal infection occurs most frequently between the months of November and March. Influenza is circulating within Northern Ireland at present and rates of 'flu-like illness are higher than in previous years. There is, therefore, a possibility that the incidence of meningococcal infection may increase in the coming weeks – particularly as young children have also been the group most affected by influenza during the early part of this winter. 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 November 2003**

HSSB	Confirmed			Not confirmed	Total
	B	C	Other and ungrouped		
E	14	0	1	7	22
N	29	0	4	4	37
S	12	2	0	5	19
W	8	1	2	11	22
Total	63	3	7	27	100

**Table 3: Meningococcal disease: case and death by age, Northern Ireland, January to November 2003**

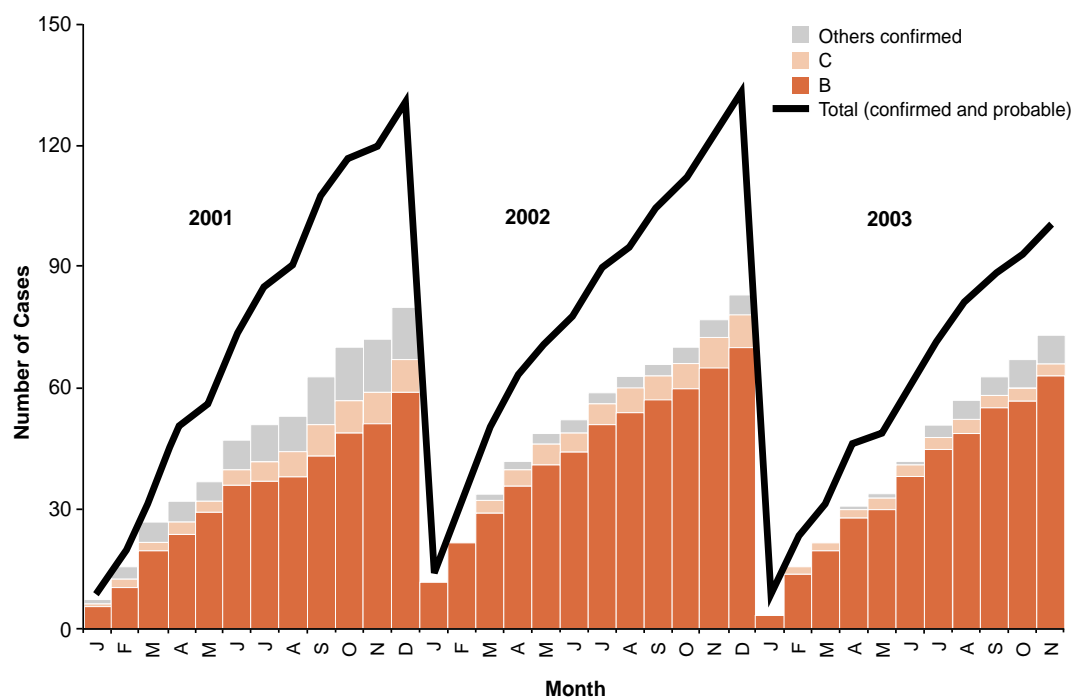
Age group	Confirmed			Not confirmed	Incidence per 100,000 population*	Death
	B	C	Other and ungrouped			
0-2	35	0	4	14	79.2	2
3-4	7	1	0	0	16.7	0
5-14	9	1	1	8	7.4	0
15-17	3	0	0	1	5.0	0
18-24	5	0	0	3	5.0	0
>24	4	1	2	1	0.7	0
?	0	0	0	0		0
Total	63	3	7	27	5.9	2

\*age-specific incidence rate

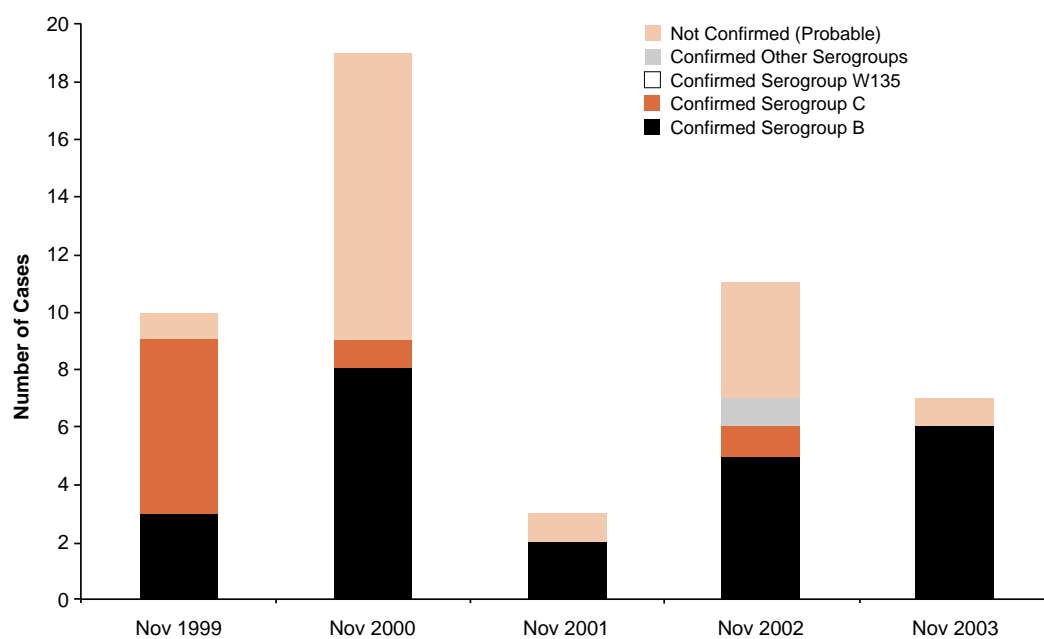
**Table 4: Meningococcal disease: case and death by age, Northern Ireland, for November 2003**

Age group	Confirmed			Not confirmed	Total	Death
	B	C	Other and ungrouped			
0-2	4	0	0	1	5	0
3-4	1	0	0	0	1	0
5-14	1	0	0	0	1	0
15-17	0	0	0	0	0	0
18-24	0	0	0	0	0	0
>24	0	0	0	0	0	0
?	0	0	0	0	0	0
<b>Total</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>7</b>	<b>0</b>

**Figure 3: Cumulative Monthly cases of meningococcal disease from January 2001 to November 2003**



**Figure 4: Cases of Meningococcal Disease in the month of November, 1999-2003**



# Update on *Mycoplasma pneumoniae* Infections

***Mycoplasma pneumoniae* is a Gram negative bacterium that causes acute respiratory illness ranging in severity from mild respiratory illness to severe pneumonia (atypical pneumonia), bronchitis, bronchiolitis and pharyngitis. It is common worldwide and can occur in epidemics at intervals of three to four years which last for about 12 to 15 months. The most recent upsurge of reported cases in Northern Ireland began in autumn 2001 and continued into 2002, in line with the previously observed four-yearly cycle<sup>1</sup>. Activity in this period, as judged by the number of positive laboratory reports, was lower than was observed in the previous increase (see Figure 5).**

Most laboratory reports are of infection occurring in children aged 5 to 14 years, and adults aged 30 to 39 years. Very few reports relate to children under 5 years old or adults aged over 65 years. This is partly because infection is very mild or asymptomatic in very young children. Older children acquire *Mycoplasma pneumoniae* from other children at school and transmit infection to other children and family members. Treatment is normally with antibiotics. The organism is susceptible to a range

of antibiotics including tetracyclines and erythromycin. There is no vaccine available to provide protection from the infection.

Figure 5 shows the pattern that occurred in laboratory reports for this organism over the last few years. A higher number of laboratory reports were received over the winters of 1994/95, 1997/98 and 2001/02, indicating an expected cyclical increase in activity. No significant increase in

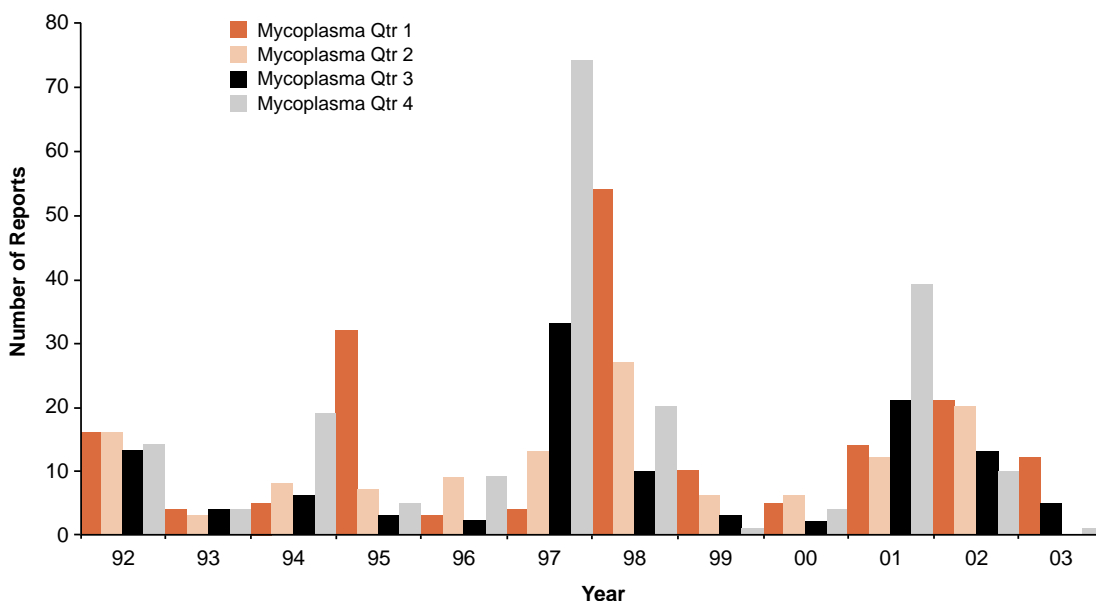
laboratory reports has been seen of the winter of 2002/03, as expected. It is important to bear in mind that these data do not provide an accurate reflection of the disease burden, since the number of laboratory reports will reflect investigative and sampling policy, as well as methods of diagnosis. The epidemic cycle of infection in England and Wales normally follows a similar pattern to that observed in Northern Ireland.

For laboratory reports of *Mycoplasma* infection in England and Wales, please see the following link:

[http://www.hpa.org.uk/infections/topics\\_az/mycoplasma/seasonal/myco\\_0304.htm](http://www.hpa.org.uk/infections/topics_az/mycoplasma/seasonal/myco_0304.htm)

1. CDSC (NI). Communicable Disease Monthly Report, 11, 1, 5-7. Available at [http://www.cdscni.org.uk/publications/MonthlyReports/Volume\\_11\\_2002/No\\_1.pdf](http://www.cdscni.org.uk/publications/MonthlyReports/Volume_11_2002/No_1.pdf)

**Figure 5: Laboratory reports of *Mycoplasma pneumoniae*, by quarter, 1992-2003, Northern Ireland**



Data for 2003 is provisional

# Severe Acute Respiratory Syndrome (SARS)

The Department of Health, Social Services and Public Safety (DHSSPS) hosted a major international conference on SARS on 8 December. Among the guest speakers were: Dr Bernardus Ganter, Regional Adviser, Communicable Disease Surveillance and Response, WHO (Europe) who presented a global update; Prof Angus Nicoll, Communicable Disease Surveillance Centre, London, who described the UK response to SARS; and Dr Michael Gardam, University Health Network, Toronto who outlined the experiences gained during the Toronto outbreak.

The latest version of Northern Ireland's interim SARS contingency plan was launched at the conference. This plan was developed by the NI SARS Taskforce which was established in June 2003 by the Chief Medical Officer. It provides detailed guidance for the Health and Personal Social Services and

describes actions that would be taken at different alert levels should SARS re-emerge. The approach taken is consistent with that being developed elsewhere in the UK in order to ensure a co-ordinated UK response.

Part of SARS preparedness planning included a major desk-top

exercise led by the Emergency Response Division of the Health Protection Agency to test local arrangements.

The interim plan, and appendices including patient pathways and clinical report forms, are available to health professionals on a new section of the DHSSPS website (<http://www.dhsspsni.gov.uk/publichealth/sars.html>). The website also has a section for the general public.

Comments on the interim plan are welcomed and should be forwarded to Dr B Smyth ([brian.smyth@hpa.org.uk](mailto:brian.smyth@hpa.org.uk)).



## Training Fellowships for Intervention Epidemiology in Europe

The European Programme for Intervention Epidemiology Training started in 1995. The programme is funded by the European Commission and by various EU member states as well as WHO and Norway. Subject to agreement for another round of funding, the tenth cohort of fellows is planned, starting in September 2004. The programme invites applications for twelve fellowships for this 24-month training programme in communicable disease field epidemiology.

### Fellowships

Applicants for the 2004 cohort must be nationals of an EU member country, Switzerland 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 EU language, 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 can be obtained from the EPIET programme office at the address below. Letters of application accompanied by curriculum vitae should be submitted by 15 February 2004 to:

The Swedish Institute for Infectious Disease Control  
EPIET Programme Office  
SE-171 82 Solna, Sweden  
Fax: 00 46 8 30 06 26  
Website: [www.epiet.org](http://www.epiet.org)  
Email: [carole.desmoulins@smi.ki.se](mailto:carole.desmoulins@smi.ki.se)

# Laboratory Reports

## Mycobacteria: Laboratory Reports, Weeks 33-44

	Number of Reports received			Cumulative total	
	03/33-36	03/37-40	03/41-44	03/01-44	02/01-44
<i>M. avium-intracellulare</i> group	2	2	0	11	22
<i>M. bovis</i>	0	0	0	2	0
<i>M. celatum</i>	0	0	0	0	0
<i>M. chelonae</i>	0	1	0	3	2
<i>M. kansasii</i>	0	0	0	3	3
<i>M. malmoeense</i>	0	0	0	7	4
<i>M. marinum</i>	0	0	0	0	0
<i>M. tuberculosis</i>	2	3	2	31	41
<i>M. xenopi</i>	0	0	0	0	0
<i>Mycobacterium sp</i>	0	0	0	3	1
<b>Total</b>	<b>4</b>	<b>6</b>	<b>2</b>	<b>60</b>	<b>73</b>

### Comment:

There were four reports of *M. avium-intracellulare* reported during this twelve-week reporting period. Three were isolated from sputum and one was isolated from pus (source unknown). Two cases were male, aged 76 and 81 years

and two cases were female, aged 4 and 74 years.

There was one report of *M. chelonae* isolated from sputum in weeks 33-34. The patient was female aged 81 years.

There were seven cases of

*M. tuberculosis* during this reporting period. Three were isolated from sputum, one from skin/wound, one from urine/kidney, one from pus (source unknown) and one from tissue. Four cases were male, aged 30 to 66 years and three cases were female, aged 33 to 80 years.

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

	Number of Reports received		Cumulative total	
	03/41-44	02/41-44	03/01-44	02/01-44
<i>Campylobacter</i>	37	49	636	700
<i>C. difficile</i> Toxin	73	84	807	805
<i>C. perfringens</i>	0	1	16	18
<i>E. coli</i> O157	0	2	49	24
<i>Salmonella</i> total	12	18	201	219
<i>S. enteritidis</i> (PT 4)	5 (1)	8 (5)	84 (16)	87 (26)
<i>S. typhimurium</i> (DT 104)	2	7	42 (10)	67 (15)
<i>Salmonella</i> other	5	3	75	65
<i>Shigella</i>	1	2	12	8
<i>Cryptosporidium</i>	5	3	131	117
<i>Giardia</i>	3	1	18	11
Adenovirus (faeces)	15	9	120	153
Enterovirus (faeces)	1	2	25	46
Rotavirus	2	8	549	372
SRSV	3	72	105	336

### Comment:

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

*S. souza* ..... 1  
*S. typhi* ..... 1  
 (travel history not available)  
*S. unnamed* ..... 2  
*S. spp* ..... 1

The following was associated with foreign travel:

Male, aged 44 years, *Salmonella enteritidis*, Crete.

Laboratory reports of *Campylobacter*, *C. perfringens*, Adenovirus, Enterovirus and SRSV continue to decline compared with the same period last year.

Cumulative reports of total *Salmonella* maintain a decline of 8%; reports of *S. enteritidis* and *S. typhimurium* have also declined by 3% and 37% respectively.

Reports of *Shigella*, *Cryptosporidium*, *Giardia* and Rotavirus have also exhibited a reduction compared to the same period last year.

Cumulative reports of *E Coli* O 157 continue to increase with 49 confirmed cases reported to week 44 compared to 24 for the same period last year. Sixteen (33%) of these cases were attributable to an outbreak in a nursery school in Antrim.

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

Information contained in this document is compiled from confidential reports and should not be quoted without permission from the Editor. Comments and contributions are welcomed and should be sent to the Editor.