



Influenza and Pneumococcal Vaccination Programmes: Winter 2003/04

Provisional analyses of the winter 2003/04 Influenza and Pneumococcal Vaccination Programmes were completed at the end of March 2004.

Influenza Vaccine

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. Prior to the commencement of the 2003/04 campaign it was once again agreed that, across Northern Ireland, a nominal 10% of the under 65 population should also be considered "at risk". Therefore, DHSSPS also set an additional target of 60% influenza immunisation uptake among the under 65 "at risk" population. These targets remain unchanged from those set for winter 2002/03.

Over two hundred and sixty-seven thousand influenza vaccines were administered to all groups of patients considered 'at risk' - i.e. all those over 65 years of age, all those in long stay residential care, and those with underlying 'high

risk' conditions, namely chronic respiratory, cardiac or renal disease, those patients who are immunosuppressed, and diabetics. This figure represents a 6% increase on the number that were administered during winter 2002/03, and a 10% increase on the number that were administered during winter 2001/02.

At the close of the winter 2003/04 campaign, 354 of the 363 practices in the Province were included in the provisional analysis. Of the total 267 780 vaccines administered, 169 751 (63%) were given to the 65+ age group. The regional target uptake rate of 70% in the over 65 population had already been attained by the end of November (70.4%) and, by the end of the campaign, had been exceeded in each of the four Health Boards (range 71.5% - 74.7%). The overall uptake in the over 65 population for 2003/04 was 72.7%, which is slightly higher than was

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achieved during winter 2002/03 (72.1%). This is despite a 1.1% increase (2574 persons), between October 2002 and October 2003, in the number of individuals aged 65 years or over registered with the Central Services Agency. Over sixty-nine per cent of practices in Northern Ireland achieved an uptake rate of 70% or more in the 65+ age group during 2003/04. This compares to sixty-four percent of practices in 2002/03. Therefore, once again, the decision to target the under 65 "at risk" patients during the current season has not proved detrimental to the ongoing annual vaccination of those aged over 65.

A total of 98 029 vaccines were administered to under 65 "at risk" patients. Of these, 9 995 were administered to patients under 15 years, 90% of whom were children with chronic respiratory disease.

Of the 88 034 patients within the 15-64 years age group who were vaccinated, 45 % were categorised as suffering from chronic respiratory disease, 26% from chronic cardiac disease and 17% from diabetes. The overall uptake in the under 65 “at risk” population for 2003/04 was 63.2% (inter-Board range 61.2% - 67.4%), indicating a large increase in the uptake rate within this group when compared to 2002/03 (55.8%). This may, at least in part, be attributed to public awareness initiatives during the autumn – highlighting the early circulation of influenza virus in the community and the importance of early immunisation.

Pneumococcal Vaccine

During winter 2003/04, pneumococcal vaccine was offered to adults aged 65 and over, together with those in the under 65 “at risk” categories outlined above, who had not received it previously. As in 2002/03, pneumococcal vaccine was also offered to those aged under 65 years with asplenia, sickle cell anaemia, liver disease or recipients of cochlear implants.

A total of 21 699 pneumococcal vaccines were administered during 2003/2004. Of these, 11 654 vaccines (54%) were administered to patients over 65 years of age.

The remaining 10 045 (46%) pneumococcal vaccines were administered to patients in the under 65 “at risk” categories. As expected, the majority of these individuals had underlying lung or heart disease, or diabetes. Vaccine was also administered to 11 cochlear implant recipients aged under 65 years.

CDSC (NI) appreciates the efforts of all those involved in the timely supply of both influenza and pneumococcal vaccination uptake data from each Health and Social Service Board.

Table 1: Influenza Vaccine Programme Summary: Winter 2003/04

	EHSSB	NHSSB	SHSSB	WHSSB	NI
No of practices in Board (CSA Oct 03)	147*	81	76	59	363
Size of registered population in Board (CSA Oct 03)	714802	419136	342991	306829	1783758
Size of registered 65+population in Board (CSA Oct 03)	101659	56870	41473	33430	233432
No of practices submitting return by specified date	138	81	76	59	354
Size of total registered population of practices which submitted return	681841	419136	342991	306829	1750797
% of registered Board population covered by practices which submitted return	95.39%	100%	100%	100%	98.15%
No. of influenza vaccines administered per practice which submitted return					
Total number administered in board	110208	65537	48634	43401	267780
Range	163-3003	146-2416	173-1914	168-1850	146-3003
Median	632	693	523	702	645
Mean	799	809	640	736	756
% vaccine uptake rate among 65+ population per practice submitting return					
Total No. of vaccines administered to 65+ population	72633	41961	30180	24977	169751
Range	38-88%	48-88%	52-89%	43-111%	38-111%**
Median	74%	75%	73%	73%	74%
Mean uptake rate as percentage of 65+ population (CSA Oct 03) in board	71.5%	73.8%	72.8%	74.7%	72.7%
Percentage of practices achieving >= 70% uptake rate	71.0%	72.8%	67.1%	64.4%	69.5%

* One new GP practice formed in EHSSB after Oct 03. Not included in this analysis

** Single practice administered 1188 influenza vaccines to individuals aged over 65 years. Uptake based on CSA over 65 practice population figure of 1067 at 1st Oct 2003

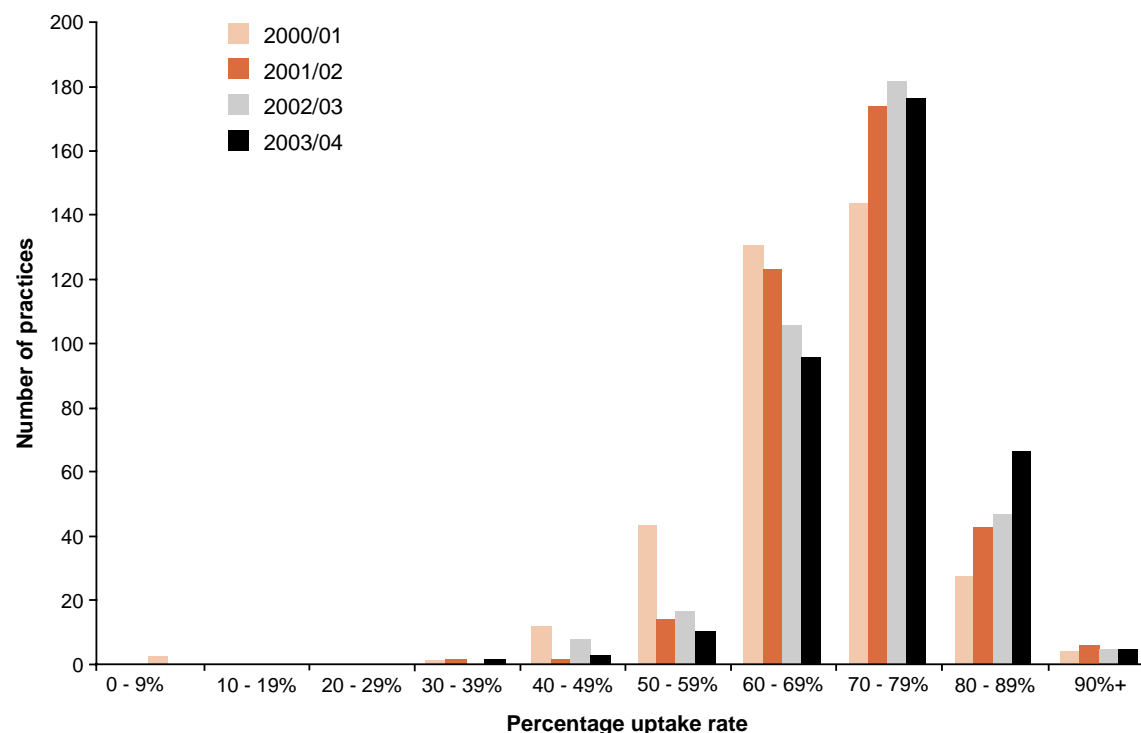
Table 2: Pneumococcal Vaccine Programme Summary: Winter 2003/04

	EHSSB	NHSSB	SHSSB	WHSSB	NI
No of practices in Board (CSA Oct 03)	147*	81	76	59	363
Size of registered population in Board (CSA Oct 03)	714802	419136	342991	306829	1783758
No of practices submitting return by specified date**	94	81	76	59	310
Size of total registered population of practices which submitted return	448494	419136	342991	306829	1517450
% of registered Board population covered by practices which submitted return	62.74%	100.00%	100.00%	100.00%	85.07%
No. of pneumococcal vaccines administered per practice which submitted return					
Total number administered in board	6348	7275	4623	3453	21699
Range	0-387	7-465	0-319	0-211	0-465
Mean	68	90	61	59	70
No. of pneumococcal vaccines administered to 65+ population per practice which submitted return					
Total number administered to 65+ population in Board	3503	4059	2420	1672	11654
Range	0-307	1-293	0-147	0-96	0-307
Mean	37	50	32	28	38

* One new GP practice formed in EHSSB after Oct 03. Not included in this analysis

** Date specified as: 13/02/2004 by NHSSB, SHSSB, WHSSB; 16/04/2004 by EHSSB

Figure 1: Percentage influenza vaccine uptake rate in 65+ age group (Northern Ireland), winter 2000/01 to winter 2003/04



Format of the Monthly Report

The Monthly Report has been published in its current format since the establishment of the Communicable Disease Surveillance Centre (Northern Ireland) in 1999. A readership survey undertaken in 2003 noted a high level of satisfaction among readers regarding style and content but some commented that the data could be timelier. Over 90% of respondents stated they could access an electronic copy of the Monthly Report. Many had also visited our website (www.cdscni.org.uk) which contains relevant data on communicable diseases and all the Unit's surveillance outputs/reports.

A detailed provisional summary for 2003 will be published shortly following which the Monthly Report will be available only in an electronic format and posted on our website. This change in format will enable greater flexibility in format and considerably improve timeliness of dissemination of data. It is also a more cost effective method of communication. It is envisaged future provisional annual summaries would be published electronically and in hard copy.

It is hoped this proposed change will not inconvenience readers. Readers on our current mailing list (electronic and postal) will receive an email when each Monthly Report is uploaded to the website. Those wishing to be added to this list should email cdscni@hpa.org.uk with their email details. A further readership survey will be undertaken in due course to assess the impact of these changes.

World TB day 2004

Tuberculosis (TB) continues to be a serious threat with one third of the world's population currently infected. World TB Day is held each year on 24 March, to increase public awareness and knowledge for action against this disease. The World Health Organisation (WHO) estimates there will be approximately 150 million cases and 36 million deaths from TB between 2002 and 2020. Despite being a curable disease, two million people die annually from TB. The

global 2005 targets for TB control are to detect 70% of all infectious TB cases and cure 85% of those detected. According to EuroTb (the European network for TB surveillance, www.eurotb.org), over 65,000 TB cases were notified in 2002 in the 25 countries of the enlarged European Union. The spread of HIV/AIDS and the emergence of multidrug-resistant TB are exacerbating the impact of TB. In England, Wales and Northern Ireland TB rates continue to increase in 2002 (preliminary

results). In Northern Ireland, however, the incidence rate remains low at about one quarter the rate observed in the UK as a whole and the Republic of Ireland. The final report on TB cases in Northern Ireland is available at: (<http://www.cdscni.org.uk/publications/AnnualReports/pdf/TB%20Report%202001.pdf>.)

(Source World Health Organization, Health Protection Agency (CDR weekly) and Eurotb)

Enhanced Surveillance of Meningococcal Disease (ESMD)

During the month of February 2004, a total of three cases of invasive meningococcal disease were notified through the ESMD scheme. One of these has been confirmed as serogroup B infection and occurred in an adult aged over 25 years who presented with septicaemia. The remaining two cases are, as yet, unconfirmed. No deaths occurred during the month of February.

These figures are very much lower than the same period last year, when fourteen cases of invasive meningococcal disease were

notified. Ten of these fourteen cases were laboratory confirmed as serogroup B infection, two as serogroup C infection and the

remaining two cases were unconfirmed. No deaths due to meningococcal disease occurred during the month of February 2003.

Meningococcal infection occurs most frequently during the winter months. A more detailed update on disease activity, covering the period January to March 2004, will be published in the next Monthly Report.

Table 3: Meningococcal disease by Health and Social Services Board, Northern Ireland, February 2004

HSSB	Confirmed			Not confirmed	Total
	B	C	Other and ungrouped		
E	0	0	0	2	2
N	0	0	0	0	0
S	1	0	0	0	1
W	0	0	0	0	0
Total	1	0	0	2	3

All Ireland Campylobacter Case Control Study

A campylobacter case-control study has recently commenced in Northern Ireland (NI) and the Republic of Ireland (ROI). The main objective of this study, which is expected to last until September 2004, is to identify and assess risk factors for sporadic cases of campylobacter on an all-Ireland basis. Campylobacter is the most commonly reported bacterial cause of acute gastroenteritis in NI and ROI and constitutes a considerable public health burden. This is the first study of its kind on an all-Ireland basis and may help to explain why rates of campylobacter North and South differ significantly.

The project is being undertaken by the two communicable disease surveillance institutes, CDSC-NI (Belfast) and NDSC (Dublin), the Eastern Regional Health Authority

(Dublin) and the four Health and Social Services Boards in NI. It is supported by *safefood*-Food Safety Promotion Board. Ethical approval has been obtained from the Queen's

University Belfast Research Ethics Committee (NI) and the Faculty of Public Health Medicine Ethics Committee (ROI). There has been extensive liaison with Consultants in Communicable Disease Control and Environmental Health Officers throughout NI in developing local arrangements to implement this survey and their support is greatly appreciated. Further information is available from Dr Danis (costas.danis@hpa.org.uk).

Recent sporadic case of Legionnaires' disease

A sporadic case of Legionnaires' disease linked to the North Antrim area has been investigated by the Northern Health and Social Services Board (NHSSB), Coleraine Borough Council Environmental Health Department (EHD), Northern Group Systems (NGS) and the Health and Safety Executive for Northern Ireland (HSENI). The case was reported to the Board on 8 December 2003, after presenting with cough, fever and shortness of breath. The first onset of symptoms was on 1 December 2003. The diagnosis was based on a positive urinary antigen test indicating *Legionella pneumophila* serogroup 1 infection.

Information was provided to medical practitioners to enable the early identification and appropriate investigation of further cases. A letter was sent to General Practitioners, Dalriada Doctor On-Call, Medical Directors of Trusts and Accident and Emergency Consultants to alert them of the occurrence of a case of Legionnaires' disease.

Environmental Health Officers visited the rented accommodation occupied by the affected person and concerns were raised with the proprietor concerning the lack of maintenance and condition of the hot and cold water distribution system. At the time, 102 residents lived in the accommodation. Four water samples were taken on 9 December 2003 for examination at the Public Health Laboratory, Belfast City Hospital.

Results received on 15 December 2003 indicated the presence of presumptive legionella infection in three of these samples, which was subsequently confirmed. As a result

a prohibition notice was served on the use of the hot/cold water system throughout the premises. The entire hot/cold water storage and distribution system were subsequently promptly cleaned and disinfected. Inspection of the premises on 16th December confirmed that required remedial action had been undertaken and repeat water samples were satisfactory.

Inspectors from HSENI examined control regimes at wet cooling systems at factories in the Ballymoney area in relation to possible work related exposure.

There were four factory premises containing seven cooling towers and ten evaporative condensers. Environmental Health Officers were involved in taking water samples at these locations and a sample from one evaporative condenser was positive for legionella species. Corrective action including on-line disinfection was successfully undertaken.

No additional cases were identified either in the rented accommodation or at his place of employment nor did links exist to any previous cases. There had been no recent cases of Legionnaires' disease in the area and it was not possible to establish the source of infection.

This case highlights the potential for Legionnaires' disease in large premises providing domestic accommodation particularly on an intermittent basis. The EHD has commenced an awareness-raising programme among owners of other vulnerable premises to help prevent any further similar incidents.

Contributors:

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Possible Transmission of Variant Creutzfeldt Jakob Disease by Blood Transfusion

In March 1996 a blood donor who, at the time, was free of the signs of vCJD, donated blood to the National Blood Service [NBS] in England. Shortly afterwards, this blood was transfused into a patient who underwent surgery. Three years later in 1999, the donor developed vCJD and subsequently died. The recipient of the blood died in the autumn of 2003 also of vCJD. It was thus considered possible that the infectious agent had been transmitted from the donor, who was infectious three years before developing the disease, to the recipient by the blood transfusion. The recipient then developed the disease after a 6 and a half-year incubation period. The connection cannot be proven, as both could have acquired the disease from eating BSE infected meat.

As there is a theoretical risk of transmission of vCJD by blood, precautionary measures to safeguard the supply of blood and blood products have been in place since 1997. This is because no blood test was, or indeed is, available for vCJD. These precautionary measures have included:

- All cases of 'probable' vCJD result in a search of the NBS blood donor records to see if the patient was a blood donor;
- All donated blood is leucodepleted, a process that removes most of the white cells, considered to be the main component containing infectivity;
- Blood plasma for the manufacture of blood products is obtained from non-UK sources.
- The National Blood Service uses only imported Fresh Frozen Plasma for the treatment of children born after 1996. This came into effect for newborn children this March, and will be extended to older children as soon as possible.

Prior to this event, these measures were considered to be sufficient to prevent the transmission of vCJD by blood. It was not considered necessary to implement further,

more stringent measures. However, since this event the Government's expert committee, the Microbiological Safety of Blood and Tissues for Transplantation, has advised that the UK should exclude from donating blood those people who had themselves previously received transfusions of whole blood components since January 1980. This date was chosen as it is generally accepted that there would have been no exposure to BSE in

the UK before that date.

The NBS estimates that this will result in a loss of some 52,000 donors and a publicity drive to replace these donors is to be rapidly undertaken so that there is no shortfall in the supply of blood. Efforts to use blood more effectively have been re-emphasised and that transfusions should only be given when there is a clear clinical need. It is likely that further advice will be given to Trusts and an increased number of specialist practitioners in transfusion will be established. More appropriate use of blood would reduce risks and also make more effective use of scarce blood supplies.

Reference:

http://www.dhsspsni.gov.uk/publications/2004/hssmd_8-2004.pdf

UK Zoonoses Report 2002

The fifth UK zoonoses report has recently been published (<http://www.defra.gov.uk/animalh/diseases/zoonoses/reports.htm>) by the Department of Environment, Food and Rural Affairs (Defra). This pulls together information on a range of zoonoses. It includes considerable animal and human data on the main zoonoses such as campylobacter, salmonella, VTEC and M. bovis but also covers less common ones such as leptospirosis, psittacosis, toxocariasis and toxoplasmosis. Information from the June 2002 Agricultural and Horticultural Census showed that there were 1.7 million cattle, 2.23 million sheep, 0.39 million pigs and 16.4 million poultry in Northern Ireland. Therefore the cattle population is similar in size to the human population of Northern Ireland of 1.7 million people and this highlights the importance of zoonotic surveillance.

It is hoped that this report will be a useful reference source for professionals who routinely deal with zoonotic disease and also provide non-specialists with an insight into zoonoses within the UK. There is an associated questionnaire seeking feedback on the format and content in order to inform future reports.

Laboratory Reports

Respiratory Tract Infections: Laboratory Reports, Weeks 01- 08

	Number of Reports received		Cumulative total	
	04/01-04	04/05-08	04/01-08	03/01-08
<i>Coxiella burnetii</i>	0	0	0	0
<i>Mycoplasma pneumoniae</i>	4	1	5	4
Respiratory <i>Chlamydia</i>	2	1	3	1
<i>Adenovirus</i> (excluding faeces)	1	5	6	5
RSV	36	57	93	95

Foodborne and Gastro-intestinal Tract Infections: Laboratory Reports, Weeks 05- 08

	Number of Reports received		Cumulative total	
	04/05-08	03/05-08	04/01-08	03/01-08
<i>Campylobacter</i>	36	57	72	104
<i>C. difficile</i> Toxin	94	80	187	150
<i>C. perfringens</i>	1	3	3	5
<i>E. coli</i> O157	1	0	2	0
<i>Salmonella</i> total	4	7	7	14
<i>S. enteritidis</i> (PT 4)	2	0	3	1
<i>S. typhimurium</i> (DT 104)	1	5 (1)	1	11 (2)
<i>Salmonella</i> other	1	2	3	2
<i>Shigella</i>	1	0	2	1
<i>Cryptosporidium</i>	5	4	7	5
<i>Giardia</i>	2	0	5	0
Adenovirus (faeces)	10	4	19	10
Enterovirus (faeces)	1	1	3	2
Rotavirus	9	94	11	157
SRSV	5	33	7	59

N.B. There has been a delay in receipt of a number of laboratory reports pertaining to this reporting period. Cumulative figures may therefore increase by date of next publication.

Comment:

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

S. sp 1

The following was associated with foreign travel:

Female, age 70, *Salmonella enteritidis*, Spain; Male, age 23, *Campylobacter*, RoI.

Laboratory reports of *Campylobacter*, *C. perfringens* and *Salmonella* to week 8 have shown a decrease compared with the same period last year. Cumulative

reports of Rotavirus and SRSV have also decreased.

To week 8 of this year there have been 2 reports of *E Coli* O 157, 2 reports of *Shigella* and 5 reports of *Giardia*.

Contributing Laboratories

Information

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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