



Surveillance of Campylobacter Infection

Campylobacter is the most common form of bacterial food poisoning in the UK with over 55,000 infections reported to CDSC (Colindale) in 1999. In Northern Ireland, reports of campylobacter have steadily increased from 244 in 1990 to 1009 in 2000. However, the rate of campylobacter infection in Northern Ireland is approximately half that noted elsewhere in the UK. For example in 1999, the rate of campylobacter infection reported per 100,000 population in England and Wales was 104, Scotland 114 and Northern Ireland 51.

Despite being such a common form of gastro-enteritis, the epidemiology of campylobacter infection is poorly understood with the cause of the vast majority of cases being unknown. The Food Standards Agency has a target to reduce the incidence of food-borne disease by 20% over the next five years. As campylobacter forms a large proportion of reports of laboratory confirmed food poisoning attaining this target will mean a reduction in campylobacter infection.

Following funding from the Food Standards Agency, Northern Ireland is participating over the next twelve months in a campylobacter sentinel surveillance programme, which is already underway in England and Wales. This involves Environmental Health Officers interviewing those with campylobacter infection using a specially designed questionnaire. Campylobacter isolates from local laboratories are forwarded to the Campylobacter Reference Unit at

the Laboratory of Enteric Pathogens for typing. Epidemiological analysis of the questionnaires will then be linked with the results from laboratory typing. This descriptive study will hopefully then lead to hypotheses,

which can be tested in an analytical study. Comparing risk factors and typing results between England and Wales and Northern Ireland may also shed some light on why the incidence of campylobacter infection is so different to that in GB.

Influenza/Pneumococcal Vaccination Programme: Winter 2000/01

The analysis of the winter 2000/01 Influenza/Pneumococcal Vaccination Programme was completed at the end of March.

Almost two hundred and twenty two thousand influenza vaccines were administered to those patients considered 'at risk' - ie 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 is more than twice the number that were administered the previous winter. It is difficult to directly compare the results of the winter

2000/01 analysis with winter 1999/00 for two reasons: a target uptake rate for elderly patients was not set in 1999/00, and the 'at risk' age group was extended in 2000/01 to include those patients aged 65-74 years.

Of the total 221 848 vaccines administered, 155 303 (70%) were given to the 65+ age group. Almost 5000 were administered to patients under 15 years, 87% of which were given to children with chronic respiratory disease. Of the 61 842

Contents

	PAGE
Surveillance of Campylobacter Infection	1
Influenza/Pneumococcal vaccination Programme: Winter 2000/01	1
Laboratory Reports	
Foodborne and Gastro-intestinal Tract infections	3
Hepatitis	3
<i>Staphylococcus aureus</i> bacteraemias	3
Bacteraemia	4
Infectious Disease Notifications	4

patients within the 15-64 years age group who were vaccinated, 44% were categorised as suffering from chronic respiratory disease, 27% from chronic cardiac disease and 18% from diabetes.

The uptake rate among the over 65 population in the Province was 68% for winter 2000/01, and the target of 65% was also exceeded by each individual Health Board; in the

winter of 1999/00 the uptake rate among the over 75 population was 49%. By the end of the winter 2000/01 campaign 358 of the 362 practices in the Province were included in the analysis; this compares with 340 the previous winter.

Approximately thirty five thousand pneumococcal vaccinations were administered to 'at risk' patients

during the winter 2000/01 programme compared to approximately eighteen thousand the previous winter. Unlike the influenza vaccine which is administered to an 'at risk' patient every year, the pneumococcal vaccine is administered only once. During recent years the individual Boards developed a variety of initiatives to facilitate uptake of the vaccine.

Influenza Vaccine Programme Summary: Winter 00/01

Board	EHSSB	NHSSB	SHSSB	WHSSB	NI
No of Practices in Board (CSA Oct 00)	146	81	77	58	362
Size of registered population in Board (CSA Oct 00)	716794	414413	335331	303279	1769817
Size of registered 65+ population in Board (CSA Oct 00)	100801	54061	39800	32266	226928
% of registered Board population covered by practices which submitted return	99.39%	100%	99%	100%	99.57%
No of vaccines administered per practice which submitted return					
Total number administered in Board	92322	55343	39062	35121	221848
Median	568	584	430	545	544
% vaccine uptake rate among 65+ population per practice submitting return					
Total no of vaccines administered to 65+ population	67635	38130	26495	22770	155030
Range	39%-89%	40%-92%	41%-94%	50%-86%	39%-94%
Median	68%	72%	67%	72%	70%
Mean uptake rate as percentage of 65+ population (CSA Oct 00) in Board	67%	71%	67%	71%	68%
Percentage of practices achieving >65% uptake rate	66%	77%	64%	86%	71%

Pneumococcal Vaccine Programme Summary: Winter 00/01

Board	EHSSB	NHSSB	SHSSB	WHSSB	NI
No of Practices in Board (CSA Oct 00)	146	81	77	58	362
Size of registered population in Board (CSA Oct 00)	716794	414413	335331	303279	1769817
% of registered Board population covered by practices which submitted return	97.52%	100%	97.40%	99.60%	98.44%
No of vaccines administered per practice which submitted return					
Total number administered in Board	7928	12024	8128	7331	35411
Median	28	101	81	85	66

Approximately 1000 pneumococcal vaccines were administered to patients under 15 years; of these approximately 900 (88%) were

given to children with chronic respiratory disease. Almost 7 000 (75%) vaccines were administered to patients categorised as suffering

from chronic respiratory or cardiac disease and just over 500 asplenic patients were vaccinated.

Laboratory Reports

Foodborne and Gastro-intestinal Tract Infections: Laboratory Reports, Weeks 13-16

Salmonella (other than <i>enteritidis</i> or <i>typhimurium</i>):	
<i>S. agona</i>	1
<i>Salmonella</i> sp	1
<i>S. weltevreden</i>	1

Comment:

The following were associated with foreign travel:

Male, 5 years, *Giardia lamblia*, Andora; male, 40 years, *Salmonella* sp, Canary Islands; female, 39 years, *Salmonella weltevreden*, Hong Kong.

	Number of Reports received		Cumulative total	
	01/13-16	00/13-16	01/01-16	00/01-16
<i>Campylobacter</i>	43	70	166	261
<i>C. difficile</i> Toxin	32	24	114	103
<i>E. coli</i> O157	0	8	1	11
<i>Salmonella</i> total	5	12	62	62
<i>S. enteritidis</i> (PT 4)	2 (0)	6 (5)	35 (24)	31 (29)
<i>S. typhimurium</i> (DT 104)	0 (0)	2 (1)	10 (3)	20 (8)
<i>Salmonella</i> other serotypes	3	4	17	11
<i>Shigella</i>	0	0	0	5
Cryptosporidium	95	20	167	45
<i>Giardia</i>	1	1	3	3
Adenovirus (faeces)	11	10	48	38
Enterovirus (faeces)	2	5	5	17
Rotavirus	84	136	157	246
SRSV	2	18	48	40

Cumulative reports to week 16 of 2001 of *Campylobacter*, *E. coli* O157, *Shigella*, Rotavirus and Enterovirus have all decreased compared with the same period last year; *E. coli* O157 is exhibiting a

particularly marked decrease of 91%, and to date there have been no reports of *Shigella*. Cumulative laboratory reports of *Salmonella* are on a par with cumulative reports to week 16 of 2000.

Laboratory reports of Cryptosporidium for weeks 13-16 of 2001 have increased almost five-fold compared with the same four-week period of 2000, due the waterborne outbreak in Eastern and Northern Boards.

Hepatitis: Laboratory Reports Weeks 05-16

	Number of Reports received			Cumulative total	
	01/05-08	01/09-12	01/13-16	01/01-16	00/01-16
Hepatitis A	0	0	1	1	13
Hepatitis B	0	0	1	3	5
Hepatitis C	3	1	5 (1)	13 (1)	23 (7)

The figure in brackets represents those reports for which an association with intravenous drug use was noted.

Comment:

Hepatitis A

There was one report of Hepatitis A

during weeks 13 - 16; male aged 19. No risk factor information was recorded.

Hepatitis B

There was one report of Hepatitis B during weeks 13 - 16; male aged 48. No risk factor information was recorded.

Hepatitis C

There were nine reports of Hepatitis C in this 12 week period 2001, one was associated with intravenous drug use; 5 were male aged between 26 and 51, 3 were female aged between 28 and 38 and one was 85 years (sex unknown).

Staphylococcus aureus bacteraemias: Laboratory Reports, Weeks 01-16

Total reports of <i>S. aureus</i>		Reports of MRSA (%)		Reports of MSSA (%)	
01/01-16	00/01-16	01/01-16	00/01-16	01/01-16	00/01-16
98	94*	40 (41%)	33* (35%)	58 (59%)	61 (65%)

*includes 1 isolate from CSF

Bacteraemia: Laboratory Reports, Weeks 01-16

	2001/01-16	2000/01-16
Gram negative bacteria		
<i>Acinetobacter sp</i>	6	7
<i>Aeromonas sp</i>	0	2
<i>Citrobacter sp</i>	4	2
<i>Enterobacter sp</i>	16	18
<i>Escherichia coli</i>	113	150
<i>Haemophilus influenzae</i>	4	6
<i>Haemophilus sp</i>	1	0
<i>Klebsiella sp</i>	14	24
<i>Neisseria meningitidis</i>	20	41
<i>Neisseria sp</i>	0	1
<i>Proteus sp</i>	9	27
<i>Providencia sp</i>	1	0
<i>Pseudomonas aeruginosa</i>	14	19
<i>Pseudomonas sp</i>	10	5
<i>Salmonella sp</i>	1	0
<i>Serratia sp</i>	10	11
Other gram negative bacteria	3	8
Totals	226	321
Gram positive bacteria		
<i>Corynebacterium sp</i> & Diphtheroids	1	3
Staphylococci:		
<i>S. aureus</i>	98	93
coagulase negative	76	112
Streptococci and enterococci:		
group A	13	3
group B	10	13
group C	0	1
group G	5	2
<i>Enterococcus sp</i>	41	46
α - and non-haemolytic	18	26
<i>S. pneumoniae</i>	46	52
Other gram positive bacteria	0	4
Totals	308	355
Anaerobic bacteria		
Anaerobic cocci	1	3
<i>Bacteroids sp</i>	11	7
<i>Clostridium sp</i>	6	7
Other anaerobic bacteria	0	0
Totals	18	17
Grand Total	552	693

Infectious Disease Notifications

In future, NOIDS data will be published at quarterly intervals.

Notable points from weeks 13-16:

- 6 notifications of malaria; all notified within the Eastern Health Board. This brings the Northern Ireland cumulative total to week 16 of 2001 to 12, compared with 2 for the same period in 2000.
- 35 notifications of mumps have been received from the Western Health

Board, bringing the Northern Ireland cumulative total to 368 compared with 265 for the same period in 2000.

Requests for information between published reports can be accommodated.

Contributing Laboratories

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

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

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