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This edition of *Monthly Report* provides details of a case of imported rabies in Northern Ireland. Subsequent CMO letters HSS (MD) 42/2008 and HSS (MD) 46/2008 reinforce the importance of considering the need for pre and post exposure rabies vaccination in those travelling to rabies endemic areas.

CMO letter HSS(MD)40/2008 issued on 12 December alerted colleagues to the fact that influenza A virus is now circulating in the community in Northern Ireland, and that NICE guidance on the use of antivirals now applies. Given this background we are pleased to report that uptake rates of influenza immunisation have reached 70% in the over 65 years age group and 63% in the under 65 years at risk age group. These very encouraging figures reflect the extensive commitment to the programme by all concerned.

Finally we would signpost the annual report of the European Antimicrobial Resistance Surveillance Scheme (EARSS). We provide a summary of comparative statistics for Northern Ireland, ROI and UK.

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Confirmed case of imported rabies in Northern Ireland

A patient with confirmed rabies infection is currently being managed in the intensive care unit of Belfast Trust. The diagnosis was confirmed by tests on samples sent to the United Kingdom National Reference Laboratory for Rabies at the Veterinary Laboratory Agency, Weybridge, Surrey.

CDSC (NI) holds Notification of Infectious Diseases records going back to 1938. In this time there have been no notifications of rabies.

The case had worked as a volunteer with animals in South Africa for short periods during the past two years and had close contact with various animals including dogs. Rabies is endemic in South Africa where bites from infected dogs are the main source of rabies in humans.

CMO letters HSS(MD)42/2008 and HSS(MD)46/2008 and the Health Protection Agency's *Health Protection Report* provide further detail and carry key messages around the importance of pre-exposure prophylaxis in those planning to work with animals in rabies endemic areas, and of the need for individual assessment for post-exposure prophylaxis in the event of an exposure.

<http://www.dhsspsni.gov.uk/hss-md-42-2008.pdf>

<http://www.hpa.org.uk/hpr/news/default.htm#rabies>

Influenza vaccination programme: winter 2008/09

For winter 2008/09 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 2007/08, 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.

CDSC (NI), in liaison with Influenza Immunisation Co-ordinators, collates influenza immunisation statistics at intervals over the winter.

By 31 October 2008, the uptake rate for the over 65 population was 58.9%, a slight increase on the rate recorded for the same period last year (53.3%). The overall uptake rate for the under 65 "at risk" population at 31 October 2008 was 48.4%.

Interim uptake data from the seasonal influenza vaccination programme to 30 November is now also available.

By 30 November the uptake rate among those aged 65 years and over was 70.4% a slight increase compared to 69.1% for the same period last year. The uptake rate for those deemed "at risk" and aged under 65 years was 63.0% (60.8% for the comparable period last year).

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: Interim vaccine coverage data to 30 November 2008

	30-Nov-08	30-Nov-07	30-Nov-06	30-Nov-05
	NI 2008/09	NI 2007/08	NI 2006/07	NI 2005/06
Number of Practices	358	362	363	364
Number of practices submitting return by 10th December 2008	351	351	352	356
Number of 65+ receiving influenza vaccine between 1st November and 30th November 2008	28663	38204	40970	32398
Cumulative number of 65+ receiving influenza vaccine by 30th November 2008	176407	168130	161584	172453
Registered 65+ population	250647	243416	240007	237696
Uptake rate for 65+ population at 30th November 2008	70.4%	69.1%	67.3%	72.6%
Number of under 65 "at risk" population receiving influenza vaccine between 1st November and 30th November 2008	23829	28135	35030	35233
Cumulative number of under 65 "at risk" population receiving influenza vaccine by 30th November 2008	102599	96845	101825	115356
Presumed "at risk" population under 65 years <i>(equivalent to 10% of registered population under 65 years)</i>	162933	159300	157863	156325
Uptake rate for under 65 "at risk" population at 30th November 2008	63.0%	60.8%	64.5%	73.8%
* Not all GP practices have submitted returns to Board by 10th Dec 2008 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, based on data provided by each Board, as the denominator. As a consequence, true uptake rates in NI as a whole at 30th Nov 2008 will be slightly higher than figures above suggest				

It is worth noting that the “at risk” population to receive influenza vaccine has increased by 2.6% in the past year (from 403173 to 413584). Therefore to meet the DHSSPS uptake targets of 70% in those aged 65 years and over and 60% in the under 65 years “at risk” groups additional individuals require to be vaccinated.

The next interim uptake results will be for the period ending 30 December and should be available by February.

EARSS 2007

EARSS is the European Antimicrobial Resistance Surveillance Scheme and the data collected is formally reported on an annual basis. The Northern Ireland contribution to the scheme has been coordinated by CDSC (NI) since 2003 and is included with the UK data for the purposes of reporting. The scheme involves the collection of enhanced surveillance data, including patient risk factors and the antibiotic sensitivities of the isolates detected. Each lab takes part in EARSS voluntarily, in parallel to the mandatory *Staphylococcus aureus* surveillance scheme. Eight out of ten laboratories, serving the five Trusts in Northern Ireland in 2007, reported blood isolates of *Staphylococcus aureus* to EARSS.

The 2007 annual report of the European Antimicrobial Resistance Surveillance System is available from the EARSS website at: http://www.rivm.nl/earss/result/Monitoring_reports/.

The key findings in relation to the full EARSS report are as follows:

- In 2007, proportions of *S. aureus* reported to be MRSA are slightly higher for NI (43%) when compared with RoI (38%) and UK (36%).
- During 2006/2007 in NI a larger proportion of patients reported with *S. aureus* are aged 65 years and over (57%) compared with the UK (44%).

MRSA

During 2007 a total of 502 *S. aureus* isolates were reported from 8 laboratories (covering 5 Trusts) in Northern Ireland (Figure 1). Of these, 43% were reported to be MRSA (Table 1). This is slightly higher than the levels reported for both the UK as a whole (36%) and for the Republic of Ireland (38%) for the reporting period 06/07 (latest published EARSS Annual Report). The trend, for NI figures to be higher than the UK/RoI, has occurred for a number of years and can be explained in part by the voluntary nature of this scheme. The mandatory surveillance scheme for the same period reported slightly lower proportions of MRSA in NI from 2003-2007 which implies that isolates were more likely to be reported to EARSS if they were meticillin resistant particularly during the earlier years of EARSS in Northern Ireland.

Figure 1: Number of laboratories participating in the EARSS scheme and the number of isolates reported 2003-2007.

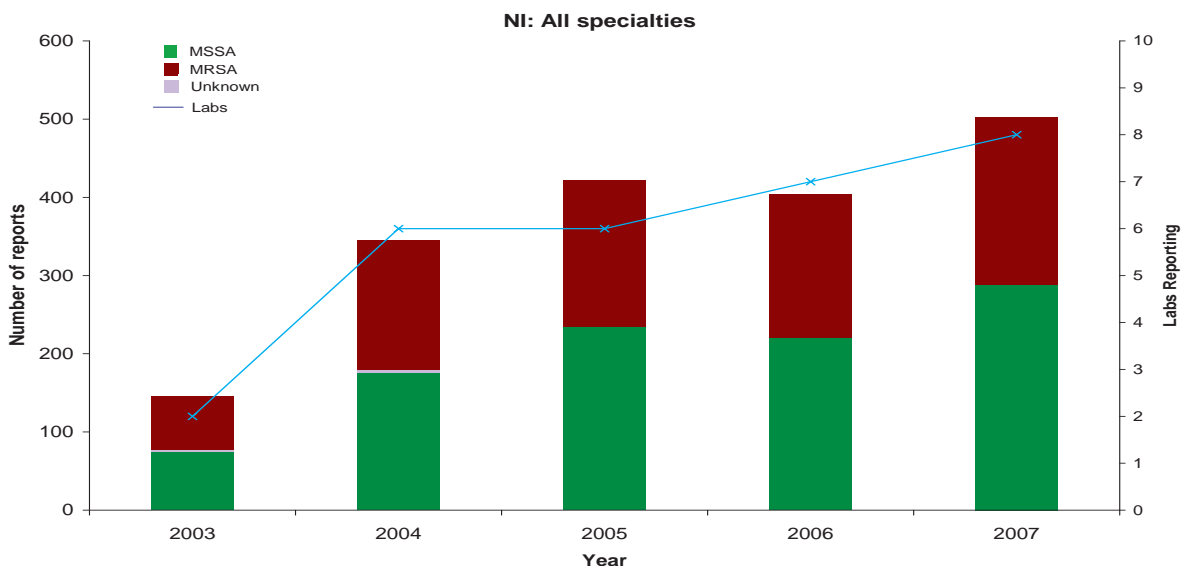


Table 2: Percentages of meticillin resistance in isolates reported from the voluntary (EARSS) and mandatory *S. aureus* surveillance schemes, 2003-2007.

Scheme	Antimicrobial Classes	2003	2004	2005	2006	2007
EARSS	Oxacillin/ Meticillin R	47	48	44	45	43
Mandatory	Oxacillin/ Meticillin R	45	45	43	42	41

Table 3: Selected details on invasive MRSA isolates reported from Northern Ireland 2006 and 2007.

<i>S. aureus</i> (n=906)		
Characteristic	% of all isolates	% MRSA
Gender		
Male	59	47
Female	41	40
Unknown	0.3	33
Age (years)		
0-4	7	16
5-19	2	18
20-64	33	35
65 +	57	53
Unknown	0.4	100
Hospital dept.		
ICU	8	56
Medicine	60	45
Surgery	13	51
Other	7	15
Unknown	13	37

Note:

% of all isolates = total for gender/grand total*100

% MRSA = total MRSA for gender/total for gender*100

*100% in this instance refers to 4 cases (ages unknown) which were all MRSA.

57% of *S. aureus* reports from 2006 and 2007 were from patients aged 65 years and over (Table 2), a larger proportion than reported for the UK (44%) and slightly higher than the RoI (52%). 60% of *S. aureus* reports were from patients in General Medicine departments. This is higher than both the UK (26%) and RoI (15%). It should be noted that the completion of patient details giving the location of the patient at time of testing was much higher for NI (13% unknown location) in comparison to the UK and RoI data (22% and 55% unknown respectively) which may have impacted on the result.

The percentage MRSA for NI in all hospital departments ranged from 45% (Medicine) to 56% (ICU). The percentage MRSA in all reported specialties was very similar for all three countries.

In summary, the proportions of *S. aureus* reported to be MRSA are broadly similar for Northern Ireland, the Republic of Ireland and the UK. In Northern Ireland a larger proportion of patients reported with *S. aureus* are aged 65 years and over and were treated in General Medicine departments when compared with the RoI and the UK.

Enhanced surveillance of meningococcal disease in Northern Ireland

Quarter 3, July-September 2008 (provisional data)

Cases

16 cases were reported during Q3. 7 (44%) were laboratory confirmed, 6 of which were Serogroup B and 1 Serogroup C (Table 1).

Deaths

There were no deaths during Q3.

Table 4: Invasive Meningococcal disease, by serogroup, by HSSB area of residence, Northern Ireland July – Sept. 2008

HSSB	B	C	Others & ungrouped	Not confirmed	Total
EHSSB	4	0	0	7	11
NHSSB	1	0	0	1	2
SHSSB	1	0	0	0	1
WHSSB	0	1	0	1	2
Total	6	1	0	9	16

Foodborne and gastrointestinal tract infections: Laboratory reports, weeks 41-44

	Number of Reports received		Cumulative total	
	08/41-44	07/41-44	08/01-44	07/01-44
<i>Campylobacter</i>	58	58	753	776
<i>C. difficile</i> Toxin	104	158	1421	1138
<i>C. perfringens</i>	3	1	27	15
<i>E. coli</i> O 157	5	12	59	51
<i>Salmonella</i> total	21	9	154	142
<i>S. enteritidis</i> (PT 4)	6 (0)	2 (1)	55 (7)	44 (3)
<i>S. typhimurium</i> (DT 104)	0	4 (0)	26 (4)	34 (0)
<i>Salmonella</i> other	15	3	73	64
<i>Shigella</i>	2	1	10	13
<i>Cryptosporidium</i>	5	4	100	81
<i>Giardia</i>	0	1	3	4
Adenovirus (faeces)	12	27	248	116
Enterovirus (faeces)	5	8	32	33
Rotavirus	6	0	673	357
Norovirus	14	43	361	317

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

<i>S. agona</i>	1
<i>S. gallinarum-pullorum</i>	1
<i>S. kentucky</i>	1
<i>S. montevideo</i>	1
<i>S. sp</i>	1

Comment:

Table 5: Infection associated with foreign travel, weeks 41-44, 2008, Northern Ireland

Organism	Countries visited
<i>Campylobacter</i> (4)	Spain (2), Hungary (1), Turkey (1)
<i>S. enteritidis</i> (1)	Spain
<i>S. kentucky</i> (1)	Africa
<i>S. montevideo</i> (1)	Greece

Mycobacteria: Laboratory reports weeks 33-44

	Number of Reports received			Cumulative total	
	08/33-36	08/37-40	08/41-44	08/01-44	07/01-44
<i>M. abscessus</i>	0	0	0	2	3
<i>M. avium-intracellulare</i> group	4	4	7	40	28
<i>M. bovis</i>	0	0	1	2	0
<i>M. chelonae</i>	1	1	0	6	8
<i>M. fortuitum</i>	0	0	0	2	2
<i>M. gordonae</i>	0	1	0	11	16
<i>M. kansasii</i>	0	1	0	10	3
<i>M. malmoense</i>	1	0	2	4	7
<i>M. other named</i>	0	0	0	3	3
<i>M. sp</i>	0	0	0	0	2
<i>M. tuberculosis</i>	2	5	5	43	50
<i>M. xenopi</i>	0	0	0	1	1
TOTAL	8	12	15	124	123

Comment:

Fifteen cases of *M. avium intracellulare* were reported during weeks 33 - 44, 2008. Age of cases ranged from 31 – 85 years, median 70 years. Eleven cases were isolated from sputum, three from lower respiratory tract, and one from tissue.

There was one case of *M. bovis* (non BCG strain) isolated from lower respiratory tract during this reporting period in a person aged >60 years.

There were two cases of *M. chelonae* during this twelve-week reporting period. One case was <20 years and one was aged >60 years. Both specimens were from sputum.

One case of *M. gordonae* was isolated from sputum in a person aged >60 years.

One case of *M. kansasii* was isolated from lower respiratory tract in a person aged >60 years.

Three cases of *M. malmoense* were isolated from sputum. One case was <60 years and two were >60 years.

Twelve cases of *M. tuberculosis* were reported during this reporting period. Age of cases ranged from 23 – 83 years, median 36 years. Three cases were isolated from sputum, three from pus (source unknown), three from lower respiratory tract, one from blood, one from tissue and one from urine.

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Belfast City	Royal Hospitals Bacteriology
Causeway	Tyrone County
Craigavon	Ulster
Greenpark	

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