COMMUNICABLE DISEASES
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School cluster of meningococcal infection in Ballymena

Two cases of meningococcal infection (Group B) affecting pupils attending a secondary school were reported in April 2002. The first case was reported at the beginning of April and arrangements were made for close contacts to receive rifampicin in accordance with standard practice for a single case. Three weeks after the first case a second pupil who attended the same school was admitted to hospital with suspected meningococcal infection. The common link to the school was immediately recognised and measures initiated to take control measures at the school.

Contents

There is increased risk of further cases in a household and schools following an index case. It has been estimated that in the week after the diagnosis of a case, there is more than a thousand-fold increased risk of further cases among household contacts, with a 160-fold increased relative risk among school contacts[1]. While the relative risk is increased, the absolute risk remains low and most cases of meningococcal infection occur as single sporadic cases. An individual in a secondary school has been estimated to have between 1 in 6 000 and 1 in 20 000 chance of becoming a case after an index case.

The main control measures are:

- to provide information to pupils, parents and health professionals so that an further cases will be promptly recognised and receive immediate treatment
- to arrange antibiotic prophylaxis for the school population to reduce the risk of further cases by eradicating carriage of potentially virulent meningococci.

An incident team was convened at the school, comprising the School Principal, Community Paediatrician, School Nurse Manager, Child Health System Project Manager, Trust Pharmacist, Public Relations Officer, Meningitis Trust, Specialist Registrar in Public Health Medicine, Consultant Microbiologist and Consultant in Communicable Disease Control.

Parents were asked to attend information sessions at the school the evening on the day the second case was reported, to receive information and complete consent forms for their children to receive antibiotics. Information packs were prepared for approximately 450 pupils at the school. The print and broadcast media were helpful in facilitating contact with parents and pupils at the school. It was decided to offer ciprofloxacin to pupils, subject to parental consent. Ciprofloxacin is not specifically licensed to be given to pupils in meningococcal outbreaks but had been used successfully in similar school outbreaks previously and was consistent with expert advice.

Four hundred and thirty five pupils were considered eligible to receive antibiotics and of these 432 received antibiotics at the school. Most received antibiotics the next day at school, with the remainder receiving antibiotics the following morning. Alternative arrangements were made for the other three pupils. Rifampicin was given to 13 pupils for whom ciprofloxacin was contraindicated.

Both cases were confirmed as Group B Meningococcal infection. There were no further cases reported from the school population. The last reported meningococcal school cluster in Northern Ireland was in 1999, also involving the same town, but was associated with two children with Group C infection.

1. A retrospective survey of clusters of meningococcal disease in England and Wales, 1993 to 1995: estimated risk of further cases in household and educa tional settings. Communicable Disease Report 1997, vol 7, R195-200.

(contributed by Dr M Devine, CCDC, Northern Health and Social Services Board)

Launch of CDSC NI website

We are pleased to announce the launch of our website on 17 June 2002 located at www.cdscni.org.uk. Northern Ireland data for selected organisms and infections is published, along with information on events relevant to public health and training opportunities within CDSC NI. For general advice and guidelines, there are links to the websites of the Department of Health, Social Services and Public Safety (NI), the Department of Health, England and the Public Health Laboratory Service. We hope that the website will be used by members of the public, the media, students and teachers, as well as by public health professionals. Feedback is very welcome and requests for more comprehensive information may be accommodated. Consideration will also be given to advertising seminars/ conferences in the events section. It may be appropriate to include a link to CDSC NI on other related organisations' websites. Please address your comments/requests to feedbackni@phls.org.uk.

Enhanced Surveillance of Tuberculosis in 2000: Summary

Clinicians in Northern Ireland, in line with those in the rest of the United Kingdom, are required to notify all cases of tuberculosis to the Director of Public Health of the Health and Social Services Board (HSSB) of residence. Enhanced surveillance of tuberculosis was established in Northern Ireland in 1992 with the introduction of two customised data collection forms (TBS1 and TBS2). TBS1 was designed to collect clinical, demographic and microbiological information, as available at the time of notification. TBS2 is a follow-up surveillance form, which is issued, by the Consultant in Communicable Disease Control (CCDC) in the appropriate HSSB, to the notifying clinician approximately 9 months after initial notification. The purposes of this second form are to collect details of treatment, outcome and further clinical and/or microbiological information not available at the time of notification; hence there is often some delay before an annual dataset becomes complete. All forms are subsequently forwarded to the Communicable Disease Surveillance Centre (Northern Ireland), where the information is entered onto a secure database, validated, updated and analysed. For the first time, collection of outcome data on notified cases is to be introduced to England and Wales using a 'Tuberculosis Treatment Outcome Surveillance Form'. For all cases notified in Northern Ireland after 1 January 2001, this new form will replace TBS2.

In 2000 as part of the enhanced surveillance of tuberculosis notification scheme, CDSC (NI) received 60 notifications of tuberculosis. Six were subsequently identified as having infections with mycobacteria other than tuberculosis complex (MOTTs) and another was subsequently diagnosed as having a condition other than tuberculosis. Thirty-seven cases were culture confirmed as *M. tuberculosis* infection. There were no culture confirmed cases of *M. bovis* during 2000. In addition to the culture confirmed cases, 4 cases were sputum smear positive, 1 case was bronchoscopy smear positive and 3 cases were positive by histological examination of lymph nodes. The outstanding 8 cases remain notified on the basis of clinical and other laboratory diagnosis, giving a total of 53 notified cases of tuberculosis identified through this programme in 2000. The annual notification rate of tuberculosis was estimated at 3.1 cases per 100,000 population.

Of the 53 cases, 30 had pulmonary disease and 23 had non-pulmonary disease. Out of the 30 cases of pulmonary tuberculosis 4 were both sputum smear and culture positive, 18 were culture positive only and 4 were smear positive only. Ten patients with pulmonary disease died. Tuberculosis was the cause of death in 1 case and was implicated in 6 others.

Fifteen of the 23 non-pulmonary tuberculosis cases were confirmed by culture. The sites of disease reported in these cases were: lymph nodes (15), pleura (5), genitourinary (2) and gastrointestinal (1).

Details of initial treatment were recorded for 27/53 cases, of which 24 received a combination of rifampicin, isoniazid and pyrazinamide. Continuation therapy was recorded for 23 cases, of which 20 received a combination of rifampicin and isoniazid.

Antimicrobial sensitivity testing results were available for 32 isolates. Resistance, to streptomycin only, was found in 1 isolate.

A full report will shortly be presented to the TB sub-committee of the Regional Advisory Committee on Communicable Disease Control. For further details of this report, please contact Dr Hilary Kennedy at CDSC(NI) or email hkennedy@phls.org.uk

Replacement of single antigen tetanus vaccine by combined tetanus/low dose diphtheria (Td) vaccine for adults and adolescents

The Department of Health, Social Services and Public Safety (DHSSPS) has announced that single antigen Tetanus vaccine (T) is being replaced by the combined Tetanus/ low dose diphtheria vaccine for adults and adolescents (Td) for all routine uses. Td vaccine replaced single antigen Tetanus vaccine for the routine booster immunisation given to school-leavers in 1994. The change was on the advice of the Joint Committee on Vaccination and Immunisation (JCVI), generated by concern at the low levels of immunity to diphtheria in older people in the UK. It brings us into line with recommendations from the World Health Organisation.

Td should now be used:

- For primary immunisation of adults and adolescents previously un-immunised against tetanus
- Where booster doses of tetanus are indicated, following a tetanus prone wound or for the purposes of travel.

(DHSSPS, 21 May 2002)

Laboratory Reports

Foodborne and Gastro-intestinal Tract Infections: Laboratory Reports, Weeks 17-20

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

S. senftenberg 1

Comment:

All of the main bacterial gastro-intestinal infections have declined up to week 20 of 2002 compared to the same period last year. Reports of *Campylobacter* and *C.difficile* toxin have decreased by 10% and 16% respectively, but the most marked reduction is the 56% fall in reports of *Salmonella*. Reports of *S. enteritidis* in particular, have declined by 90% whereas reports of *S. typhimurium* exhibit a less marked reduction of 20%. Reports of *Shigella*, *E. coli* O157 and *C. perfringens* have increased, but the numbers remain very low.

Cumulative reports of *Cryptosporidium* have declined by 80% compared to the same period last year. There were 2 water borne outbreaks in 2000 and 1 in 2001, each associated in excess of 100 cases. Cumulative cases to week 20 in 1997, 1998 and 1999 were 49, 112 and 83 respectively.

There have been more than 3 times as many reports of SRSV to week 20 of 2002 than for the same period of 2001. There have been 8 outbreaks of SRSV in 2002 reported to CDSC NI to date.

	Number of Reports received		Cumulative total	
	02/17-20	01/17-20	02/01-20	01/01-20
Campylobacter	53	102	245	273
C. difficile Toxin	12	29	117	139
C. perfringens	1	1	8	4
E. coli 0157	1	1	3	2
Salmonella total	3	24	37	85
S. enteritidis (PT 4)	0	11 (7)	5 (1)	47 (35)
S. typhimurium (DT 104)	0	3 (1)	12 (3)	15 (4)
Salmonella other	3	3 (1)	20	23
Shigella	2	4	5	4
Cryptosporidium	17	123	57	292
Giardia	0	1	6	5
Adenovirus (faeces)	7	7	71	52
Enterovirus (faeces)	0	2	16	7
Rotavirus	80	778	181	237
SRSV	12	3	161	51

NB 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.

Mycobacteria: Laboratory Reports, Weeks 13-20

	Number of Reports received		Cumulative total	
	02/13-16	02/17-20	02/01-20	01/01-20
M. avium-intracellular group	4	0	7	7
M. bovis	0	0	0	0
M. chelonae	1	1	2	1
M. kansasii	1	0	2	3
M. malmoense	0	0	1	0
M. marinum	0	0	0	1
M. tuberculosis	3	1	18	12
Total	9	2	30	24

Comment:

There were four reports of *M. avium-intracellular* during weeks 13-20 of 2002 isolated from lower respiratory tract, lymph nodes, sputum and tissue. Three were female aged between 1 and 71 years and the other was male aged 84 years.

There were two reports of *M. chelonae* during this twelve week period isolated from pleura and lower respiratory tract. Both patients were female aged 62 and 85 years.

One report of *M. kansasii* isolated from lower respiratory tract was reported during this twelve week period. The patient was male aged 77 years.

There were four reports of *M. tuberculosis* during weeks 13-20 of 2002. Two were isolated from sputum, and two were isolated from lower respiratory tract. All four patients were male aged 29 to 81 years.

Hepatitis: Laboratory Reports Weeks 13-20

	Number of Reports received		Cumulative total	
	02/13-16	02/17-20	02/01-20	01/01-20
Hepatitis A	0	0	4	1
Hepatitis B	1	3	13	8
Hepatitis C	7 (1)	3	18 (3)	26 (4)

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

Comment:

Hepatitis A

There were no reports of Hepatitis A during weeks 13-20 of 2002.

Hepatitis B

There were four reports of Hepatitis B during weeks 13-20. Three were female aged between 23 and 30 and the other, aged 22 was of unknown sex.

Hepatitis C

There were 10 reports of Hepatitis C during this twelve week period. One was associated with intravenous drug use. Three were female aged between 30 and 83. The other, aged 50 was of unknown sex.

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Belfast City
Belvoir Park
Causeway
Craigavon
Daisyhill
Erne
Mater
Musgrave Park
Regional Mycology
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Royal Victoria
Tyrone County
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Monthly numbers are provisional and should not be used to indicate trends.