

1.5 Other Forms of Bacterial Meningitis*

(*excluding meningococcal disease)

Summary

Number of cases, 2011:35
Number of cases, 2010:42
Number of cases, 2009:40
Crude incidence rate, 2011: 0.8/100,000

Apart from *Neisseria meningitidis*, which is the most common cause of bacterial meningitis in Ireland, other pathogens cause this disease including those caused by non-notifiable organisms, details of which are presented below. For information on invasive meningococcal disease (*Neisseria meningitidis*), see other chapter within this report. Information on bacterial meningitis caused by notifiable diseases is summarised below and further data are available in the organism specific chapter. The figures presented in this chapter are based on data extracted from the Computerised Infectious Disease Reporting (CIDR) system on 29th August, 2012. These figures may differ from those published previously due to ongoing updating of notification data on CIDR.

Bacterial meningitis caused by diseases not otherwise specified:

In total, 35 cases of meningitis under this disease category were notified in 2011, among which two patients, aged less than four months, died. The causative pathogens were identified in 57% (n=20)

of cases. No causative pathogen was identified in the remaining 43% (n=15) cases, a decrease compared to that recorded during the previous year with 50% (n=21/42).

Among the bacterial meningitis (not otherwise specified) cases notified in 2011 were 15 cases of Beta Haemolytic Streptococcus Group B (*Streptococcus agalactiae*), 14 of which were infants aged 4 months or less, one of whom died and also in one adult aged between 50 and 54 years.

Staphylococcus aureus occurred in two patients (age range 11 months to 76 year). Other meningitis notifications include one caused by *Escherichia coli* in an infant eight months of age, one caused by *Klebsiella oxytoca* in an infant five months of age and another caused by *Streptococcus* species in an infant aged four weeks.

Bacterial meningitis caused by specified notifiable diseases:

Haemophilus influenzae

Four cases of meningitis due to *H. influenzae* were notified in 2011. The age range was 17 months to 17 years, two of which were caused by non-typeable strains and another two caused by strains that were not type b. No deaths were reported. See the chapter on invasive *H. influenzae* disease for further details.

Leptospira species

In 2011, one case of leptospirosis meningitis was reported in a male aged more than 65 years, which may have been work-related. See a separate chapter on non-IID zoonotic diseases for further details.

Listeria species

Two cases of listeriosis meningitis were notified in 2011: one in a woman aged between 80-84 years with an underlying medical condition, and the other in a neonate. See the chapter on listeriosis disease for further details.

Streptococcus pneumoniae

In 2011, 24 cases of pneumococcal meningitis were notified, compared to 25 in 2010 and 34 in 2009. Cases in 2011 ranged in age from three months to 80 years. One pneumococcal meningitis related death in 2011 was reported in an adult aged 45-49 years. This adult had an immunosuppressive condition, but was unvaccinated and developed a serotype 19F infection (a serotype that is included in both the PCV7 and PCV13 vaccines). See a separate chapter on invasive pneumococcal disease for further details.

Mycobacterium species

In 2011, three tuberculosis meningitis cases were notified (provisional). Cases ranged in age from 41 to 71 years. One tuberculosis meningitis death was reported. See the chapter on tuberculosis for further details.

Table 1. Annual notifications of bacterial meningitis other than meningococcal disease, 2009-2011

Notified under	Causative organism	2009	2010	2011	2009-2011
Haemophilus influenzae disease (invasive)	Haemophilus influenzae	3	2	4	9
Leptospirosis	Leptospira species	1	0	1	2
Listeriosis	Listeria species	1	3	2	6
Salmonellosis	Salmonella enteritidis	1	0	0	1
Streptococcus pneumoniae infection (invasive)	Streptococcus pneumoniae	34	25	24	83
Streptococcus Group A infection (invasive)	Streptococcus pyogenes (Group A strep)	0	1	0	1
Tuberculosis*	Mycobacterium species	8	9	3*	20
Total Bacterial Meningitis, Specified		48	40	34	122
	Escherichia coli	3	2	1	6
	Enterobacter species	1	0	0	1
	Klebsiella oxytoca	0	0	1	1
	Mycoplasma pneumoniae	0	1	0	1
Bacterial Meningitis, Not Otherwise Specified	Streptococcus agalactiae (Group B strep)	7	10	15	32
	Staphylococcus aureus	2	6	2	10
	Streptococcus bovis	1	0	0	1
	Staphylococcus capitis	0	1	0	1
	Streptococcus species	1	1	1	3
	Not reported	25	21	15	61
Total Bacterial Meningitis, Not Otherwise Specified		40	42	35	117
Total Bacterial Meningitis		88	82	69	239

Notes: *Tuberculosis meningitis figure for 2011 is provisional