

AUSTRALIAN MENINGOCOCCAL SURVEILLANCE PROGRAMME, 1 APRIL TO 30 JUNE 2016

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Introduction

The reference laboratories of the National Neisseria Network, Australia report laboratory data on invasive meningococcal disease (IMD) cases confirmed by laboratory testing using culture and non-culture based techniques for the Australian Meningococcal Surveillance Programme. Culture positive cases, where *Neisseria meningitidis* is grown from a normally sterile site or skin lesions, and non-culture based diagnoses, derived from results of nucleic acid amplification testing and serological techniques, are defined as IMD according to Public Health Laboratory Network definitions. Data contained in quarterly reports are usually restricted to a description of the numbers of cases by jurisdiction and serogroup, where known.

Results

Of note in this quarter 2016 is the number and proportion of IMD caused by serogroup W. In the years 2007 to 2011 the proportion of IMD caused by serogroup W in Australia ranged from 1.8% to 4.5%, and increased to 8.6% to 9.9% in 2013 to 2014. In 2015, this increased markedly to 31/81 (21.4%) of the IMD in Australia. In 2015, 25/31 serogroup W IMD strains were genotyped, and 81% were

sequence type (ST)-11, and had the *porA* antigen encoding gene type P1.5,2, the same genotype as the hypervirulent serogroup W strain reported in the United Kingdom and South America since 2009. Nationally enhanced surveillance strategies, including whole genome sequencing and phylogenetic inference, has been applied to the recent emergence in Australia of *N. meningitidis* serogroup W in Australia.

Some minor corrections to data in the Table below may be made in subsequent reports if additional data are received. A full analysis of laboratory confirmed cases of IMD in each calendar year is contained in the AMSP annual report published in *Communicable Diseases Intelligence*. For more information see *Commun Dis Intell* 2016;40(1):E13.

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Table: Number of laboratory confirmed cases of invasive meningococcal disease, Australia, 1 April to 30 June 2016, by serogroup and state or territory

State or territory	Year	Serogroup													
		A		B		C		Y		W135		ND		All	
		Q2	YTD	Q2	YTD	Q2	YTD	Q2	YTD	Q2	YTD	Q2	YTD	Q2	YTD
Australian Capital Territory	2016	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2015	0	0	1	1	0	0	0	0	0	0	0	0	1	1
New South Wales	2016	0	0	2	7	0	1	3	4	5	9	0	2	10	23
	2015	0	0	9	12	0	1	2	2	1	2	1	1	13	18
Northern Territory	2016	0	0	2	2	0	0	0	0	0	0	0	0	2	2
	2015	0	0	1	1	0	0	0	0	0	0	0	0	1	1
Queensland	2016	0	0	2	5	0	0	2	6	3	5	2	2	9	18
	2015	0	0	4	9	0	0	0	1	0	0	1	1	5	11
South Australia	2016	0	0	5	11	0	0	0	0	0	0	0	0	5	11
	2015	0	0	7	9	0	0	0	0	0	0	0	0	7	9
Tasmania	2016	0	0	0	0	0	0	0	0	0	2	0	0	0	2
	2015	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Victoria	2016	0	0	4	7	0	1	2	2	9	15	0	0	15	25
	2015	0	0	8	16	0	0	2	2	5	6	0	0	15	24
Western Australia	2016	0	0	1	2	0	0	0	0	1	3	0	0	2	5
	2015	0	0	2	4	0	0	1	1	0	0	0	0	3	5
Total	2016	0	0	16	34	0	2	7	12	18	34	2	4	43	86
	2015	0	0	32	52	0	1	5	6	6	8	2	2	45	69