

Short reports

OUTBREAKS OF DENGUE IN NORTH QUEENSLAND, 1990–2008

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The (recognised) outbreaks of dengue that have occurred in north Queensland from 1990 to 2008 (inclusive) are summarised in the following Table.

Year(s)	Location	Reported cases	Suburbs / islands predominantly affected	Duration of outbreak	Serotype
1990–91	Cairns, Townsville, Torres Strait	27		8 weeks	Dengue 1
1992–93 ^{1,2}	Townsville, Charters Towers	900		64 weeks	Dengue 2
1995 ³	Cairns	4	Manunda	14 weeks	Dengue 2
1996–97 ⁴	Torres Strait, Cairns	208	Mer, Erub, Masig, lama, Thursday Island, Westcourt	28 weeks	Dengue 2
1997–98	Cairns	12	Whitfield	11 weeks	Dengue 2
1997–99 ⁵	Cairns, Mossman, Port Douglas	498	Cairns North, Parramatta Park, Stratford, Machans Beach, Holloways Beach, Bungalow	70 weeks	Dengue 3
2000 ⁶	Cairns	49	Machans Beach	6 weeks	Dengue 2
2001 ⁷	Townsville	9	Mysterton, North Ward	3 weeks	Dengue 2
2002 ⁸	Kuranda	21		10 weeks	Dengue 2
2002 ⁸	Townsville	2	Railway Estate	2 weeks	Dengue 1
2002 ⁸	Cairns	2	Smithfield	3 weeks	Dengue 4
2003	Cairns	3	Parramatta Park	2 weeks	Dengue 1
2003 ⁹	Mareeba	1		1 week	Dengue 1
2003 ¹⁰	Cairns	5	Manunda	3 weeks	Dengue 2
2003–04 ¹⁰	Cairns, Townsville, (Torres Strait)	536	Parramatta Park, Bungalow, Stratford, Aeroglen, Edge Hill, Whitfield, Townsville CBD, Cranbrook, Currajong, North Ward, Thursday Island	69 weeks	Dengue 2
2003–04 ^{10, 11}	Torres Strait, Cairns	356	lama, Thursday Island, Mer	41 weeks	Dengue 2
2004	Torres Strait	1	Masig	1 week	Dengue 2
2005	Torres Strait	56	Mer, Thursday Island, Erub	7 weeks	Dengue 4
2005	Townsville	18	Currajong	22 weeks	Dengue 4
2005–06	Townsville	8	Cranbrook	6 weeks	Dengue 3
2006	Cairns	29	Gordonvale, Manunda	18 weeks	Dengue 2
2007	Townsville	46	South Townsville, West End	12 weeks	Dengue 3
2008	Port Douglas/ Mossman	22		10 weeks	Dengue 3
2008	Cairns	1	Manoora?	1 week	Dengue 2
2008	Cairns, Townsville	99 (with onset in 2008)	Cairns North, Clifton Beach, Whitfield, Parramatta Park, Edge Hill, Belgian Gardens (with more suburbs in 2009)	8 weeks in 2008 – ongoing into 2009	Dengue 3
2008	Townsville	5 (with onset in 2008)	North Ward, City	2 weeks in 2008 – ongoing into 2009	Dengue 1

It is obvious that outbreaks of dengue have become more frequent in north Queensland in recent years. This is a reflection upon the deteriorating dengue situation in the Asia–Pacific region and elsewhere,¹² as every outbreak in north Queensland is initiated by a viraemic traveller to the region.

However, increased surveillance for dengue in north Queensland and the use of very powerful molecular techniques that are able to discern significant differences between isolates of dengue viruses belonging to the same serotype¹⁰ have also contributed to this increase, particularly in more recent years. It is quite possible that some small outbreaks, or outbreaks caused by (unrecognised) differing genotypes of the same serotypes of dengue viruses, were not detected, and therefore the Table may under-enumerate the actual number of outbreaks that occurred in north Queensland over the 18 years.

A detailed review of the recognised outbreaks that occurred in 2005–2008 (inclusive) is in preparation.

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References

1. Streatfield R, Sinclair D, Bielby G, Sheridan J, Pearce M, Phillips D. Dengue serotype 2 epidemic, Townsville, 1992–93. *Commun Dis Intell* 1993;17:330–332.
2. McBride WJH, Mullner H, LaBrooy JT, Wronski I. The 1993 dengue 2 epidemic in Charters Towers, North Queensland: clinical features and public health impact. *Epidemiol Infect* 1998;121:151–156.
3. Ritchie S, Hanna J, van den Hurk A, Harley D, Lawrence R, Phillips D. Importation and subsequent local transmission of dengue 2 in Cairns. *Commun Dis Intell* 1995;19:366–370.
4. Hanna JN, Ritchie SA, Merritt AD, van den Hurk AF, Phillips DA, Serafin IL, et al. Two contiguous outbreaks of dengue type 2 in north Queensland. *Med J Aust* 1998;168:221–225.
5. Hanna JN, Ritchie SA, Phillips DA, Serafin IL, Hills SL, van den Hurk AF, et al. An epidemic of dengue 3 in far north Queensland, 1997–1999. *Med J Aust* 2001;174:178–182.
6. Ritchie SA, Hart A, Long S, Montgomery B, Walsh I, Foley P. Update on dengue in north Queensland. *Arbovirus Res Aust* 2001;8:294–300.
7. Hills SL, Piispanen JP, Humphreys JL, Foley PN. A focal, rapidly-controlled outbreak of dengue fever in two suburbs in Townsville, North Queensland, 2001. *Commun Dis Intell* 2002;26:596–600.
8. Hanna JN, Ritchie SA, Hills SL, Pyke AT, Montgomery BL, Richards AR, Piispanen JP. Dengue in north Queensland, 2002. *Commun Dis Intell* 2003;27:384–389.
9. Dengue in north Queensland, 2003: an update. *Tropical Public Health Unit Communicable Disease Control Newsletter* 2003;(43):1–2.
10. Hanna JN, Ritchie SA, Richards AR, Taylor CT, Pyke AT, Montgomery BL, et al. Multiple outbreaks of dengue serotype 2 in north Queensland, 2003/04. *Aust N Z J Public Health* 2006;30:220–225.
11. McBride WJH. Deaths associated with dengue haemorrhagic fever: the first in Australia in over a century. *Med J Aust* 2005;183:35–37.
12. Gubler DJ. Epidemic dengue/dengue hemorrhagic fever as a public health, social and economic problem in the 21st century. *Trends Microbiol* 2002;10:100–103.