TOP END

HEALTH SERVICE

NORTHERN TERRITORY GOVERNMENT

Salt Marsh Mosquito Pest Calendar for Coastal NT 2021



Aedes vigilax – northern salt marsh mosquito

Medical Entomology
Public Health Unit
Top End Health Service
Northern Territory Health

Salt marsh mosquito lifecycle

The northern salt marsh mosquito *Aedes vigilax* is the most important pest mosquito in the Top End of the NT due to its aggressive biting habits, its ability to bite during the day as well as the night, and its sudden emergence in very high numbers. This calendar shows periods when *Ae. vigilax* pest numbers are expected in the Darwin area in 2021 in relation to Darwin Harbour tides. Other coastal areas of the NT near breeding sites will have pest problems at around the same time. Heavy rainfall between October and December can cause high numbers outside the indicated pest periods. These potential rain related pest periods are indicated as shaded in light pink in the calendar.

Aedes vigilax breeding sites include the upper tidal section of extensive mangrove areas, brackish swamps with extensive reed growth and flood plains associated with tidal rivers. The mosquitoes lay their eggs in moist mud. The eggs hatch when the habitat is flooded by large tides or heavy rain. Newly emerged adult mosquitoes start flying 9 days after the tide or rain and persist in high numbers for 7 to 14 days, depending on the humidity. They can disperse over long distances of up to 50km but are generally more common within 5km of breeding sites.

In Darwin, salt marsh mosquito numbers increase after each succeeding spring tide and heavy rain between August and January. Very high *Ae. vigilax* numbers can usually be expected between October and mid-January, depending on tides and rain. The mosquitoes are largely absent or occur in relatively low numbers from February to July.

Disease risk

Aedes vigilax can transmit Ross River virus and Barmah Forest virus. The highest risk months for these viruses in the Top End are December and January. Older mosquitoes present at the tail ends of the highest pest periods pose a higher potential risk for Ross River virus transmission, as they have had more time to acquire the virus from animal reservoirs.

Personal protection

Personal protection, such as full-length trousers, long-sleeved shirts, socks and shoes, and the use of insect repellents containing DEET, picaridin or PMD (extract of lemon eucalyptus - at a minimum concentration of 30%) is needed to provide protection from salt marsh mosquitoes. Avoidance of affected areas is the best protection measure.

For more information please contact: Medical Entomology, PHU, Top End Health Service, Darwin on (08) 8922 8901

Disclaimer:

- This Pest Calendar has been developed to provide an indication of potential *Ae. vigilax* pest periods, and therefore should only be used as an indicator.

Salt Marsh Mosquito Pest Calendar for coastal NT 2021

JANUARY

M	T	W	T	F	S	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

FEBRUARY

M	T	W	T	F	S	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28

MARCH

M	T	W	T	F	S	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

APRIL

M	T	W	T	F	S	S
		1	2	3		4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

MAY

M	T	W	T	F	S	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

JUNE

M	T	W	T	F	S	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

JULY

M	T	W	T	F	S	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

AUGUST

M	T	W	T	F	S	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	21	21	22
23	24	25	26	27	28	29
30	31					

SEPTEMBER

M	T	W	T	F	S	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

OCTOBER

M	T	W	T	F	S	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

NOVEMBER

M	T	W	T	F	S	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

DECEMBER

M	T	W	T	F	S	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

High mosquito peaks

Moderate mosquito peaks

Potential for mosquito peaks caused by rain

For more information visit https://health.nt.gov.au