

## Vector-borne Disease Notifications in New Zealand

TABLE 1: NUMBER OF NOTIFICATIONS OF DENGUE FEVER IN NEW ZEALAND, BY RISK FACTORS AND YEAR, 1997-2012

Risk factor	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Overseas travel during incubation period	14	25	9	7	92	66	54	8	11	18	114	113	137	51	41	76
No overseas travel, prior travel unknown	0	1	0	0	1	4	1	0	0	1	0	1	3	0	0	1
<b>Total</b>	<b>14</b>	<b>26</b>	<b>9</b>	<b>7</b>	<b>93</b>	<b>70</b>	<b>55</b>	<b>8</b>	<b>11</b>	<b>19</b>	<b>114</b>	<b>114</b>	<b>140</b>	<b>51</b>	<b>41</b>	<b>77</b>

Source: ESR(2013)

From 1997 to 2012, more than 98% of the annual notifications of dengue fever had a history of overseas travel during the incubation period (Table 1). This indicates that the majority of cases contracted the diseases outside New Zealand.

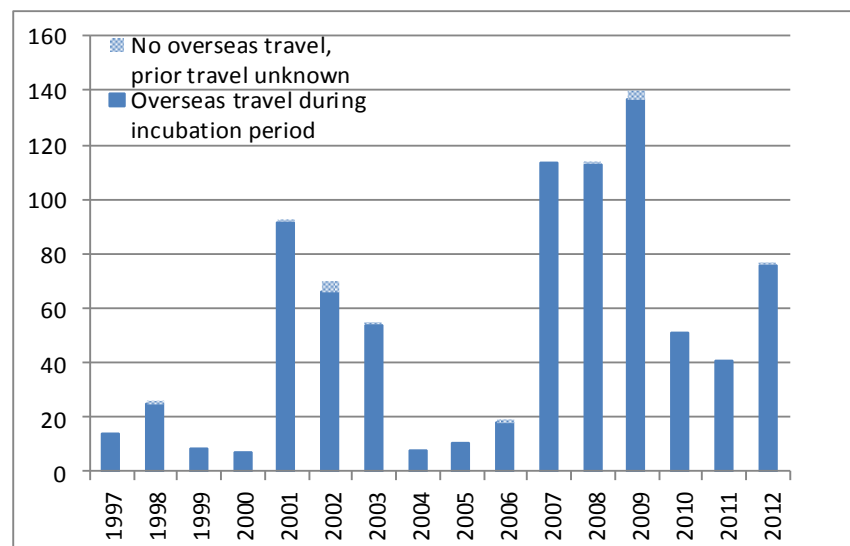
In the year 2001, the annual notifications of dengue fever rose dramatically to 93 cases from an average of 14 cases between 1997 and 2000 (Figure 1). According to the Institute for Environmental Science and Research (ESR), the majority of these cases reported travel to Samoa where an outbreak of dengue fever happened (ESR, 2001; Pacific Islands Report, 2007).

Since 2001, the annually notified dengue fever cases decreased gradually to 55 cases in 2003 before it fell markedly to 8 cases in 2004. The number of cases rose slightly in the next 2 years before soaring to 114 cases in 2007 and 140 cases in 2009 (Figure 1). ESR (2007) data for 2007, showed that the most common countries travelled to were the Cook Islands, followed by Samoa. According to the media, the Cook Islands had an outbreak of dengue fever in 2007 while Samoa had an increased number of reported cases compared to the previous years (ABC Radio Australia, 2007; Pacific Islands Report, 2007).

In contrast, dengue fever notifications decreased to 51 cases in 2010, but increased again in 2012 (77 cases) (Figure 1).

As overseas travel played such an essential role in dengue epidemic as well as many other vector-borne diseases in New Zealand, the Ministry of Health has advised its citizens to avoid bug bites during travelling (Ministry of Health, 2013).

FIGURE 1: NUMBER OF NOTIFICATIONS OF DENGUE FEVER IN NEW ZEALAND, BY EXPOSURE RISK FACTORS AND YEAR, 1997-2012



Source: ESR(2013)

### REFERENCES

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### HIGHLIGHTS:

- From 1997 to 2012, more than 98% of the annual notifications of dengue fever had history of overseas travel during incubation period.
- There were 2 dramatic increases in the annual notifications of dengue fever between 1997 and 2012, both of them are consistent with the outbreak that happened in other countries.
- The Ministry of Health suggested its citizens to avoid bug bites when travelling overseas to reduce the risk of contracting dengue fever and other vector-borne diseases.

### CONTACT:

Fei Xu  
f.xu@massey.ac.nz