

Sting of Climate Change

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NORTHERN Australia is much closer to Australia's neighbours than we are down south. Papua New Guinea is only 3km from Queensland's outer islands. Sydney is a three-hour flight from our only southern neighbour. The expansive Tasman Sea is less a "ditch" than the narrow Torres Strait or Timor Gap.

Not only is the north much closer to many more of Australia's neighbours, these countries face many more grave problems that can spill over into Australia. We have seen this with tuberculosis in far north Queensland.

Climate change could well aggravate these geographical realities, place greater demands on local public health services and require deeper co-ordination between the Commonwealth and the northern states.

While climate change may sink Tuvalu and Kiribati, it is making larger parts of the Pacific Islands, Indonesia and the Philippines more hospitable to mosquitoes bearing malaria and dengue fever.

Within Australia, the effects of climate change are bad for mosquitoes in southern Australia, but good for them in the north. Conditions may improve for malaria-carrying mosquitoes as far south as Gladstone, while dengue-carrying mosquitoes could migrate downwards to Rockhampton.

However, the biggest risks come from the importation of these diseases by infected people travelling to Australia. Between 2000 and 2006, the national disease notification system recorded an average of 701 malaria cases a year, up from 193 a year from 1983 to 1991. Most of these cases appear to have been imported. Dengue cases averaged 303 a year from 2000 to 2006, peaking at 861 in 2003. This is bad news as malaria and dengue are already serious public health problems globally and to our north.

Malaria is the ninth-largest cause of death in low-income countries, accounting for up to 2 million deaths a year. In our largest neighbour, Indonesia, close to half the population of more than 220 million people is at risk from this often lethal disease.

Recently, malaria cases have been documented in 65 of the Philippines' 79 provinces. More than 30 per cent of Solomon Islanders and a quarter of people in Papua New Guinea could be infected with malaria every year.

Early modelling suggests that due to the impacts of climate change, by 2050 malaria will be up to four times more prevalent than it was in 1990, with up to 60 per cent of the world living in malaria-endemic zones. The population at risk from malaria in Papua New Guinea alone could increase by 2 million people.

Dengue, while generally responsible for far fewer deaths than malaria, is proving to be much harder to eradicate once it has become established -- as it has in the Torres Strait islands.

In September, the World Health Organisation declared a dengue pandemic in the Pacific Islands, a conclusion backed up by the Institute of Medical Research at Royal Brisbane Hospital. By 2085, more than half of the world may live in areas at risk of dengue. For Fiji, it is estimated that climate change could boost dengue fever numbers by between 20 and 30 per cent.

Climate change will make northern Australia more vulnerable to the stings of malaria and dengue. In preparation, the Australian Government is already helping Indonesia, the Philippines and Pacific Islands better combat their malaria and dengue problems.

Fortunately, public health is one of the fastest-growing areas of the AusAID budget. More needs to be done though, particularly in surveillance of areas previously unaffected by these diseases of mosquitoes that carry them.

In the longer run, establishing a sustainable public health facility north of the Torres Strait border would provide a good centre for disease monitoring, and as a first-line facility during epidemics. This centre would serve to assist neighbouring countries fight these two diseases while limiting their spread to our shores.

Within Australia, the Northern Territory policy of screening all visitors from groups at high malaria risk should be extended to Queensland and Western Australia. In the Territory, these include illegal fishermen from Indonesia, refugees, and students from the Solomon Islands and Papua New Guinea. Similar testing should also be considered for dengue.

In our deliberations over climate change, we should not forget the mere mozzie and its potentially lethal sting.