

THE souvenirs NO TRAVELLER WANTS

FROM BAGHDAD BOILS TO AFRICAN EYE WORMS, THERE'S A WORLD OF TROPICAL INFECTIONS OUT THERE, AND THEY DO SOMETIMES STRIKE CLOSER TO HOME, WRITES LOUISE MARTIN-CHEW.



Dr Robert Norton a Medical Microbiologist at Townsville Hospital stresses that the risk is not so much to do with living in the tropics as such, but poor living conditions

Tropical diseases do not have much of a public profile in Australia, where they affect mostly Aborigines and returning travellers.

There have been cases of malaria north of Rockhampton and regular instances of the bacterial infection brucellosis (usually among feral-pig shooters). An outbreak of dengue fever in the Torres Strait in 2003 resulted in the first death from this disease in 100 years.

But it may not be widely known that a tropical disease can stay with someone much longer than, say, their travel tan, and outlast photos and memories alike.

Dr Jenny Robson, a Medical Microbiologist at Brisbane's Sullivan Nicolaides Pathology, relates the story of a girl who had not been overseas for four years, but felt a sensation akin to a worm crawling through her eye.

The girl had been seeing an allergy specialist, but tests done at Dr Robson's laboratory revealed hundreds of worms in her blood. This was a case of loa loa, or African eye worm, which can turn up in the eye or under the skin in any part of the body. Luckily, the condition is highly treatable, as are many tropical diseases.

In terms of dormant diseases, Dr Robson has also seen interesting cases in recent years among former Australian

soldiers forced to work on the Burma Railway in the 1940s. Many contracted the roundworm infection strongyloidiasis, a condition which can persist for a lifetime.

The disease had been dormant for decades, but now that these men were older and their immune systems were waning, this silent infection was making itself manifest. Vietnam veterans and patients from elsewhere in Southeast Asia or from Fiji may also have the problem.

Defined as diseases that occur predominantly between the Tropic of Cancer and the Tropic of Capricorn, tropical diseases are more prevalent in developing countries, where clean water supply is not guaranteed and hygiene and housing standards are lower than those in the developed world.

Dr Robert Norton a Medical Microbiologist at Townsville Hospital stresses that the risk is not so much to do with living in the tropics as such, but poor living conditions. "The real burden of these diseases is borne by the poor and disadvantaged," he says.

For travellers to tropical areas overseas, the most common infections are diarrhoeal diseases and the bulk of these involve salmonella or giardia.

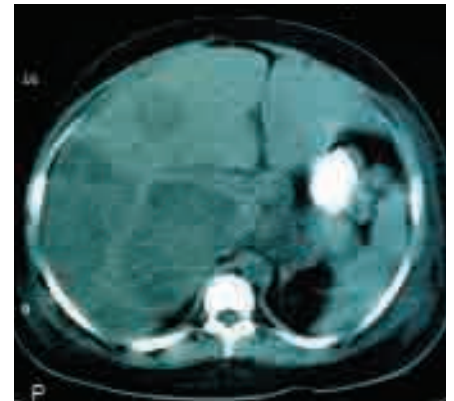
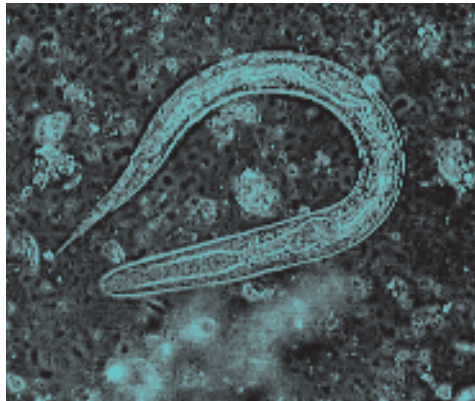
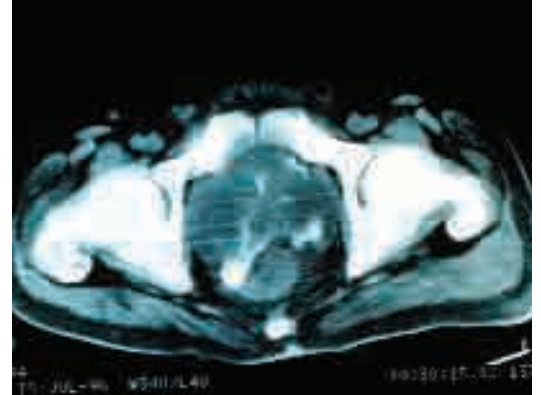
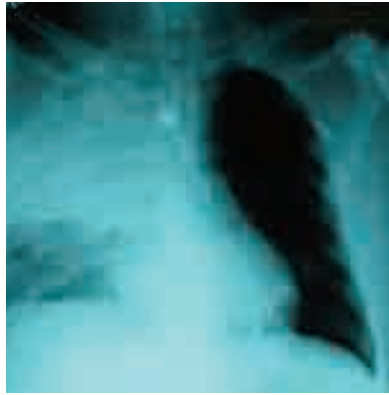
Some of the most serious tropical diseases tend to be heralded by fevers.

Top left: Chest X ray showing a community acquired pneumonia in melioidosis

Top right: CT scan of prostate showing prostatic abscesses in melioidosis

Bottom left: The strongyloides round worm. An important cause of diarrhoea in indigenous communities

Bottom right: CT scan of the abdomen showing large liver abscesses



Malaria is the most common, and, while it is a life-threatening illness, it is also highly treatable. The World Health Organisation estimates there are up to half a billion cases of malaria each year, of which about one million are fatal. In fact, Dr Robson suggests that in the returning traveller, fever should be assumed to be malaria until proven otherwise.

Recent increases in malaria and dengue fever have been attributed to the urbanisation of previously rural areas in Southeast Asia. The malarial mosquito flourishes in swampy rural conditions but dengue fever, also transmitted by mosquito bite, is common in cities as well.

Among other nasties waiting for the unsuspecting traveller are insect and tick-borne viruses, measles from abroad, and schistosomiasis (or bilharzia), which is common in Africa and South America and involves infection with types of flatworm whose larvae are able to penetrate swimmers' skin. While it may not produce symptoms, the worm can live in the body for up to 20 years.

So how best should you minimise your exposure to tropical diseases during overseas travel? There is no vaccine for malaria but preventative drugs are available. Before travelling, it is wise to check the World Health Organisation website for the latest information about

how to avoid diseases and infections, www.who.int/tih.

Basic hygiene rules, such as boiling drinking water, frequent washing and having appropriate vaccinations, are essential. Measles from overseas is a danger to Australian travellers born after 1966, and a pre-travel vaccination may be recommended.

A recent case of the bacterial disease melioidosis, which can be highly fatal, was seen by Dr Robson in a traveller who was injured in Sri Lanka during the Boxing Day tsunami. She also cites skin conditions such as leishmaniasis, which has affected hundreds of US troops serving in the Middle East. It causes large, long-lasting sores and is known by the troops, in not so affectionate terms, as Baghdad boil. Transmitted by the bite of types of sand fly, in its most virulent form it can cause spleen and liver damage and be fatal.

With all these conditions, early treatment is best if prevention measures have failed. In terms of bilharzia, Dr Robson advises travellers to avoid swimming in fresh water in affected areas. The worm is spread by snails that live in such water.

Within Australia, while it is possible to contract dengue fever (in northern Australia), and malaria (north of Rockhampton), the

risk, says Dr Norton, is generally low. Other diseases in northern Australia are melioidosis, brucellosis, atypical bacterial infections, diarrhoeal diseases, parasitic scabies and intestinal worms.

"For your average non-indigenous traveller, someone from Melbourne or Sydney, the likelihood of contracting tropical disease on a visit to northern Australia is very slim. However, for your indigenous individual living in northern Australia, it is very common," he says.

While overall, there are few of these cases, reflecting the small percentage of indigenous Australians, Dr Norton warns practitioners and laboratories in southern Australia to be aware of all of these diseases and their symptoms.

Between 1990 and 2000, there were about 10 deaths from tropical diseases among Australian travellers. While there has been a worldwide increase in dengue fever, new discoveries, such as the use of predators to attack the dengue mosquito, pioneered by Professor Brian Ray's team at the Queensland Institute of Medical Research, present a significant advance.

Change is constant, so before travelling, take current advice, and minimise your risk. As Dr Robson says: "Accurate knowledge about prevention is the traveller's most effective weapon." 🔥