

AVRU IN THE MEDIA - 2001

Researchers warn of European wasp sting danger

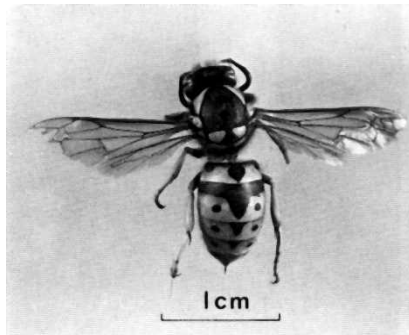
ABC News Online 26/6/2001

The Australian Venom Research Unit has warned of the danger of European wasps after a girl in Bendigo, in central Victoria, was attacked and bitten (sic) 50 times.*

Eight-year old Alison Kelly spent a night in hospital after the attack alongside the Bendigo Creek at Kangaroo Flat. Research unit director Dr Ken Winkel says the biggest danger is for people who are allergic to wasps, for whom even a single sting can cause problems. "The European wasps are particularly dangerous compared to our native paper wasps because they tend to have very large nests so rather than 10 to 100 you can have thousands and tens of thousands of these critters in a nest that may be hidden away and you may just stumble into it accidentally" Dr Winkel said.

A woman who helped the girl after she heard her screams says she hosed her down to stop the wasps stinging further. Shirley Leskovec says the girl's clothes and hair were covered in black and yellow wasps. "I grabbed hold of her and I dragged her along the side of the bank of the creek and into my garden" Mrs Leskovec said. "I thought she might have only had a few on her, but when I looked the whole back of her and her little trousers that she had on, they were just like yellow and black."

***AVRU comment:**



Wasp stings, located in the tail of the animal, inject the venom that causes pain, swelling and other symptoms. The stings are used defensively, against perceived threats to the nest. The jaws of a wasp are capable of biting, but no venom glands are present on the head.

Vespula germanica, the European wasp, showing the sting at the tip of the abdomen.

Anti-venom research centre may close

David Cohen , Guardian Unlimited Thursday May 10, 2001

A tug of war over funding being fought between a state government in Australia and the nation's national government may result in the imminent closure of the country's only academic centre devoted to anti-venom research.

The Australian Venom Research Unit, at the University of Melbourne, in the state of Victoria, will shut its doors for good next month unless it manages to make up the shortfall created by the state government's recent decision to withdraw its annual grant of £40,000 for its work. The funding pays the salaries of the centre's director and his deputy.

At issue is not so much the amount of funding, which both the federal and local government agree is modest, but rather who ought to be paying it.

Publicly, at least, the two governments have said that the work currently being done at the centre is of international importance for Australia, home to the world's largest contingent of venomous creatures, but each argues that it is really the other who is honour-bound to support these activities.

Until the centre's establishment in 1994, at the university's department of pharmacology, the Australian federal government shouldered the responsibility for funding initiatives to do with venom research, which had traditionally constituted a small but important part of academic activity in the medical field for much of the last century. Since then, however, the local government has picked up the tab in areas where funding from the private sector cannot be found.

The centre's anti-venoms are used most commonly in the treatment of the 3,500 Australians estimated to be bitten or stung each year, about three of whom die. Increasingly, however, the research unit has found itself called on to supply its expertise to developing nations such as the Indonesian province of West Papua, where, for example, up to 40% of snake bite victims in any given year will perish. The centre has links with other medical researchers and institutions in Mauritius, Papua New Guinea, Saudi Arabia, Singapore and the United States.

In a telephone interview, Ken Winkel, the unit's director, said that the threatened closure highlighted what he described as being a global crisis in anti-venom production and anti-venom research. The crisis has happened, he said, because pharmaceutical companies did not see anti-venom research as an especially lucrative area to be funding - not compared with the commercially sexier prospect of developing a cure for Aids or cancer - while governments in the rich world increasingly tended not to see it as a high social priority.

"The fact that this work doesn't affect hundreds of thousands of people around us makes it difficult for governments, in particular, to appreciate its importance," said Dr Winkel. Nevertheless, he added, "there really is a global crisis going on right now, particularly in places like North Africa," where, he predicted, thousands could die after the region runs out of anti-venoms "in about five years time". New anti-venoms, he said, would not only save many lives but also reduce or remove the long term side effects associated with snake and spider bites, jellyfish stings or wasp, bee and ant stings.

It's our duty to lead on antivenom research

Janet McCalman, THE AGE (Melbourne, Australia) 05 May 01

Three and a half thousand people are admitted to hospital each year in Australia for treatment for envenomation: from spider bites, bee and wasp stings, snake bites, marine stings, ants and ticks, in that order. Thanks to Australian science and emergency medicine, only about five of the patients die.

In Papua New Guinea, it is a different story. In some areas the snake-bite rate is one of the highest in the world. Over 10 years, about one in 20 people will be bitten. In some Fore villages, snake bite has been the commonest cause of death, vastly more important than the brain disease kuru that made them world famous because of its similarity to mad cow disease.

And the snake bite victims die. More than a third need ventilation, and even if they reach medical care there will be no antivenom because one ampoule of Australian antivenom costs between \$900 and \$1300 - about half the annual GDP per capita. They die in Vietnam also, where 30,000 people a year are bitten by snakes. In one World Health Organisation study, the case fatality rate was 22 per cent. In Indonesia it's the same. In West Papua, the estimated case fatality rate is 40 per cent. Timor has no specific snake antivenoms, neither have Cambodia nor Laos. Of course, this isn't our problem. In fact, the Federal Government doesn't even think that Australian envenomation is its problem, and that the Victorian Government can continue to fund the Australian Venom Research Unit out of its allegedly vast surplus.

Perhaps they're right. Only a couple of Australian deaths out of 100,000 annually from snake bites around the world is not exactly a national health crisis (although our defence force carries out operations in parts of South-East Asia, and our young people travel and work there).

It may not be our problem (though exotic venomous snakes are still brought into this country), but it is our responsibility. It's our responsibility because for the past 100 years Australia has led the world in the development of antivenoms and the treatment of victims. It is one of our greatest scientific achievements, and has featured in the centenary of Federation celebrations.

But if these arguments cut no ice with the Federal Government, let's try an economic one. The economics of the research are: the Commonwealth Serum Laboratories, whose magnificent work achieved international renown, are now privatised. As a result, research and development in antivenoms has been dropped from their functions. The Commonwealth Government, however, in addition to directly assisting the CSL for the continued production of antivenoms for Australian use, pays the CSL a direct, unencumbered subsidy of \$2 million as compensation. Antivenoms are clearly not good business and it is far too expensive for poor nations to buy what they need from Australia at Australian prices.

There are solutions, however, in the development of cheaper production methods and new therapies. But this requires research. And research requires funding to pay research workers. The government's bill for this research to continue, in Australia and our region, is \$100,000 a year. The Victorian Government picked up the tab for the research seven years ago when the CSL was privatised, but it has always argued that this should be primarily a Commonwealth responsibility. The Commonwealth claims it funds antivenom production adequately through its subsidy to the CSL.

But this money does not fund research. What do you, the taxpayer, get for your \$100,000? You get research into new antivenoms. If you are one of the 3500 Australians bitten by a venomous creature each year, you get expert advice from staff who are clinicians and laboratory scientists, delivered to your doctors or paramedics anywhere in Australia, 24 hours a day, seven days a week. You get the training of new researchers as PhD students and post-doctoral researchers. You get public education about the hazards of animal toxins. You get professionals trained in the treatment of envenomation. And you get the compilation of national statistics into morbidity and mortality from venomous bites and stings. This expertise is shared worldwide. These researchers are leaders of a small global community of experts on envenomation. Australia plays a critical role in the research and training of scientists and technicians in poor countries, which can start producing their own antivenoms. The Howard Government has put religion back on the political map in Australia. Rarely has the Federal Parliament had so many active Christians among its members, meeting for prayer and spiritual renewal. May I suggest for their next "thought for the day": "From those to whom much is given, much will be required."

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