



The heat is on

The evidence that climate change will affect human health is undeniable – and rural towns are most vulnerable. In the first of a two-part report, **MELISSA SWEET** looks at what needs to be done to protect country communities.

The changing clim



Outbreaks of dengue fever are frequent across much of Australia, stretching as far south as Sydney. Killer heat waves regularly hit the frail and infirm, while emergency and medical services are stretched to their limits, responding to an unending cycle of cyclones, bush fires and other disasters induced by global warming.

Decades of structural change – which have seen entire industries and communities close, particularly in the increasingly arid areas of the continent’s south-east – have been especially harsh on rural Australia. Many coastal and island communities are also grappling with the distress and upheaval of relocation.

Welcome to the future, at least as it is predicted for 2100, just as the babies of this generation enter their vulnerable twilight years. But, as a series of reports have recently highlighted (see further reading), climate change is not just an issue for the future. It is already affecting health in Australia and elsewhere, and the keys to minimising its impact lie very much in the present.

Yet there is a widespread sense the health sector has been slow to respond to the threat, despite it being more

than a decade since the Intergovernmental Panel on Climate Change first warned of the potential for a devastating impact on health in its 1996 report.

“We’ve thought more about the risks to physical infrastructure and to the economy than we have about the risks to human health,” says Professor Tony McMichael, director of the National Centre for Epidemiology and Population Health at the Australian National University, and an international authority on climate change.

“Departments of health at national and state levels ought now to be saying we need to understand what the risks will be and who will be vulnerable, and we need to be supporting research and evaluation to understand what the most effective interventions will be, both in the short and long term.”

Mr Bob Wells, co-director of the Menzies Centre for Health Policy based at the ANU, and a former senior federal health bureaucrat, agrees the health sector has been slow to step up to the plate. He says the response of health bureaucracies to climate change has been “negligible”. “Climate change has sort of crept up on us,” he says.

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The heat is on

“The important thing is for rural doctors to realise that vectors have spread and that disease patterns are changing.”

PROFESSOR IAN WRONSKI

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Mr Wells believes the Federal Health Department should drive a national response to climate change, with rural health a key focus. “The evidence is that the impact, at least initially, will be greatest in rural areas simply because they’re drying up quicker and also don’t have the resource infrastructure of urban areas to cope with sudden changes or emerging trends.”

Mr Gordon Gregory, executive director of the National Rural Health Alliance, freely acknowledges that the implications of climate change only hit the alliance’s radar in any significant way at the recent National Rural Health Conference in Albury.

A sobering presentation by Professor McMichael got him thinking how climate change might exacerbate many existing problems, further increasing the gap between the health of country and city people. “It was not until Tony raised it at the conference that we started to focus on it,” he says.

So how should policy makers and communities be responding to the threat, especially given the many uncertainties involved?

Mr Gregory believes governments at all levels should work with rural, remote and regional communities to plan for significant structural changes.

“If it’s true that the bread basket is going to move from the Murray Darling to Kununurra, then we need planning at a

national level involving states and territories,” Mr Gregory says. “We clearly need regional plans for the areas most likely to be directly affected, like the Riverina and the Riverland. And thirdly we need plans for communities, so that if we have less apricot growers, what are they going to do in Renmark? Are they going to leave or change industries?”

“We know from history that structural change is a health threat. We’ve shown in the past that we can handle such change when it’s been caused by economic factors – can we do it when it comes from climate change? We will need government intervention to manage the rate of structural change, to support or compensate some of those who are adversely affected.”

The light-bulb moment for prominent rural GP Dr Sue Page came while watching a “gob-smacking” presentation late last year by Professor Will Steffen, the science advisor to the Australian Greenhouse Office. The data he presented transformed her “idle curiosity” about climate change into a passionate belief that it merits urgent consideration by all sectors, including rural doctors and their organisations.

Dr Page, acting head of the Northern Rivers University Department of Rural Health at Lismore, NSW, says rural doctors can play an important role in educating their communities about new and emerging health threats – even through relatively simple measures, such as putting up posters about the importance of drinking fluids in hot weather.

As prominent professionals, they also have a responsibility

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What the experts think



"The general distress of a community will lead to more of a burden on doctors in terms of their professional work."

Dr Kim Webber



"The impact, at least initially, will be greatest in rural areas simply because they're drying up quicker."

Mr Bob Wells

"We've thought more about the risks to physical infrastructure and to the economy than we have about the risks to human health."

Professor Tony McMichael



to inform themselves about the likely impact of climate change and to consider becoming advocates for their communities, she adds.

Professor Ian Wronski, pro vice-chancellor of the faculty of medicine, health and molecular sciences at James Cook University in Townsville, says it is not only rural doctors who have a "moral authority" to act. All rural health professionals, including pharmacists and nurses, have a responsibility as advocates for their communities.

But Professor Wronski says rural doctors have a particular duty to update their skills and knowledge to keep abreast of how climate change will affect their patients and communities. "The important thing for rural doctors is to realise that vectors have spread and that disease patterns are changing," he says. The likely increase in disasters will also reinforce the importance of emergency medicine and hospital leadership skills, he says.

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Adding life to their years¹...



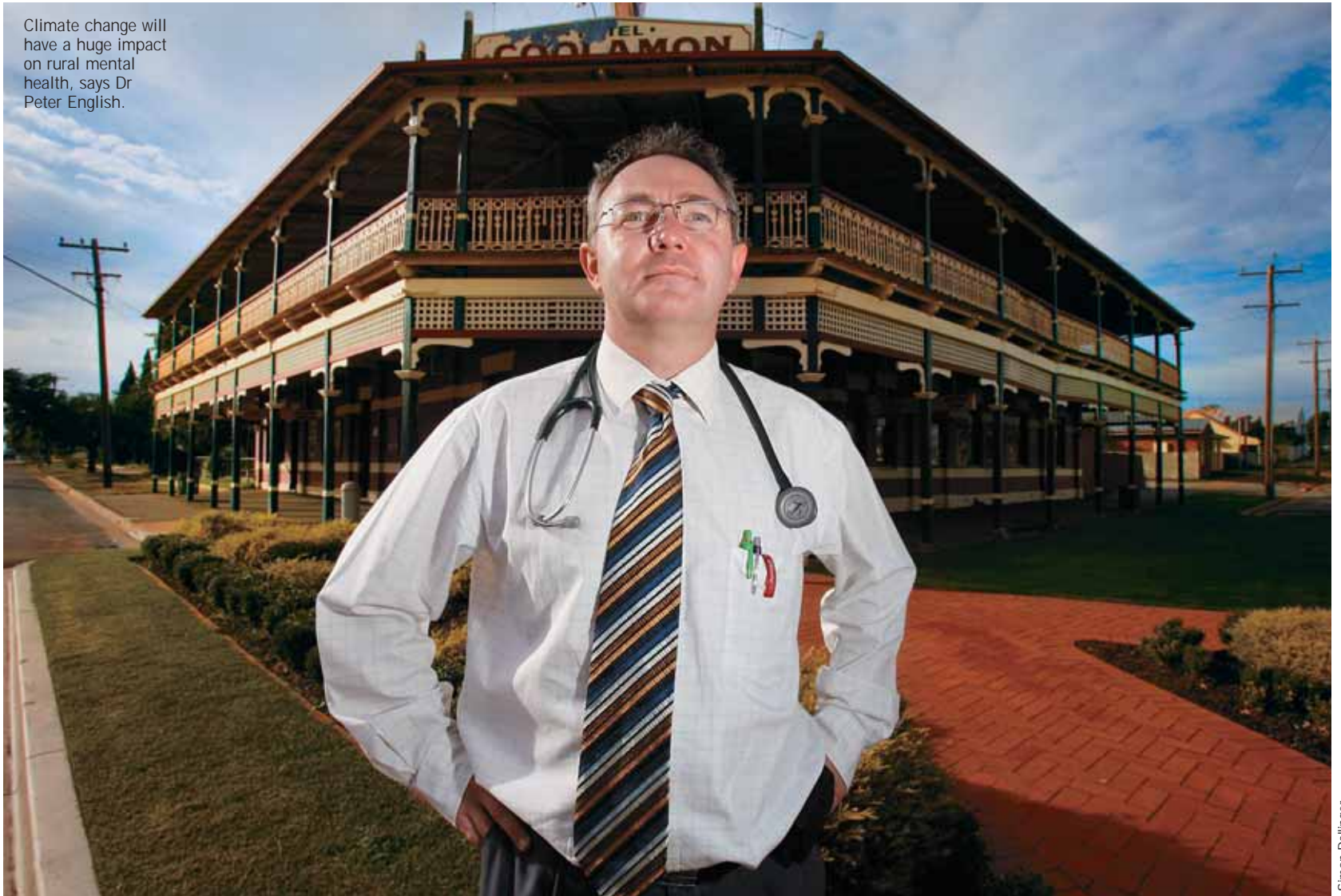
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The heat is on

Climate change will have a huge impact on rural mental health, says Dr Peter English.



Simon Dallinger

“For every one that you treat, you’ve got to think there’s another dozen or so out there.”

DR PETER ENGLISH

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When Dr Peter English and his wife packed up their Adelaide home to move to the small NSW town of Coolamon, they expected to stay no more than a few years.

But it’s now 13 years later, and Dr English is delighted to be staying put. He and his wife have enjoyed becoming part of their new community and developing a broader circle of friends than they had in Adelaide.

“And professionally you couldn’t want for anything better than working in a small rural community,” he says. “It gives you the opportunity to practise a much more complex but a much more rewarding kind of medicine.”

Coolamon’s website boasts its location is “one of the richest agricultural and pastoral districts in the Riverina”. But after several years of devastating drought, the claim is starting to ring hollow for many locals, despite some relief from recent rains.

Dr English has become all too familiar with the relationship between drought and health.

“It’s not like people are coming in beating the doors down with depression or stress-related illnesses but over the time I probably would have treated a dozen or maybe even 20 farmers who are affected by depression or significant mental

illness directly related to the adverse environments that they find themselves in,” he says.

“For every one that you treat, you’ve got to think there’s another dozen or so out there who are not presenting for treatment but who are still substantially affected.”

Nor is it only farmers who’ve been affected, with the recent closure of two businesses a reminder that “everyone lives and dies by what happens to the rural community”, he adds.

While the weather is a constant topic of conversation among locals, Dr English says many don’t want to acknowledge what climate change might mean for the community long term.

“Those questions in some respects people don’t really want to ask,” he says. “Maybe they don’t want to say it out loud that things are changing on a more permanent basis.”

Dr English is too busy “patching up the walking wounded” to spend much time contemplating the health aspects of climate change, but expects that its impact on mental health will be a major issue for the future.

His assessment is backed by a diverse range of experts interviewed by *Australian Rural Doctor*. They say that

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responses to the mental health threat of climate change will need to be broad ranging, including everything from better access to services to efforts to build communities' infrastructure and resilience to cope with change and uncertainty.

Ms Rhonda Galbally, the chief executive officer of www.ourcommunity.com.au, an organisation set up several years ago to enhance the work of community groups, says rural doctors can help both individual patients and the broader community by promoting membership of community groups.

"Rural doctors ought to have the directory of community groups at their elbows, and prescribe joining up," she says.

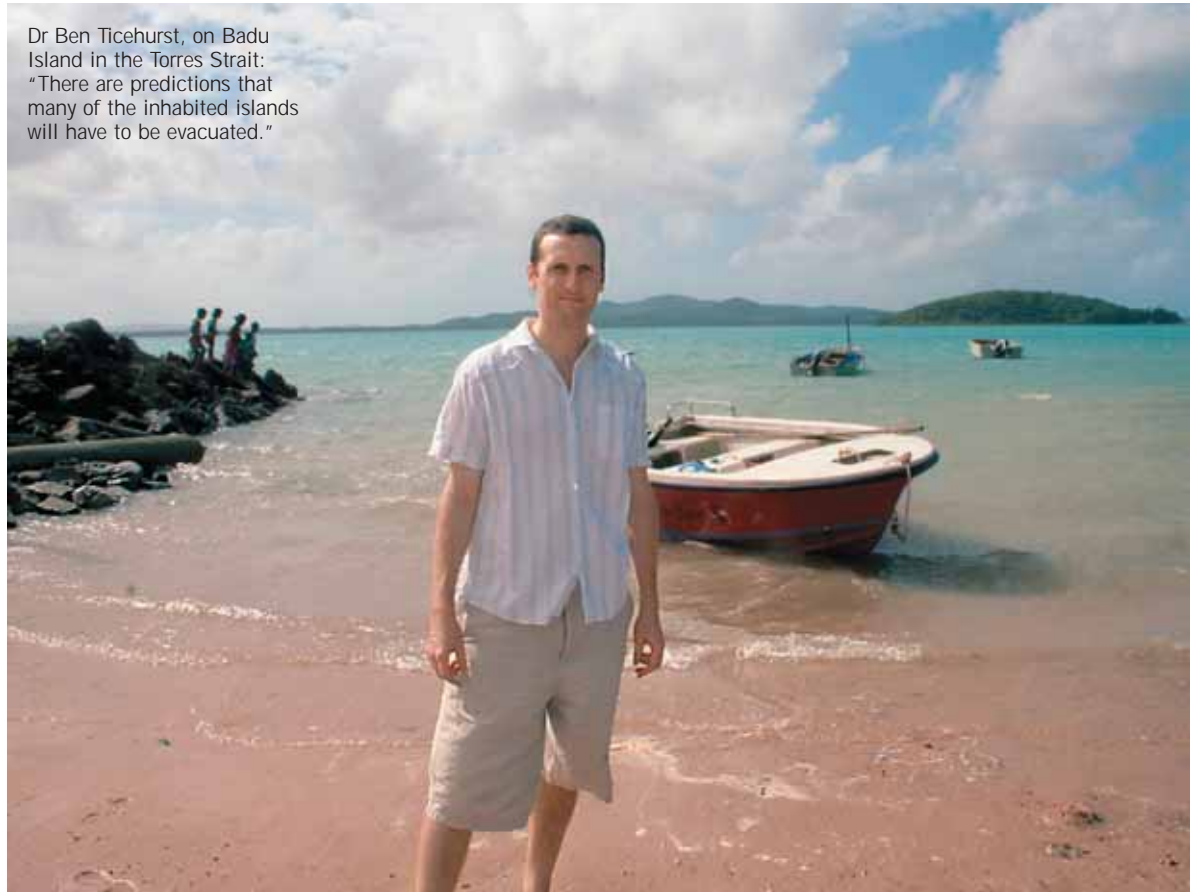
"There's nothing that safeguards people through transitions more."

However, Ms Leonie Young, the chief executive officer of beyondblue, cautions that mental health responses to climate change should not assume that rural areas are especially vulnerable. Country people, long used to coping with uncertainty and adversity, may have something to teach their city cousins, she says.

"I'm not writing off people living in the coun-

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Dr Ben Ticehurst, on Badu Island in the Torres Strait: "There are predictions that many of the inhabited islands will have to be evacuated."



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Saving paradise

Six months ago, Dr Ben Ticehurst and his wife Dr Alison Taggart were harried as they juggled the demands of two young children, work and the stresses of Sydney life.

Now, they wake to the idyllic views and easy rhythms of paradise. Coconut palms frame the pristine beaches where their children play and discover the beauties of unspoilt nature.

Dr Ticehurst, 34, can't speak highly enough of the professional and personal benefits of moving to Badu Island, which lies in the Torres Strait, about half way between the tip of Cape York and Papua New Guinea. The couple job-share as the only GPs for about 1200 locals, with patients requiring secondary care flown to Cairns Base Hospital, about 850km away.

But the move has also heightened Dr Ticehurst's concerns about global warming. Every day he sees patients whose complex problems, including diabetes-related amputations, blindness and kidney disease, remind him of how the environment shapes health. Every day also brings reminders of how the islanders' wellbeing is intricately connected with the sea, a source of food,

leisure and cultural identity.

Dr Ticehurst says rising sea levels and climate change are a "looming disaster" for the islands, whose highest points are often only a metre or two above sea level. "They're already experiencing storm surges and king tides which have given people a taste of what the future may hold," he says. "There are predictions that many of the inhabited islands will have to be evacuated."

Dr Ticehurst says it is ironic that policy makers have paid so little attention to the impact of climate change on Torres Strait Islanders, given that they will probably be the first and worst affected Australian communities.

"We don't get a lot of information," he says. "We don't even know what the normal sea level is up here because there are no tidal gauges and equipment up here to measure it."

Dr Ticehurst became interested in the environment several years ago when an internship at Lismore in northern NSW brought new opportunities for exploring and appreciating nature.

As he started to read more, he became increasingly worried: "We live on a finite planet with

limited resources and yet we're behaving like spoilt kids, burning through oil and forests and raw materials like we're only here for a couple weeks rather than the long run."


Dr Ticehurst, a member of the Torres Strait Climate Action Network (see page 14), is studying two environmental subjects in a Masters of Public Health through James Cook University, and hopes the course will help his environmental advocacy.

He believes that doctors in rural, remote and regional areas are uniquely placed to act on climate change because of the respect and influence they command. He urges colleagues to get involved, whether by putting up posters, talking to community groups or lobbying politicians.

"Satisfaction with your job comes, not just from patching people up but from looking at their long-term interests," he says. "We have to spend long hours fixing the heart attacks and dealing with the broken bones but if we're not providing what sustains us all, which is a vibrant, clean living world, then we're not doing all of our job."

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try as people who need resilience-building," she says. "We've built the country on the resilience of rural communities."

Meanwhile, policy makers have been warned that the likely toll of climate change on rural health highlights the need for better support for rural doctors themselves.

Dr Kim Webber, chief executive officer of the Australian Rural and Remote Workforce Agencies Group, says rural doctors will need better access to mental health referral services as well as more professional support.

"The general distress of a community will lead to more of a burden on doctors in terms of their professional work, and them personally, and their relationships with the community," she says.

Dr Webber believes city-based public health services need to develop a better understanding of rural and remote Australia and better systems for working with GPs around new and emerging health threats.

"The systems and the relations between public health and general practice are not that great, and there is capacity for improvement," she says.

But for Professor John Humphreys, professor of rural health research at Monash University, based at Bendigo, the most important responses to the health threats of climate change will come from outside the health sector.

"The health of people in regional and remote Australia is influenced by factors other than health services," he says. Professor Humphrey identifies the lack of regional development policies as a key issue which needs addressing in any response to climate change. But he is not confident this issue will gain the attention it merits.

"The reality is that in this country we tend to be very reactive and wait for the crisis," he says. ●

Further reading

- Intergovernmental Panel on Climate Change reports: www.ipcc.ch
- Climate change and human health: risks and responses. World Health Organisation 2003: www.who.int/globalchange/publications/cchhsummary/en
- Climate Change Health Impacts in Australia, Report for the Australian Conservation Foundation and the Australian Medical Association: www.acfonline.org.au/news.asp?news_id=565&c=283715
- Healthy Planet, Healthy People. Shaping a Sustainable Healthy Future. Vic Health Letter, No 26. Summer 2006: www.vichealth.vic.gov.au/assets/contentFiles/VicHealthSummer06_Final.pdf



Looking to a better future: Dr Catriona Arnold-Nott and her daughter, Grace.

Torres News

A family concern

For many years, Dr Catriona Arnold-Nott has carried a burden. It began, she remembers, as a child growing up in Canberra.

"I can remember seeing some stuff on TV when I was a kid and feeling completely paralysed and terrified of the implications of climate change," says Dr Arnold-Nott, 40, a GP on Thursday Island in the Torres Strait.

"I've carried that fear with me all my life and have felt powerless about it."

Dr Arnold-Nott was amazed when her brother, orthopaedic surgeon Dr Matthew Nott, began to attract national headlines for his work as a climate change activist on NSW's south coast (*Australian Rural Doctor*, March 2007). He was a recent convert to the cause who'd previously been an enthusiastic consumer, while she'd been a long-standing environmentalist who'd always shopped carefully.

Watching her brother's attitudinal shift and achievements provided the impetus for Dr Arnold-Nott to also begin acting on a broader scale.

Last November, she organised a public meeting on Thursday Island, which led to the formation of the Torres Strait Climate Action Network, whose members number several local doctors, including her GP husband Dr Peter Arnold-Nott.

The network aims to raise public and political awareness, and to encourage local communities to reduce greenhouse emis-

sions while increasing use of energy from renewable sources. It also plans to establish a community garden to reduce the air-freight of produce from Cairns.

"Our view is that everyone, everywhere on the planet needs to do everything they can about climate change," Dr Arnold-Nott says. "It's no good for us on Thursday Island to say we're going to be affected earlier and worse than the rest of the country so the rest of the country should be doing something about it. We have to show that we're doing everything we can but we expect everyone else to do everything they can."

"This is the single biggest issue to face humanity and I certainly want to be able to tell my kids that I didn't sit back and say I was too busy or I didn't realise it was a problem or I didn't think I could do anything about it."

Becoming an activist has been empowering and anxiety-relieving for Dr Arnold Nott.

"The other thing I would say to people who don't know what they could do is that I got up there at that meeting on my own and said I'm worried about this and don't know what to do. And straight away, I wasn't on my own any more. Even just getting a group of people together to meet regularly to talk about options and solutions is a very powerful tool."

"Interestingly, I suffer from a lot less anxiety about climate change since I started doing something about it."

Next month...

How rural doctors are taking up the climate-change challenge.