

Climate change and its implications for travel.

North Europe Conference on Travel Medicine

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Dr James A R Willis, Retired GP, Author, Grandfather



Chairmen, ladies and gentlemen, fellow speakers,

It is an unexpected honour and privilege for me, a retired GP, to be giving the opening address at an international conference on travel medicine. Indeed, I think it is quite possible that I know less about travel medicine than anyone else in this room. In this country general practice travel medicine is usually restricted to immunisations, and *even that* I left almost entirely to the experts – the wonderful nurses in our health centre treatment room. In fact my only claim to fame in the field of travel medicine is what I dare to call “Willis’ sign for malaria”: Willis’ sign for malaria is positive when a patient’s first words when you see them are “I’ve got malaria, doctor”. I found it applied to every one of the actual cases of malaria I saw during my career. It works because patients with malaria usually know where they’ve just come back from, know they haven’t been taking their tablets, or recognise the symptoms of a relapse. Of course I don’t need to tell you as

scientists that this “sign” is of no practical use whatever in dealing with the next suspect case.

No, the reason I’m here is because of one of my articles. I write... it gets you into all sorts of trouble. Almost exactly one year ago I had one of my regular Back Page columns in *The New Generalist*, which is the quarterly magazine for members of the Royal College of General Practitioners. I’ll read it out to you, it is quite short:

We will only know for sure if predictions of catastrophic climate change due to human activity are correct when the catastrophe happens. Even then, some people will go on arguing, as the sea drowns vast coastal areas around them, that it is all an amazing coincidence.



What I can't understand is the vitriol that comes from the ecosceptic camp. Don't they have grandchildren too? If someone flags down your car and tells you they think the road over the crest of the hill may be starting to subside into a quarry, the normal reaction is to be grateful. Or at least to slow down. Only a complete imbecile would step on the gas and shout invective about the human right to party. Of course the warning may be a hoax, or the person may be wrong, but the sensible thing is to take appropriate precautions.

The other thing I can't understand about the ecosceptics is their certainty. In the midst of our society's unprecedented dependence on technology and our official belief in rationality (exemplified for us doctors by 'Evidence-Based Medicine'), we are witnessing an explosion of irrationality among the public. They simply do not understand the characteristics of reliable knowledge, and are absolutely hopeless when it comes to comparing the scale of hypothetical risks. They worry about tiny or manifestly non-existent dangers that are publicised by the media. They acquiesce with a stepwise outlawing of any activity that carries the smallest degree of risk, so that diving boards have been removed from swimming pools across the world, and you are no longer supposed to fit a plug onto a household appliance.

Meanwhile when an international conference on preventing dangerous climate change reports that things are worse than previously thought, and that we are facing the greatest peril that has ever confronted mankind, people find any fatuous excuse to turn their heads away. They think the warnings are boring, predictable, exaggerated, not something that they can do anything about anyway. Notoriously, they cast around for anyone who can be called a scientist and who disagrees. This "expert" will be given a place on any discussion – ostensibly to "balance" it, but in effect to grossly distort it.

If we believe in preventive medicine nothing else touches this for importance. You can leave my sky-high cholesterol, you can let me smoke like a chimney, and you can let me tear about on my motorcycle. The thing to get serious about is CO² emissions and sustainability. You may not get points for this under the new target-based GP contract,

(remember I was writing this for British GPs) but now is the time to show your independence.

There are no votes in it for politicians, so the public are going to have to lead them by the nose. And nobody leads the public better than their dear old GPs. If we showed our patients and our communities that we are serious about this we could make a crucial difference. We are scientists, and we are highly trained in recognising reliable knowledge. And part of the reliable knowledge in this case is that we still have time to avoid the worst-case scenario.

Sorry, I have to make a correction. I asked above “don’t they have grandchildren too?”. I should, of course, have said “children”. It’s all much more immediate than we hoped.

The change in perceptions

So, I am here because I wrote that article, and I wrote that article partly because *I* have grandchildren. Here they are earlier this year –



since this photograph was taken the little girl at the back has got a new baby sister, and our fifth, a baby sibling for the twins, is due to be born today, a coincidence perhaps worth mentioning, and the reason why I am going to have to go straight back home to help instead of staying for the rest of the conference.

A year ago my article was obviously sufficiently unusual to catch the attention of the organisers of this meeting. It would not be unusual today. In fact today the media is so full of *global warming*, *climate change*, *climate chaos*, that it almost seems that there can be nothing left for me to say.

The image is a screenshot of the BBC News website from May 24, 2006. The main headline reads "Attenborough: Climate is changing" with a sub-headline: "Climate change is the biggest challenge facing the world, naturalist Sir David Attenborough has said." A quote from Sir David Attenborough is highlighted in a white box: "Climate change is the biggest challenge facing the world, naturalist Sir David Attenborough has said." The website layout includes a navigation bar at the top with links for Home, TV, Radio, Talk, Where I Live, and A-Z Index. A search bar is located in the top right corner. The main content area features a large image of Sir David Attenborough and a video player. To the right of the main article, there are sections for "Climate change" with an "In Depth" link, "KEY STORIES" listing various climate-related news items, "FEATURES" including "Climate news: A load of hot air?", "BACKGROUND" information, and "RELATED BBC LINKS". The bottom right corner has a "TOP SCIENCE/NATURE STORIES NOW" section.

But I do think there is something for me to say

And I do think I am the right person to say it

You need someone like me to talk about this sort of thing because you need a generalist, by which I mean someone who takes the inclusive view and the long term view. You need someone who has a human view of life and also you need someone who knows the meaning of science. My father was Secretary to the British Association for the Advancement of Science, and Atomic Energy attaché at the British Embassy in Washington – so science is in my blood. And you need someone without vested interests who is capable of independent thought, based on their own understanding. So what you need is a doctor rather than a spin doctor, and a GP rather than a specialist.

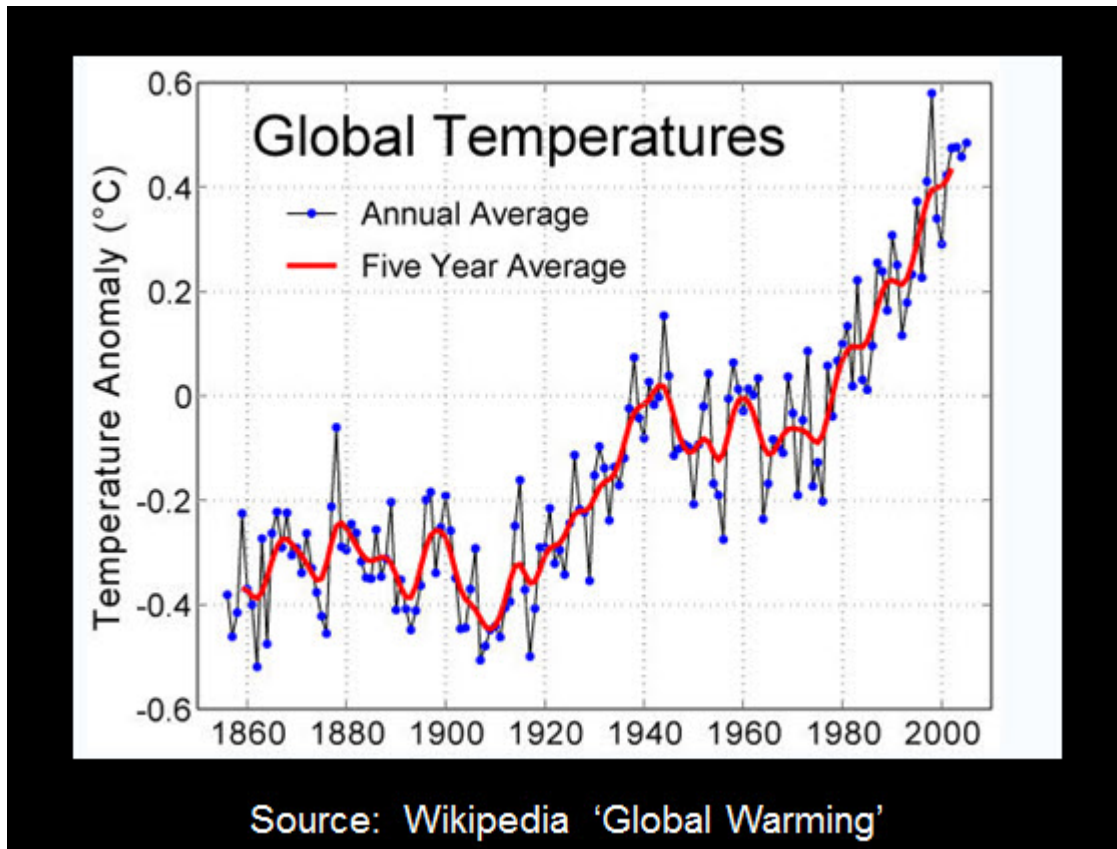
I have another qualification – I am not trying to win an argument. I am not a member of any lobbying group. Apart from the article I have mentioned you will find no mention of global warming in my two books, my numerous published articles, or my website. My column in this summer's *New Generalist*, due out any day, is on the foolishness of over-regulation – which is much more my normal subject. I have never spoken on the perils of climate change before and expect never to do so again. Like the rest of you, perhaps more than most of you, I desperately want everything to turn out alright. But I can't ignore the warnings, I wrote that article in a moment of passion, as a result I have been asked to speak today, and I cannot duck my responsibility or my opportunity.

And there is one more qualification: I am one of those dull, old-fashioned people, again like my father, and I am sure like many of you, who has spent their life building up a reputation for personal integrity (I wouldn't normally say this, but today it seems important) I was paid one hundred pounds for that *New Generalist Article*, and as far as I know I am getting my rail fare, registration fee and overnight accommodation for speaking today. Nobody has seen my talk or knows what I am going to say, I am standing here entirely on trust. I am answerable only to myself. I haven't a job and I can't be

sacked. That is the way I like it, partly because it puts me on a different moral plane from those who lobby, at rather higher rates than mine, on behalf of vested interest groups.

Of tipping points and hockey stick curves

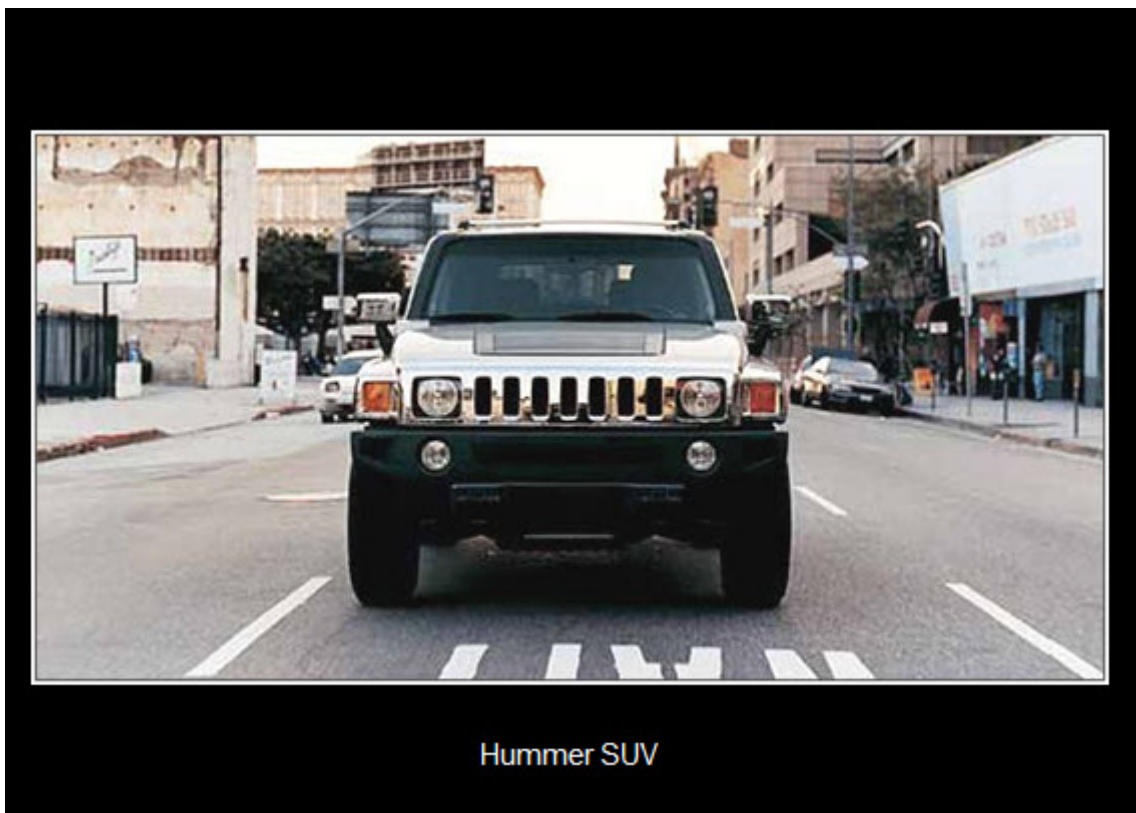
Anyway, as anyone who has had the courage to follow the news during the last year knows, the basic facts are no longer in dispute: The world is hotter than it has been for hundreds of thousands of years. Carbon dioxide levels have been measured from air bubbles trapped in meticulously catalogued ice cores drilled from up to three kilometres below the Polar ice caps, and the current level, 381 ppm, is the highest for at least a million years and half as high again as the level which prevailed before the industrial revolution. This rise is the main cause of the heating of the world and it in turn is caused by man's burning of fossil fuels. Glaciers and icecaps are melting all over the world and particularly in Antarctica, where the temperature rise is twice the global average. The combination of this and thermal expansion of water is causing sea levels to rise. Sea temperatures in the Gulf of Mexico are the highest ever recorded, hurricanes there are correspondingly more powerful and more destructive, droughts in Africa and the Amazon are similarly in line with sophisticated models of the earth's climate change such as those run by the Hadley Institute of the British Meteorological office. And in all of these cases the rate of increase is accelerating – the graphs all show the same ominous upturn during the last few decades.



Climate scientists tell us that we may be close to a tipping point where positive feedback mechanisms come into play to further accelerate the warming process, for example the melting of sea ice so that a correspondingly larger proportion of the sun's heat is absorbed by new areas of dark sea. An area of sea ice twice the size of Texas has disappeared in the last twenty years. All this has happened with an average temperature rise of 0.6°C in the last century, almost all climatic models suggest this is now bound to continue with a further rise of something like 1.4°C this century, but if we fail to take effective action the rise could be much higher, 5.8°C or even more. In David Attenborough's words last week, this is the difference between a severe challenge, and

catastrophe. Which of the paths we follow is up to us, now is the time to prove we are an adaptive species. The worry is that if we fail to act effectively and soon the changes may have moved beyond our control.

Meanwhile, the whole of our way of life is structured around the burning of fossil fuels. Worse, our economy is geared to maximising the rate of consumption. Consumption has almost been elevated to the status of a public duty, or a symbol of success.



Way back in the nineteen sixties my elder brother went to work in a blood bank in Baltimore while waiting to start his medical studies. Fresh from post-war Britain he was

astonished by the scale of profligate consumption he saw in America. I have always remembered him telling me the wry comment of one of the staff, herself a recent émigré from central Europe: “This is America, you may *waste!*”.

So here in Britain, instead of preserving North Sea Oil as a precious resource for future generations, from the moment of its discovery we have set about using it up as quickly as possible. And we have been astonishingly successful. Just as America’s oil production peaked in 1971, Britain’s peaked in 1999. From now on we are going to have to compete in the global market place for the world’s remaining supplies. China the sleeping giant has woken and is now using its rapidly growing economic power to claim its fair share. It is planning to build one large coal-fired power station every week for the next seven years. If this should happen without compensating mechanisms to store the released carbon dioxide, China will become an even more polluting nation than America. And when such vast populations become affluent and the summers become increasingly hot another positive feedback mechanism comes into play – the use of refrigeration plant and air conditioners on a massive scale.

Houston, as they say, we’ve got a problem. The tragedy is, Houston isn’t listening.

*“Who is to say that the current warming trend, whether a natural cycle or man made, won't also provide more benefit than harm? In any case it is a very gradual shift and we can deal with it in time if necessary.
David, Houston, Texas, USA”*

Contribution to a BBC website debate, Spring 2005, on the subject “Does climate change pose a bigger threat to the planet than terrorism?”

But even in places where the problem is being recognised we are still a long way from getting real about solutions. As part of its superb coverage of climate change issues this spring, *The Independent* Newspaper ran a full front page feature on the possible consequences of a 3°C temperature rise by the end of the century given in a new projection.



Yet inside the same issue – the 15th April – was a full page advertisement for patio heaters. A British television journalist called Jeremy Clarkson, who presents a popular motoring show and who insists that there is no such thing as global warming, has vowed to keep his patio heater lit 24 hours a day, just to annoy Greenpeace. If you are looking to

wage war on terror then I don't know anything more terrifying than this. If you want to find weapons of mass destruction, start with the 700,000 patio heaters that currently exist in Britain.

What can we do about it?

So what can we do about it?

Huge numbers of small people, especially the young, have already realised the seriousness of the problem and are quietly putting into practice principles of conservation which if applied generally could make a dramatic difference. But as the great philosopher of science, Sir Karl Popper pointed out, to win the argument you have to tackle the toughest targets and persuade them. That means the big people. And the travel industry with its obvious vested interest is a prime example.

The health professionals at this conference are expert advisers to the travel industry whose contacts encompass the world. If you force this subject onto the agenda of every meeting and every conversation and refuse to collude with denial, you could contribute to another tipping point, another hockey stick curve, we could help to create a climate of opinion which enables, or even compels, politicians to act, and we could suddenly find ourselves members of a world wide community united for the first time in history against a uniquely common enemy. We are all in the same boat, the same plane, the same cruise liner.

Moreover as scientists and students of human nature we medics are well placed to recognise and confront an unfortunate combination of human characteristics which currently act as obstacles to the necessary action:

1 The first is well known human propensity to talk about anything and everything but the 'elephant in the room' – where huge energies are expended on trivial concerns like passive smoking and imaginary side-effects of immunisations, while gigantic problems are ignored because they are simply too large to grapple with. You know the

fable of *the boy who cried 'wolf'* so often that when the real wolf came, nobody took any notice. This is the biggest elephant in the room of all - this is the real wolf.

2 The second human characteristic is the belief that it won't affect *us*, that we will come through and the problems will be confined to other people. It is hard to avoid the conclusion that this is the attitude taken by many Americans. I have already said enough not to have to waste time pointing out the folly of this particular belief.

3 The third is the current atmosphere of distrust for science and the widespread retreat from rationality. This has come at the most unfortunate moment in history; we are utterly dependent on science to show us the road ahead, and to find ways of travelling it safely. The idea that we can return to nature (whatever that means) and put our faith in mysticism, which is so widespread today as to represent a kind of counter-enlightenment, is again the height of folly. To dismiss global climate projections based on the accumulated knowledge, experience, and wisdom of eminent scientists as 'just another theory' is far worse than mere ignorance. But to do so *deliberately*, for what you imagine to be your own selfish interests, is something I cannot talk about. That is because there is no word in the English language which adequately describes the enormity of such unprecedented criminality.

4 Finally, there is the very natural human belief that everything has been all right so far, so it is bound to carry on like that in the future. Again as scientists we have a duty to point out that there is no rational basis for this belief whatsoever. History is written by the survivors, to make this point I will give you an example of one exception to this rule:

"There are games of tennis on the lawn before breakfast or backgammon for the older men. There is an hour or two in the library before we sit down to an excellent luncheon followed by a siesta. Then we go out riding and return for a hot

bath and a plunge in the river. I would like to describe our luscious dinner parties but I have no more paper. However, come and stay with us and you shall hear all about it.”

This letter was written in the year 465 by Sidonis Apollinaris – in the last days of the Roman Empire. It was quoted by Eileen Power in her book *Medieval People*. She comments “...How could they imagine that anything so solid could conceivably disappear?”

We can change things

Thank God for the BBC. It's 'Climate Chaos Season' finished this week, but much of the material will remain on line from the BBC website where it can be accessed from most of the world. On Sunday evening many of you may have seen the Panorama documentary, 'Bush's climate of fear',

The screenshot shows the BBC News website interface. At the top, there's a red navigation bar with the BBC NEWS logo and a 'WATCH BBC NEWS IN VIDEO' button. Below the navigation bar, there are links for 'UK version', 'International version', 'About the versions', 'Low graphics', 'Help', and 'Contact us'. The main headline is 'Climate chaos: Bush's climate of fear'. To the left of the main text, there's a sidebar with a video player and a link to 'Watch Panorama on Sunday 4 June at 2215 BST on BBC One or live or on demand on this site to find out if the Bush administration has covered up the findings of global warming scientists.' The main text discusses a US government whistleblower's report on global warming and mentions that some leading climate scientists claim to be censored. A quote from Jim Hansen, a US climate scientist, is featured: 'For five or 10 years the public has not been fully informed. We were not taking the initial steps that need to be taken. If we continue down this path we're going to be past a point at which we can avoid really large climate changes.' To the right of the main text, there are several promotional boxes for Panorama content, including 'WATCH PANORAMA ON DEMAND', 'Work for Panorama', and 'Panorama library'. There is also a search bar and a 'Climate change' section with an 'In Depth' link.

which, in a quiet, unsensational way, documented allegations that the Bush administration has censored, delayed, and otherwise weakened a series of reports by its own climate scientists calling for urgent, radical action. Acting on the advice of a strategist who has since disowned the policy, they continue to pursue a deliberate tactic of suggesting that the science is in doubt. Those seeds have been cast on fertile ground, every one of us desperately wants to believe them. But it's a lie – the science is not in doubt.

The real implication of this is that it shows just how much the Bush administration thinks that ideas such as the ones we are discussing could really make a difference. The extraordinary measures they took to delay one major report until after the 2004 election – this is in ‘The Land of the Free’ don't forget – speak volumes about the belief by the White House that its publication might have changed the outcome. It is clear that the Bush Administration believes that if its public was allowed to know the truth there really would be significant reductions in the sales of fuel, of 3 ton motor cars, and yes, in the amount of air travel.



Such is the power of words. What the nine hundred people in this room say in the next few weeks and months could indeed make a crucial difference. Yes, those things so feared by Bush's blinkered friends, could indeed begin to happen. The explosive popular response to The Independent's "Your World. Your say" campaign this March



showed the eagerness for reform which exists amongst informed ordinary people. Europe is already well engaged, some of the most exciting and innovative ideas are coming out of China, when the Americans wake from their denial, as they must, we will need all of the energy and bravery and commitment we traditionally associate with their great nation. We will even need the particular skills of Jeremy Clarkson if he can bring himself to join the grown-ups. But one way or another we are going to have to get real now, we can't afford to waste another year. We've got to see those terrible graphs beginning to level off.

I have said how sorry I am that I cannot stay for the rest of this conference - I have to get back to help with the arrival of a new grandchild. But I will make a prediction, before you leave every one of you will have heard siren voices trying to soften what I have said, who call it 'emotive' or who write it off as a 'polemic'. Yes, that's exactly what it is, it's emotive, appealing to the emotions,



yes, it's a polemic – a passionate argument. I am content with that description. But don't let anyone say it is exaggerated. I tell you now, in the year since I wrote my article I have looked, unblinking, at the evidence. If you've got the stomach for it, you do the same before you call it exaggerated.

So here's one final emotive argument, the one used by David Attenborough at the end of last week's BBC programme, *Can we Save Planet Earth?*: I don't want to look into the eyes of my grandchildren in years to come and hear them say,



“You saw what might be coming, and you didn’t try do anything about it”.