

## The statistics of fear: Should we be most concerned about cars, planes or terrorists?

ABC News Breakfast By Patrick Wood

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**Are you more likely to die in a car crash or a terrorist attack? And what is safer: driving across the country for your family Christmas or getting on a plane?**

Everyone has their fears and safety concerns, but chances are that — statistically speaking — we are worrying about the wrong things, according to a visiting statistician who specialises in probability.

Professor Jeffrey Rosenthal works in the Department of Statistics at the University of Toronto and is currently doing a series of public lectures in Australia.

"People do worry about a lot of things which are extremely unlikely and we shouldn't," he told ABC News Breakfast.

Terrorism is a particularly emotive topic in Australia, with a recent ANU survey finding 45 per cent of Australians are either "very" or "somewhat" concerned about either themselves or a family member being the victim of a terrorist attack in Australia.

"Terrorism, in a way it's a tricky thing because you don't know what the future will bring and situations can change," Professor Rosenthal said.

"But one example I give is if you look at the 9/11 terrorism attacks ... in the month of September 2001 more people in the United States were killed in ordinary car crashes than were killed in the 9/11 attacks."

Professor Rosenthal said sales of anxiety medication rose in the US after the attacks and he knew one couple who made the decision to get married because they feared the threat of terrorism.

"As far as what your fear is, if you're just a random person living in the United States even in 9/11 — the worst terrorist attacks in the history of the United States — your chance of being killed in a car accident were higher than if you were killed by terrorists," he said.

"So if you think of it that way then a lot of people had really exaggerated fears."

### 'Control and the media play a part'

A lack of control can be the cause of heightened fear, which is why we don't often rate the dangers of things like driving a car as highly as other potential threats, according to Professor Rosenthal.

"I think that's why people are more afraid of being in an aeroplane than being in a car, even though statistically it's actually safer to get somewhere by aeroplane," he said.

"But if you're in the plane you have no control, you're not piloting the plane, you hope the pilot doesn't do anything wrong. With the car you think, 'Well I can get out of the way, I can steer my way out!'"



**PHOTO:** Almost half of Australians are concerned they or a family member will be the victim of a terrorist attack. (AAP: Stefan Postles)

**MAP:** Australia

He said from a purely statistical point of view, people should be more concerned about heart disease than car accidents.

"[I'm] sceptical in a way, in the sense that when I hear something whether it is in the newspaper or what somebody said, I will say, 'Wait a minute, show me the facts'."

"People will say crime is increasing when it turns out it isn't; something is dangerous when it is not."

**Topics:** mathematics, terrorism, australia

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