

Worried about meningococcal? Thirteen Victorians have died from it in 2002 alone. Man the panic stations!

“Victorians shouldn’t be lulled into a false sense of security,” intones a Department of Human Services spokesman.

But, hang on a minute. Thirteen, admittedly tragic, deaths a year amounts to 1 Victorian in every 357,000. So my odds of dying from meningococcal this year are 1 in 357,000. If I live here for 70 years, only 1 person in 5,100 will die from meningococcal.

Why am I worrying about something that, over a whole lifetime, is only going to affect one person in over five thousand? What is *false* about my sense of security? Am I being lulled into a false sense of fear?

It seems the more unlikely something is going to happen, the more we worry about it.

Every day we get into our cars to drive to the local supermarket in mortal fear that this drive may be our last. Because, thanks to the TAC and nightly television news, we see just how desperately dangerous our roads are.

But, hang on a minute. Maybe 400 people will die on Victorian roads this year. Worse than meningococcal, admittedly, but still. The odds of having a fatal accident turn out to be 1 chance in 11,600. Or, over a normal lifetime, about one chance in 166.

So, out of the 166 people that live on my block, only one of them will die in a road accident in my lifetime. Why should I worry that it will be me?

Logically, the remarkable thing about driving is just how amazingly safe it is! Despite the millions of kilometres we all drive, very few of us have accidents. And even fewer die.

But this is not how our brains are wired. We are not designed to worry about things that are really dangerous to our mortality. Like being overweight. Or smoking. Or binge drinking.

No, we are wired to worry about unlikely things.

We are worried that we’ll have a car accident close to home because statistics show that most accidents occur within five kilometres of home. We overlook another statistic that shows that, at any given moment, most cars are within five kilometres of home. Most cars are used for short trips most of the time. If accidents were evenly distributed across the State then the greater number will occur within five kilometres of home.

Actually, accidents are not evenly distributed across the State. There are more fatal crashes per car on country roads than in the suburbs. But there are so many more cars in the suburbs than on country roads, that nearer-to-home looks more dangerous.

Most of us cancelled our air travel this year. Terrorism worried us. Messrs Howard and Downer told us to be a bit careful. We stayed at home, worried, ate more fatty foods and exercised less.

The chances of being killed in a terrorist attack are so low they cannot be reasonably calculated. This writer spent 25 years of his life travelling in highly-charged Third World locations, living the best part of a decade in foreign climes, and

was never mugged, pick-pocketed or shot at. Although, to be fair, someone in Ethiopia stole the baseball cap off my head once, and I probably ate my fair share of runs-producing salads.

Nevertheless, everyone cancelled flights to Bali. Thousands abandoned plans to go to Thailand or the U.S.A. Somehow the odds of being killed in a 9/11 style attack—maybe one chance in two million—seem too terrifying to muck about with.

On the other hand, things that are more likely to kill us are worried about rather less.

One Australian adult in 4 smokes. Even though your chance over a lifetime of dying from lung cancer in Australia is one in 40 (worse, if you smoke).

While 13 Victorians tragically die each year from meningococcal, 24 die from cancer. Each day!

The odds that you will die from meningococcal are 1 in 5,100: the odds of dying from cancer are 1 in 8 (even worse if you smoke).

But deaths from cancer are so common-place and routine, neither we, nor our mass media, take much notice. A famous person with cancer might be a story. Contracting meningococcal, on the other hand, makes you famous.

And what about heart disease?

Are we worried about the possibility that one person in 5, over a normal lifetime, will be killed by heart disease? What, me worry? Nah. We are mostly overweight, eating the wrong foods, exercising too little, worrying too much about things that are unlikely. Who has time to think about heart disease?

The truth is that we have more chance of being kicked to death by a duck than dying from most of the things that seem to be worrying us to death.

Doubtless, if someone is soon kicked to death by a duck, it will be widely reported and give us a new terror about which to worry ourselves towards early heart attacks.

By Philip Hunt

SOURCES (To give you comfort that I did the homework):

Australian Bureau of Statistics web-site provides the following data:

- Australian Population in June 2001 is 19,387,000
- Victorian Population in June 2001 is 4,644,950
- Number of deaths from Cancer in Australia in 2001 is 36,750 of which 7,038 are from lung cancer.
- 24% of Australian adults report that they smoked regularly.

National Heart Foundation web-site provides the following data:

- In 1998, 50,797 deaths in Australia from all forms of cardiovascular disease, including strokes.
- In 1998 22% of Australians over 14 smoked.
- 7 million Australians are overweight.

<http://www.alternet.org/story.html?StoryID=14028> says that 2,823 people died in the Sept 11 attack on the World Trade Center in New York.

<http://blue.census.gov/cgi-bin/ipc/popclockw> estimates the World Population at 1 Dec 2002 as 6,259,378,087.

Calculations:

- Meningococcal: Odds of contracting meningococcal in Victoria are 13 in 4,644,950 = 1:357,304. Assuming three-score-years-and-ten, the odds of dying from meningococcal over a lifetime are $357,304/70 = 1:5,104$.
- Fatal Car Accidents: Number of fatalities in 2002 = 400 (personal worst-case estimate). Odds of being killed are $4,644,950/400 = 1:11,612$. Over a lifetime $11,612/70 = 1:166$.
- Odds of being killed in a 9/11 style attack: Assuming
- Lung Cancer: Odds of dying from lung cancer are $19,387,000/7,038 = 1:2,755$. Over a lifetime $2,755/70 = 1:39$. This is the statistic for everyone, smokers and non-smokers. Obviously, the real risk is greater for smokers, and lesser for non-smokers.
- Victorians dying from cancer each day: Total deaths from all forms of cancer in Australia is 36,750. Assuming an even spread across states, Victoria's share is $4,644,950/19,387,000$ or $23.96\% = 8,805$. Divide this by 365 to get the day rate of Cancer deaths in Victoria = 24.12.
- Odds of dying from cancer are $19,387,000/36,750 = 1:527.54$ or over a lifetime of 70 years $527.54/70 = 1:7.54$
- Odds of dying from heart disease are $19,387,000/50,797 = 1:381.66$ or over a lifetime of 70 years $381.66/70 = 1:5.45$
- Odds of being killed in a terrorist attack like Sept 11. Population of the world divided by the number killed. $6,259,378,087/2823 = 2,217,279$. Admittedly, this is a very coarse and unreliable statistic since it assumes

everyone in the world is equally at risk whereas Americans are more likely to be attacked than Icelanders, and public landmarks more probable targets than milksheds.