## We shouldn't poison our minds with fear of bioterrorism

- Bruce Schneier
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Terrorists attacking our food supply is a nightmare scenario that has been given new life during the recent <u>swine flu</u> outbreak. Although it seems easy to do, understanding why it hasn't happened is important. GR Dalziel, at the Nanyang Technological University in Singapore, has written a <u>report</u> chronicling every confirmed case of malicious food contamination in the world since 1950: 365 cases in all, plus 126 additional unconfirmed cases. What he found demonstrates the reality of terrorist food attacks.

It turns out 72% of the food poisonings occurred at the end of the food supply chain – at home – typically by a friend, relative, neighbour, or co-worker trying to kill or injure a specific person. A characteristic example is Heather Mook of York, who in 2007 tried to kill her husband by putting rat poison in his spaghetti.

Most of these cases resulted in fewer than five casualties – Mook only injured her husband in this incident – although 16% resulted in five or more. Of the 19 cases that claimed 10 or more lives, four involved serial killers operating over several years.

Another 23% of cases occurred at the retail or food service level. A 1998 incident in Japan, where someone put arsenic in a curry sold at a summer festival, killing four and hospitalising 63, is a typical example. Only 11% of these incidents resulted in 100 or more casualties, while 44% resulted in none.

There are very few incidents of people contaminating the actual food supply. People deliberately contaminated a water supply seven times, resulting in three deaths. There is only one example of someone deliberately contaminating a crop before harvest – in Australia in 2006 – and the crops were recalled before they could be sold. And in the three cases of someone deliberately contaminating food during packaging and distribution, including a 2005 case in the UK where glass and needles were baked into loaves of bread, no one died or was injured.

This isn't the stuff of bioterrorism. The closest example occurred in 1984 in the US, where members of a religious group known as the Rajneeshees contaminated several restaurant salad bars with salmonella enterica typhimurium, sickening 751, hospitalising 45, but killing no one. In fact, no one knew this was malicious until a year later, when one of the perpetrators admitted it.

Almost all of the food contaminations used conventional poisons such as cyanide, drain cleaner, mercury, or weed killer. There were nine incidents of biological agents, including salmonella, ricin, and faecal matter, and eight cases of radiological matter. The 2006 London poisoning of the former KGB agent Alexander Litvinenko with polonium-210 in his tea is an example of the latter.

And that assassination illustrates the real risk of malicious food poisonings. What is discussed in terrorist training manuals, and what the CIA is worried about, is the use of contaminated food in targeted assassinations. The quantities involved for mass poisonings are too great, the nature of the food supply too vast and the details of any plot too complicated and unpredictable to be a real threat. That becomes crystal clear as you read the details of the different incidents: it's hard to kill one person, and very hard to kill dozens. Hundreds, thousands: it's just not going to happen any time soon. The fear of bioterror is much greater, and the panic from any bioterror scare will injure more people, than bioterrorism itself.

Far more dangerous are accidental contaminations due to negligent industry practices, such as the 2006 spinach E coli and, more recently, peanut salmonella contaminations in the US, the 2008 milk contaminations in China, and the BSE-infected beef from earlier this decade. And the systems we have in place to deal with these accidental contaminations also work to mitigate any intentional ones.

In 2004, the then US secretary of health and human services, Tommy Thompson, <u>said on Fox News</u>: "I cannot understand why terrorists have not attacked our food supply. Because it is so easy to do."

Guess what? It's not at all easy to do.

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