

WAR ON TERROR: THE BIOLOGICAL THREAT

Don't panic: it's safer than you think

The biological terrorist has replaced the nuclear warrior as our worst bogeyman. Yet the facts don't bear out our fears, writes **Kenan Malik**

Civilisation is under threat, runs the mantra. The barbarians are not simply at the gate, but inside it, too – terrorists with bagfuls of nuclear material, or deadly toxins, just waiting to strike. As the World Health Organisation warned us, we have “to take the risk of biological warfare seriously and recognise that it might be easier than the use of other forms of potential terrorist warfare”.

The warnings have generated a sense of panic among the public. Shops run out of gas masks, there is a stampede to buy nuclear shelters, and the chatter among parents waiting for their children at the school gates is about how to fend off anthrax or smallpox.

There has been much talk over the past month about the need for a proportionate response to the assault on New York, Washington and Pittsburgh. A good way to start would be by injecting some proportion into our understanding of it. Over the past century, the world has faced two world wars, a cold war, Nazism and the Holocaust. And it survived. So why do we feel threatened by a handful of criminal acts, albeit monstrous ones?

The world will never be the same again, is the constant refrain. And perhaps it won't – but not because of a terrorist attack in Manhattan. Rather, if the world is changing, it is because of our perceptions about what the attack has done to us. The hijacked planes tore into the fabric of western societies' confidence and self-belief. And into that gaping hole has marched a whole host of demons. “If a flight full of commuters can be turned into a missile of war,” observed the *New York Times*, “everything is dangerous.” It is in giving focus to this sense of dread, to the belief that even the ordinary may be hazardous, that the attacks may have had their most devastating impact.

Take, for example, the idea that around every corner might lurk a terrorist armed with a weapon of mass destruction. It's an idea that inevitably fosters a climate of distrust and paranoia, further atomising society and undermining possibilities of social action. It facilitates attacks on civil liberties, from the introduction of ID cards to tighter controls on immigration and asylum-seekers. And it eases the way to western intervention abroad – think of how fear of Saddam Hussein's “weapons of mass destruction” has been manipulated to help maintain support for economic sanctions against, and the continued bombing of, the Iraqi people.

Of all the imagined weapons in the terrorist arsenal, biological warfare appears the most terrifying: a silent, invisible killer, gnawing away at a population from the inside, it is a perfect metaphor for western vulnerability. Such fear of bioterrorism has been accentuated by the peculiar relationship of contemporary

western cultures to biotechnology. Over the past decade, our unease has grown about technologies such as cloning and the genetic modification of organisms: they seem to corrupt the relationship between man and nature by dissolving the boundaries that appear to maintain order in the natural world. In an age when social and moral boundaries appear so fluid, our social anxieties often get relocated into the natural world, creating apprehension of what might happen if we begin to tinker with nature.

This is one of the reasons for the shift in focus from the threat of nuclear to that of biological terrorism. This shift is an expression of changes not in terrorist strategy – such groups no more possess biological weapons now than they possessed nuclear warheads a decade ago – but in cultural anxieties. After the break-up of the Soviet Union, politicians and strategists feared that the chaos that prevailed in eastern Europe and the third world would spill over into the west. This gave rise to the image of the fanatic with a nuclear bomb in a suitcase, built with the expertise of unemployed Soviet physicists. Today, western values and freedoms appear under threat as much from the inside as from the outside, a sense strengthened by the knowledge that the hijackers were not stereotypical Islamic fundamentalists, but western-educated and highly integrated, fluent in English and German, and given to vodka binges at the weekend. So now we imagine that same fanatic, but with a bagful of bio-engineered germs, corrupting society from within.

In reality, however, bioweapons are difficult to produce, and their effects are not as devastating as many imagine. Take anthrax, which the United States Defence Department describes as “100,000 times more deadly than the deadliest chemical weapon”. The WHO estimates that using 50kg of dry anthrax against a city of one million inhabitants would kill 36,000 people and incapacitate another 54,000.

Anthrax is a rod-like bacterium that usually affects grazing animals such as cows, goats and deer that ingest bacterial spores naturally occurring in the soil. In humans, the illness is rare, but can be contracted in three ways: through bacteria infecting a wound, through eating infected meat, or by inhaling sufficient numbers of anthrax spores. For many years, anthrax was called “wool-sorter's disease”, because workers at wool mills were most at risk from naturally occurring spores. The danger, however, was relatively small. A 1960 study in a Pennsylvania goat-hair mill showed that workers inhaled more than 500 spores per eight-hour shift, and yet there were no cases of illness among the workers. Indeed, only 18 cases were reported in the whole of the US between 1900 and 1978.

The US Defence Department estimates that an individual must inhale between 10,000 and

BILL GREENWELL**The Cleaner**

“Make sure that you are clean, your clothes are clean, even your shoes” – Last instructions to the WTC bombers

**I have polished my boots.
They are so clean, I can see
how dull my eyes are.**

**I have polished my eyes.
They are so clean, I can sense
how tense my mouth is.**

**I have polished my mouth.
It closes cleanly on a transparent
cargo of words.**

**I have polished my words.
They are so clean, they fill
my heart's spent ventricles.**

**I have polished my heart.
My heart is so clean. It is
in my boots.**

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50,000 spores for the disease to take hold. This happens only if huge numbers of spores are dispersed in the air and kept there (in the absence of wind, the natural tendency of anthrax spores is to drift to the ground). Technically, this is extremely difficult to accomplish.

First, anthrax spores need to be converted into a powder. Only the US and the Soviet Union, both of which expended millions of dollars on developing bioweapons during the cold war, have refined the means to do this. Iraq was supposed to have a well-developed anthrax programme. United Nations weapons inspectors, however, discovered anthrax only in liquid form, which, according to one expert, "is almost as safe as candy".

Having turned anthrax into powder, a terrorist would have to find a way of dispersing it in the air. Again, this is much more difficult than might be imagined. There was much alarm when the FBI revealed that some of the hijackers involved in the World Trade Center attacks had previously made inquiries about crop-dusting planes. According to Barbara Rosenberg, director of the chemical and biological weapons programme of the Federation of American Scientists, "a crop duster would be very useful for a chemical and biological attack – if you wanted to attack crops". But it would not be that useful in attacking humans. To get spores to lodge deeply enough in the human lung to cause damage, they must be extremely small, less than ten microns in size. Crop dusters are fitted with much larger dispensers that target insects and plants. It would be possible to modify them, but such modifications would require considerable expertise. "You can't go down to the store and buy one off the shelf," observes Rosenberg.

There are similar problems with another imagined terrorist favourite – smallpox. Smallpox is a virus that can cause bleeding and lesions all over the body, and it used to devastate large parts of both the developed and the developing world. It is highly contagious, but

also very fragile and difficult to manipulate. It is almost impossible to obtain: only two laboratories in the world still possess supplies of live smallpox virus – the Centers for Disease Control and Prevention in Atlanta and the high-security Russian installation in Novosibirsk. Neither is likely to provide handouts for terrorists.

According to the FBI, there has been only one known case of bioterrorism in the US. It involved the Rajneeshee, members of a religious cult, who had established a large commune in Wasco County, a rural area east of Portland, Oregon. The cult decided to take over the county by manipulating the results of local elections in 1984. They planned to bus homeless people into their commune and register them as voters, while at the same time make opposing voters sick by infecting them with salmonella. Cult members contaminated food in ten salad bars with salmonella – resulting in the infection of 751 people, none of whom was seriously ill. The election outcome was unaffected – although two members of the cult were eventually convicted for their involvement in the plot.

The 751 people infected by the Rajneeshee in this plot, more comic than tragic, are the only known American victims of bioterrorism. The only other group known to have dabbled with biological agents is the Aum Shinrikyo cult in Japan. In April 1990, the group tried to spread botulism through a car engine's exhaust; three years later, it attempted to spread anthrax by using a sprayer system on the roof of a building in eastern Tokyo. Neither incident resulted in a single casualty. In the end, the group abandoned its plans for biological warfare and turned to chemical weapons instead. In March 1995, the cult released sarin, a nerve toxin, into the Tokyo subway; \$10m was apparently spent preparing the attack. Twelve people died in what remains the gravest non-military chemical attack ever.

In the US, salmonella was spread through salad bars by a religious cult

All of which is why, according to a report on the threat of bioterrorism produced for the Strategic Forum of the Washington-based National Defence University, "few terrorists have demonstrated real interest in bioterrorism and fewer still have made an attempt to acquire biological agents".

So why does the terrorist with a suitcase full of plague bugs or anthrax remain such a potent image? Partly because he speaks to so many of our contemporary anxieties, from the dangers of messing with nature to the sense of the fragility of western values. At the same time, the image presents the authorities with a bogeyman to trump all bogeymen. Compared to more common figures of hatred, such as the mugger, the crack dealer or the paedophile, the faceless terrorist who might yet be your neighbour is far more sinister. Like all bogeymen, it is an image rooted in reality – you have only to look at the Manhattan skyline to recognise that. But it is also, like all bogeymen, a mythical creation, the aim of which is to make palatable draconian and illiberal measures – from the demolition of civil liberties at home to the prosecution of war abroad.

"No passion," Edmund Burke once wrote, "so effectually robs the mind of all its powers of acting and reasoning as fear." Rarely has this been more true than it is today. Before fear drives out all reason, we need to take a measured, rational, proportional view of what actually happened on 11 September.