

How does the risk of terrorism measure up against everyday dangers?

A False Sense of Insecurity?

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DETERMINING HOW TO RESPOND TO the terrorist challenge has become a major public policy issue in the United States over the last three years. It has been discussed endlessly, many lives have been changed, a couple of wars have been waged, and huge sums of money have been spent — often after little contemplation — to deal with the problem.

Throughout all this, there is a perspective on terrorism that has been very substantially ignored. It can be summarized, somewhat crudely, as follows:

- Assessed in broad but reasonable context, terrorism generally does not do much damage.
- The costs of terrorism very often are the result of hasty, ill-considered, and overwrought reactions.

A sensible policy approach to the problem might be to stress that any damage terrorists are able to accomplish likely can be absorbed, however grimly. While judicious protective and policing measures are sensible, extensive fear and anxiety over what may at base prove to be a rather limited problem are misplaced, unjustified, and counterproductive.

TERRORISM'S DAMAGE

For all the attention it evokes, terrorism actually causes rather little damage and the likelihood that any individual will become a victim in most places is microscopic. Those adept at hyperbole like to proclaim that we live in “the age of terror.” However, while obviously deeply tragic for those

directly involved, the number of people worldwide who die as a result of international terrorism is generally only a few hundred a year, tiny compared to the numbers who die in most civil wars or from automobile accidents. In fact, in almost all years, the total number of people worldwide who die at the hands of international terrorists anywhere in the world is not much more than the number who drown in bathtubs in the United States.

Until 2001, far fewer Americans were killed in any grouping of years by all forms of international terrorism than were killed by lightning, and almost none of those terrorist deaths occurred within the United States itself. Even with the September 11 attacks included in the count, the number of Americans killed by international terrorism since the late 1960s (which is when the State Department began counting) is about the same as the number of Americans killed over the same period by lightning, accident-causing deer, or severe allergic reaction to peanuts.

Some of this is definitional. When terrorism becomes really extensive, we generally no longer call it terrorism, but war. But Americans seem to be concerned mainly about random terror, not sustained warfare. Moreover, even using an expansive definition of terrorism and including domestic terrorism in the mix, it is likely that far fewer people were killed by terrorists in the entire world over the last 100 years than died in any number of unnoticed civil wars during the century.

Obviously, this condition could change if international terrorists are able to assemble sufficient weaponry or devise new tactics to kill masses of people, and if they come to do so routinely. That, of course, is the central fear. As during the Cold War, commentators are adept at spinning out elaborate doomsday and worst-case scenarios. However, although not impossible, it would take massive efforts and even more stupendous luck for terrorists regularly to visit substantial destruction upon the United States.

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HISTORICAL RECORD It should be kept in mind that September 11 continues to stand out as an extreme event. Until then, and since then, no more than 329 people have ever been killed in a single terrorist attack (in a 1985 Air India explosion). And extreme events often remain exactly that — aberrations, rather than harbingers.

A bomb planted in a piece of checked luggage was responsible for the explosion that caused a Pan Am jet to crash into Lockerbie, Scotland in 1988, killing 270 people. Since that time, hundreds of billions of pieces of luggage have been transported on American carriers and none have exploded to down an aircraft. (And millions of passengers who checked bags at hotels and retrieved them before heading to the airport have routinely lied to airline agents when answering the obligatory question about whether their luggage had at all times been in their possession.) This does not mean that one should cease worrying about luggage on airlines, but it does suggest that extreme events do not necessarily assure repetition any more than Timothy McVeigh's Oklahoma City bombing of 1995 has.

Since its alarming release of poison gas in the Tokyo subway in 1995, the apocalyptic group Aum Shinrikyo appears to have abandoned the terrorism business and its example has

sequent punishment. And terrorism likely will never go away completely; it has always existed and presumably always will.

A central issue, however, is whether such spectacularly destructive terrorist acts will become commonplace. Although there have been many deadly terrorist incidents in the world since 2001, all (thus far, at least) have relied on conventional methods and have not remotely challenged September 11 quantitatively. If, as some purported experts repeatedly claim, chemical and biological attacks are so easy and attractive to terrorists, it is impressive that none have so far been used in Israel (where four times as many people die from automobile accidents as from terrorism). Actually, it is somewhat strange that so much emphasis has been put on the dangers of high-tech weapons in the first place. Some of that anxiety may come from the post-September 11 anthrax scare, even though that event killed only a few people. The bombings of September 11, by contrast, were remarkably low-tech and could have happened long ago; both skyscrapers and airplanes have been around for a century now.

RESPONDING TO TERRORISM

Frantz Fanon, the 20th century revolutionary, contended that “the aim of terrorism is to terrify.” If that is so, terrorists can be

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not been followed. Some sort of terrorist inoculated Tylenol capsules with cyanide in 1982, killing seven people. However, that frightening and much-publicized event (it generated 125,000 stories in the print media alone and cost the manufacturer more than \$1 billion) failed to inspire much in the way of imitation.

I do not want to suggest that all extreme events prove to be the last in their line, of course. At its time, the “Great War” of 1914–18 was the worst war of its type, yet an even more destructive one followed. Moreover, while Aum Shinrikyo may be under control, Al Qaeda and like-minded terrorist groups are unlikely to die out any time soon; September 11 marked, after all, their second attempt to destroy the World Trade Center.

Much of the current alarm is generated from the knowledge that many of today's terrorists simply want to kill, and kill more or less randomly, for revenge or as an act of what they take to be war. At one time, it was probably safe to conclude that terrorism was committed principally for specific political demands or as a form of political expression. In the oft-repeated observation of terrorism expert Brian Jenkins, “Terrorists want a lot of people watching, not a lot of people dead.” Moreover, the suicidal nature of many attacks, while not new, can be very unsettling because the would-be perpetrator cannot be deterred by the threat of sub-

defeated simply by not becoming terrified — that is, anything that enhances fear effectively gives in to them.

The shock and tragedy of September 11 does demand a focused and dedicated program to confront international terrorism and to attempt to prevent a repeat. But it seems sensible to suggest that part of this reaction should include an effort by politicians, officials, and the media to inform the public reasonably and realistically about the terrorist context instead of playing into the hands of terrorists by frightening the public. What is needed, as one statistician suggests, is some sort of convincing, coherent, informed, and nuanced answer to a central question: “How worried should I be?” Instead, the message the nation has received so far is, as a Homeland Security official put (or caricatured) it, “Be scared; be very, very scared — but go on with your lives.” Such messages have led many people to develop what Leif Wenar of the University of Sheffield has aptly labeled “a false sense of insecurity.”

HYPERBOLIC OVERREACTION For example, there is at present a great and understandable concern about what would happen if terrorists were to shoot down an American airliner or two, perhaps with shoulder-fired missiles. Obviously, that would be a major tragedy. But the ensuing public reaction to it, many fear, could come close to destroying the industry.

Accordingly, it would seem to be reasonable for those in charge of our safety to inform the public about how many airliners would have to crash before flying becomes as dangerous as driving the same distance in an automobile. It turns out that someone has made that calculation: University of Michigan transportation researchers Michael Sivak and Michael Flannagan, in an article last year in *American Scientist*, wrote that they determined there would have to be one set of September 11 crashes a month for the risks to balance out. More generally, they calculate that an American's chance of being killed in one nonstop airline flight is about one in 13 million (even taking the September 11 crashes into account). To reach that same level of risk when driving on America's safest roads — rural interstate highways — one would have to travel a mere 11.2 miles.

Or there ought to be at least some discussion of the almost completely unaddressed but patently obvious observation that, in the words of risk analyst David Banks, "It seems impossible that the United States will ever again experience takeovers of commercial flights that are then turned into weapons — no pilot will relinquish control, and passengers will fight." The scheme worked in 2001 because the hijackers had the element of surprise working for them; previous airline hijackings had mostly been fairly harmless as hijackers generally landed the planes someplace and released the passengers. The passengers and crew on the fourth plane on September 11 had fragmentary knowledge about what had occurred earlier that day and they prevented the plane from reaching its target. Similar responses are likely for future attempted hijackings. Nonetheless, notes Banks, "enormous resources are being invested to prevent this remote contingency." There is a distinction, he argues, "between realistic reactions to plausible threats and hyperbolic overreaction to improbable contingencies."

Moreover, any problems caused by radiological, chemical, or perhaps biological weapons are likely to stem far more from the fear and panic they may cause than from the weapons themselves. While a "dirty bomb" might raise radiation 25 percent over background levels in an area and therefore into a range the Environmental Protection Agency considers undesirable, there ought to be some discussion about whether that really constitutes "contamination" or much of a danger at all, given the somewhat arbitrary and exceedingly cautious levels declared to be acceptable by the EPA. The potential use of such bombs apparently formed the main concern during the Orange Alert at the end of 2003. Because the bombs simply raise radiation levels somewhat above normal background levels in a small area, a common recommendation from nuclear scientists and engineers is that those exposed should calmly walk away. But this bit of advice has not been advanced prominently by those in charge. Effectively, therefore, they encourage panic. As one nuclear engineer points out, "If you keep telling them you expect them to panic, they will oblige you. And that's what we're doing."

POOR RESULTS For their part, biological and chemical weapons have not proven to be great killers. Although the basic science

about them has been well known for a century at least, both kinds of weapons are notoriously difficult to create, control, and focus (and even more so for nuclear weapons).

To this point in history, biological weapons have killed almost no one. And the notion that large numbers of people would perish if a small number of chemical weapons were to be set off is highly questionable. Although they can be hugely lethal when released in gas chambers, their effectiveness as weapons has been unimpressive. In World War I, for example, chemical weapons caused less than one percent of the total combat deaths; on average, it took a ton of gas to produce one fatality. In the conclusion to the official British history of the war, chemical weapons are relegated to a footnote that asserts that gas "made war uncomfortable...to no purpose." A 1993 analysis by the Office of Technology Assessment finds that a terrorist would have to deliver a full ton of Sarin nerve gas perfectly and under absolutely ideal conditions over a heavily populated area to cause between 3,000 and 8,000 deaths — something that would require the near-simultaneous detonation of dozens, even hundreds, of weapons. Under slightly less ideal circumstances — if there were a moderate wind or if the sun were out, for example — the death rate would be only one-tenth as great. The 1995 chemical attack launched in Tokyo by the well-funded Aum Shinrikyo (attempted only after several efforts to use biological weaponry had failed completely) managed to kill only 12 people.

Thus far at least, terrorism is a rather rare and — in appropriate, comparative context — not a very destructive phenomenon. However, the enormous sums of money being spent to deal with the threat have in part been diverted from other, possibly more worthy, endeavors. The annual budget for the Department of Homeland Security, for example, now tops \$30 billion, while state and local governments spend additional billions. Some of that money doubtless would have been spent on similar ventures under earlier budgets, and much of it likely has wider benefits than simply securing the country against a rather limited threat. But much of it, as well, has very likely been pulled away from more beneficial uses.

Accordingly, three key issues, set out by risk analyst Howard Kunreuther, require careful discussion but do not seem ever to get it:

- How much should we be willing to pay for a small reduction in probabilities that are already extremely low?
- How much should we be willing to pay for actions that are primarily reassuring but do little to change the actual risk?
- How can measures such as strengthening the public health system, which provide much broader benefits than those against terrorism, get the attention they deserve?

As Banks puts it, "If terrorists force us to redirect resources away from sensible programs and future growth in order to pursue unachievable but politically popular levels of domes-

tic security, then they have won an important victory that mortgages our future.” For instance, measures that delay airline passengers by half an hour could cost the economy \$15 billion a year, calculates economist Roger Congleton.

HYSTERIA

Filmmaker Michael Moore happened to note on CBS’ popular *60 Minutes* last year that “the chances of any of us dying in a terrorist incident is very, very, very small.” His interviewer, Bob Simon, promptly admonished, “But no one sees the world like that.” Both statements, remarkably, are true — the first only a bit more so than the second.

It would seem to be reasonable for someone in authority to try to rectify this absurdity. In Kunreuther’s words, “More attention needs to be devoted to giving people perspective on the remote likelihood of the terrible consequences they imagine.” That would seem to be at least as important as boosting the sale of duct tape, issuing repeated and costly color-coded alerts based on vague and unspecific intelligence, and warning people to beware of Greeks bearing almanacs.

What we need is more pronouncements like the one in a recent book by Sen. John McCain (R-Ariz.): “Get on the damn elevator! Fly on the damn plane! Calculate the odds of being harmed by a terrorist! It’s still about as likely as being swept out to sea by a tidal wave. Suck it up, for crying out loud. You’re almost certainly going to be okay. And in the unlikely event you’re not, do you really want to spend your last days cowering behind plastic sheets and duct tape? That’s not a life worth living, is it?”

But admonitions like that are exceedingly rare, almost nonexistent. What we mostly get is fearmongering, some of it bordering on hysteria. Some prominent commentators, like David Gergen, argue that the United States has become “vulnerable,” even “fragile.” Others, like Sen. Richard Lugar (R-Ind.), are given to proclaiming that terrorists armed with weapons of mass destruction present an “existential” threat to the United States or even, in columnist Charles Krauthammer’s view, to “civilization.” A best-selling book by an anonymous CIA official assures us that our “survival” is at stake.

The cosmic alarmism reached a kind of official pinnacle during last winter’s Orange Alert. At the time, Homeland Security czar Tom Ridge declared that “America is a country that will not be bent by terror. America is a country that will not be broken by fear.” Meanwhile, however, Gen. Richard Myers, chairman of the Joint Chiefs of Staff, was telling a television audience that if terrorists were able to engineer a catastrophic event that killed 10,000 people, they would successfully “do away with our way of life.” The sudden deaths of that many Americans — although representing less than four-thousandths of one percent of the population — would indeed be horrifying and tragic, but the only way it could “do away with our way of life” would be if we did that to ourselves in reaction.

All societies are “vulnerable” to tiny bands of suicidal fanatics in the sense that it is impossible to prevent every terrorist act. But the United States is hardly “vulnerable” in the sense that it can be expunged by dramatic acts of terrorist destruction, even extreme ones. In fact, the country can readily, if grimly, overcome that kind of damage — as it overcomes some 40,000

deaths each year from automobile accidents. As RAND’s Bruce Hoffman put it, “Unfortunately, terrorism is just another fact of modern life. It’s something we have to live with.”

POLITICIANS AND THE MEDIA

A problem with getting coherent thinking on the risk of terrorism is that reporters and politicians find extreme and alarmist possibilities so much more appealing than discussions of broader context, much less of statistical reality. That is, although hysteria and alarmism rarely make much sense, politicians and the media are often naturally drawn to them.

There is no reason to suspect that President Bush’s concern about terrorism is anything but genuine. However, his approval rating did receive the greatest boost for any president in history in September 2001, and it would be politically unnatural for him not to notice. His chief political adviser, Karl Rove, declared last year that the “war” against terrorism will be central to Bush’s reelection campaign. The Democrats, scurrying to keep up, have stumbled all over each other with plans to expend even more of the federal budget on the terrorist threat, such as it is, than President Bush.

This process is hardly new. The preoccupation of the media and of Jimmy Carter’s presidency with the hostages taken by Iran in 1979 to the exclusion of almost everything else may look foolish in retrospect, as Carter’s secretary of state, Cyrus Vance, conceded in his memoirs. But it doubtless appeared to be good politics at the time — Carter’s dismal approval rating soared when the hostages were seized. Similarly, in the 1980s the Reagan administration became fixated on a handful of American hostages held by terrorists in Lebanon. At the time, Reagan’s normally judicious secretary of state, George Shultz, was screaming that we needed desperately to blast somebody somewhere “on a moment’s notice” — even without adequate evidence — in order to avoid looking like the indecisive “Hamlet of nations.” He apparently preferred the King Lear approach. Normally, however, only lunatics and children rail at storms; sensible people invest in umbrellas and lightning rods.

Since September 11, the American public has been treated to endless yammering about terrorism in the media. Politicians may believe that, given the public concern on the issue, they will lose votes if they appear insensitively to be downplaying the dangers of terrorism (though this fear does not seem to have infected Sen. McCain). However, the media like to tout that they are devoted to presenting fair and balanced coverage of important public issues. I may have missed it, but I have never heard anyone in the media stress that in every year except 2001, only a few hundred people in the entire world have died as a result of international terrorism.

As often noted, the media appear to have a congenital incapacity for dealing with issues of risk and comparative probabilities — except, of course, in the sports and financial sections. But even in their amazingly rare efforts to try, the issue — one that would seem to be absolutely central to any rounded discussion of terrorism and terrorism policy — never goes very far. For example, in 2001 the *Washington Post* published an article by a University of Wisconsin economist

that attempted quantitatively to point out how much safer it was to travel by air than by automobile, even under the heightened atmosphere of concern inspired by the September 11 attacks. He reports that the article generated a couple of media inquiries, but nothing more. Gregg Easterbrook's cover story in the October 7, 2002, *New Republic* forcefully argued that biological and chemical weapons are hardly capable of creating "mass destruction," a perspective relevant not only to terrorism but also to the drive for war against Iraq that was going on at the time. The *New York Times* asked him to fashion the article into an op-ed piece, but that was the only interest the article generated in the media.

In addition, it should be pointed out that the response to September 11 has created a vast and often well-funded terrorism industry. Its members would be nearly out of business if terrorism were to be back-burnered, and accordingly they have every competitive incentive (and they are nothing if not competitive) to conclude that it is their civic duty to keep the pot boiling.

Moreover, there is more reputational danger in underplaying risks than in exaggerating them. People routinely ridicule futurist H.G. Wells' prediction that the conflict beginning in 1914 would be "the war that will end war," but not his equally confident declaration at the end of World War II that "the end of everything we call life is close at hand." Disproved doomsayers can always claim that caution induced by their warnings prevented the predicted calamity from occurring. (Call this the Y2K effect.) Disproved Pollyannas have no such convenient refuge.

The challenge, thus, is a difficult one. But it still seems sensible to suggest that officials and the press at least once in a while ought to assess probabilities and put them in some sort of context rather than simply to stress extreme possibilities so much and so exclusively.

KNOW YOUR AUDIENCE It is easy to blame politicians and the media for the distorted and context-free condition under which terrorism is so often discussed. In many respects, however, that circumstance arises not so much from their own proclivities, but rather from those of their customers. Hysteria and alarmism often sell.

The record with respect to fear about crime, for example, suggests that efforts to deal responsibly with the risks of terrorism will prove difficult. Fear of crime rose notably in the mid-1990s, even as statistics were showing crime to be in pronounced decline. When David Dinkins, running for re-election as mayor of New York, pointed to such numbers, he was accused by A. M. Rosenthal of the *New York Times* of hiding behind "trivializing statistics" that "are supposed to convince us that crime is going down." New Yorkers did eventually come to feel safer from crime, but that was probably less because crime rates actually declined than because of atmospheric graffiti, panhandlers, aggressive windshield washers, and the homeless were banished or hidden from view. So it may have made sense in the months after the September 11 attacks to have armed reservists parading around in airports. It is not clear how they prevented terrorist attacks, and pulling them from

productive jobs hardly helped the economy. But if they provided people with a sense of security, their presence may have been worth it.

In the end, it is not clear how one can deal with the public's often irrational — or at least erratic — fears about remote dangers. Some people say they prefer comparatively dangerous forms of transportation like the private passenger automobile (the cause of over 3 million American deaths during the 20th century) to safe ones like commercial airliners because they feel they have more "control." But they seem to feel no fear on buses and trains — which actually are more dangerous than airliners — even without having that sense of control and even though derailing a speeding train or crashing a speeding bus is likely to be much easier for a terrorist than downing an airliner. And people tend to be more alarmed by dramatic fatalities — which the September 11 crashes certainly provided — than by ones that cumulate statistically. Thus, the 3,000 deaths of September 11 inspire far more grief and fear than the 100,000 deaths from auto accidents that have taken place since then. In some respects, fear of terror may be something like playing the lottery except in reverse: the chances of winning the lottery or of dying from terrorism may be microscopic, but for monumental events that are, or seem, random, one can irrelevantly conclude that one's chances are just as good, or bad, as those of anyone else.

The communication of risk, then, is no easy task. Risk analyst Paul Slovic points out that people tend greatly to overestimate the chances of dramatic or sensational causes of death, that realistically informing people about risks sometimes only makes them more frightened, that strong beliefs in this area are very difficult to modify, that a new sort of calamity tends to be taken as harbinger of future mishaps, that a disaster tends to increase fears not only about that kind of danger but of all kinds, and that people, even professionals, are susceptible to the way risks are expressed — far less likely, for example, to choose radiation therapy if told the chances of death are 32 percent rather than that the chances of survival are 68 percent.

But risk assessment and communication should at least be part of the policy discussion over terrorism, something that may well prove to be a far smaller danger than is popularly portrayed. The constant, unnuanced stoking of fear by politicians and the media is costly, enervating, potentially counterproductive, and unjustified by the facts.

CONCLUSION

The policy perspective toward terrorism I suggest may not be more valid than other ones, and no one knows, of course, how the problem will play out in future years. However, the policy advanced here seems to me a sound and sensible one, and for there to be a really coherent policy discussion, it should be part of the mix.

Deep concern about extreme events is not necessarily unreasonable or harmful. Thus, efforts to confront terrorism and reduce its incidence and destructiveness are justified. But hysteria is hardly required. As always, there are uncertainties and risks out there, and plenty of dangers and threats. But none are existential. The sky, as it happens, is unlikely to fall anytime soon. **R**