



Risks Associated with Catastrophic Weapons of Mass Destruction Terrorism Incidents

Almost a decade after the tragedy of 9-11, terrorist activity in the United States and abroad continues to warrant a high level of concern for national security experts. From disrupted terrorist plots to the recent attempt to blow up an aircraft bound for the United States on Christmas Day 2009, the terrorist threat remains an issue.

Please join the third installment of the Homeland Security series as we listen to Brian Finlay share his perspective on the following issues: national security, insured losses from catastrophic incidents, and evaluating risk management needs related to weapons of mass destruction. Brian is a Senior Associate and Director of Stimson's Managing Across Boundaries Program at the Henry L. Stimson Center in Washington, D.C. He currently works on issues of weapons proliferation, illicit trade networks, economic development, and private sector engagement.

Brian, What's the Stimson Center's role in assessing risk?

The Stimson Center is a non-profit public policy think tank based in Washington, D.C. Since its inception the Stimson Center has specialized on national security policy and indeed since our founding more than 20 years ago a mainstay of Stimson's work has been on preventing the spread of nuclear, biological and chemical weapons of mass destruction. We do so by working very closely with governments both in this country and abroad on preventive policies efforts essentially to ensure that nuclear, biological and chemical weapons do not fall into the hands of terrorists or states that the United States Government is concerned might use those weapons against the United States or against U.S. interests. Although governments have been the focus of our efforts over the years increasingly because of globalization pushing more technology so called dual-use technologies into more hands in more countries, in more regions of the world than ever before. We are dealing with increasingly with private sector

companies which are increasingly vulnerable to a catastrophic attack. It's important to note that since 9-11 the U.S. government has poured millions and millions of dollars into protecting U.S. government, particularly military assets here in the United States and abroad from terrorists attacks and while this is extremely wise given the events of 9-11 it has had the unintended consequence of making private sector targets appear softer to terrorists essentially they have become easier hits for terrorists as obstacles to attacking government targets have gone up terrorists interests in private interest has similarly increased. This includes airliners as we have certainly seen most recently based upon the attacks on Christmas day, but also large infrastructure projects, buildings, communications and power nodes, ships, hotels, anything that essentially could cause catastrophic harm. It's also important to note that the terrorist are intent we know on killing Americans, not New Yorkers or Washatonians and so increasingly we're seeing terrorist's interests extend beyond the major terrorist "interest hubs" of the past of New York, of Washington, of Los Angeles, San Francisco as the attacks again on Christmas Day over Detroit showed terrorists will attack wherever our vulnerabilities are greatest and so we at Stimson have been working to raise awareness of private actors to the growing likelihood of a catastrophic terrorist incident here in the United States and, indeed abroad.

With so much focus at the moment on natural disasters, what do recent trends tell us about the nature of terrorism?

Well what we know certainly is that we suffer unfortunately from short term memories and that could be devastating to a private company that does not plan a hit. The earthquakes in Haiti, the earthquake near miss in California recently has shunted terrorism out of the headlines, quite clearly. But it was not so long ago that terrorism was front and center. Again, reference to Christmas day attacks just last year. And, indeed, if history is our guide we know that terrorism will once again, unfortunately, return to the headlines and unfortunately probably in the very near future. This first slide depicts the number of natural catastrophic incidents as compared to terrorists or man made catastrophes since the 1970's.

Now, looking at this along with the second slide, one might conclude that the real threat of a catastrophic incident is from natural and not terrorist or man-made threats. In deed, even the most catastrophic terrorist incident on U.S. soil to date, the events of September 11th did not even come close to the real property losses of Katrina or even several of the other large hurricane events experienced here in the United States since the 1980's. Now this, unfortunately, is a very short sided view. It should be remembered none of these incidents depicted on the graphs that we have just seen include an attack, a terrorist attack using a weapon of mass destruction and therefore we haven't truly experienced the catastrophic damage or losses that a weapon of mass destruction could or, in deed, would yield. What we do know is that Osama Bin Laden and, indeed, Al-Qaeda at large remains intent on obtaining a weapon of mass destruction. We also know that the intelligence community recognizes that to date we have had luck on our side. The concern is that the simple law of averages would suggest that eventually our luck will most certainly run out.

How impactful have previous terrorist incidents proven for the insurance industry?

Well again, slide three depicts the financial magnitude of the largest natural disasters versus terrorist incidents worldwide. As you can see, even the largest terrorist incident, 9-11, does not compare to the losses associated with the largest natural disasters to date. And beyond 9-11 other terrorist attacks have paled in comparison to the actual losses to insure property when compared to the largest natural catastrophes. Now that number, of course, rises significantly in slide four when you take into account some of all insured losses on 9-11, but again, what these charts do not show are the projected losses as a result of a terrorist incident involving a weapon of mass destruction simply because we have yet to have such an incident. Now, any economic model depicting such an attack will show that this would be a complete game changer. Moreover, it is a threat and, in deed, a possibility that experts on up to the President of the United

States himself agree is a growing rather than diminishing threat to the United States homeland.

What are realistic worst case scenarios?

Loss scenarios vary greatly according to method of attack and obviously venue of that attack. Predicting when, where, or how a terrorist will strike is an inexact science to say the very least. But what we do know is this, (1) as mentioned earlier; terrorists will strike where opportunities avail themselves and where our defenses are generally the weakest. (2) Increasingly, this means that the private sector is of growing interest to terrorists simply because by comparison they are generally less well protected than official assets. (3) We also know that while the ease of acquisition of chemical, biological, and nuclear weapons is inversely proportional to the damage that they can cause, meaning the acquisition of a chemical weapon may be easier than a nuclear weapon but the damage is comparatively smaller than a nuclear weapon. We also know that the technologies to develop these weapons including up to a nuclear weapon are becoming increasingly available to committed terrorist entities and we also know that there is no lack of interest in acquisition of these weapons from some of the most dangerous terrorist entities out there, including al-Qaeda. Slide five depicts the anticipated losses from sarin gas incident to a full on nuclear weapon. Sarin gas figure total losses of \$28 billion dollars is indicative and, in fact, was based on an attack that was perpetrated in the 1990's by a Japanese doomsday cult when they disbursed sarin gas in the Tokyo subway system. As you can see, the total potential losses as a result of that attack are relatively small in comparison to the use of a nuclear weapon simply because the property damage is not the same in those two incidences. Unfortunately, we also know and as slide six further calibrates those figures by location, an incident involving a weapon of mass destruction, particularly a nuclear weapon in New York City could easily rise beyond \$778 billion dollars. The slide also indicates that while New York City may be a much more difficult location to perpetrate such an attack, other urban venues may be equally lucrative targets for terrorist's intent on killing

Americans. And, so therefore, while there is a penchant among many to focus on the larger, higher profile urban centers in the United States, in fact, terrorists, as again, we saw over the skies of Detroit on Christmas day are intent on killing Americans wherever they live.

What should risk managers and brokers be aware of in determining needs related to WMD catastrophic insurance?

Well reporting last year a bipartisan congressional commission concluded that there was a greater than even chance of a weapon of mass destruction incident occurring somewhere in the world in the next five years. They further concluded that there was a higher potential for a biological incident over a nuclear incident simply because of the ease of acquisition of the requisite technologies necessary to build and deliver a biological weapon. That said neither did they foreclose the possibility of a full-on nuclear incident occurring even here on U.S. soil. Now President Obama, like his predecessors, when he arrived at the White House said that there was no higher U. S. priority than preventing terrorist acquisition of a weapon of mass destruction. Even after September 11th when the 9-11 commission produced a road map to help prevent a WMD incident here in the United States and proliferation abroad by the time the administration, the Bush administration left office they were barely making passing grades on implementation of that plan according to the 9-11 commissioners. Today, one full year after taking office, the earlier WMD commission that I mentioned has similarly graded the Obama administration efforts over its first year and unfortunately the results are not encouraging. On implementation of a comprehensive policy towards Pakistan to prevent leakage of nuclear weapons or technologies, the U. S. Government received an incomplete grade. On working with Russia to reduce dangers posed by nuclear and biological weapons stockpiles that that government held during the cold war a grade of "C". On the ability to tighten U. S. Government oversight of high containment pathogen laboratories containing toxins and other pathogens that could be used for a biological weapon, a grade of "D+" and on the ability to enhance the nation's

capabilities for a rapid response to prevent a biological attack from inflicting mass casualties here in the United States, the WMD commission gave the U. S. Government a grade of “F”. Now what this tells us is three-fold: (1) The U. S. Government has not acted with sufficient zeal to reduce the threat of a weapon of mass destruction incident from becoming a reality here on the U. S. homeland; (2) This failure has been a bipartisan one. One, both of the Bush administration, of the Obama administration and, indeed of the previous Clinton administration. And it is also one that requires bipartisan solutions if, indeed we are to minimize the potential for a catastrophic WMD incident here in the United States. And finally, it should tell us and should tell the private sector that they must be prepared for an inevitable incident involving a weapon of mass destruction here in the United States.

**Brian,
Thank you for sharing your expertise on this very timely and complicated topic.**

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