



David McNew/Getty Images

◀21ST CENTURY RISK: A firefighter checks an officer for radiation after the mock explosion of a "dirty bomb" in Los Angeles.

# On ALERT

## Key Points

- Insurers fear future terrorist attacks may include chemical, neurological, biological or radiological elements.
- The events of Sept. 11, 2001, forced insurers to have greater concern about contract certainty, concentration of risks and terrorism insurance availability.
- Terrorism risk modeling, once based on conjecture, now reflects the realities of five years of terrorist events.
- Insurance pros think the industry should unite behind one plan to replace the temporary federal backstop for terrorism with a permanent backstop, and time is running out.

Wary insurers weigh modeling and reinsurance options against elevated terrorism risks.

by Bonnie Brewer Cavanaugh

**I**n the five years since the terrorist attacks on the Pentagon and World Trade Center, the concept of extreme risk in the United States has gone from a focus on natural catastrophes to the heretofore unthinkable: chemical, nuclear, biological and radiological threats. It's a burgeoning realization that's transformed the insurance industry, and is the reason members of the insurance community are calling for a united front to save the industry from future terrorism losses.

Still one of the nation's costliest insured losses, estimated as high as \$40.2 billion by the Insurance Information Institute, the Sept. 11, 2001, attacks also significantly altered the way insurers view their business. Details once among the minutiae of concerns have been thrust to the forefront: contract certainty, concentration of risks, terrorism insurance availability.

Terrorism is a new class of business with respect to the United States, but as a global class of business, it has been around a long time, said Aaron Davis, director of the national terrorism and property resources group for Chicago-based Aon Corp., the second-largest insurance broker according to the *Best's Review* ranking of Top Global Insurance Brokers.

The original Terrorism Risk Insurance Act of 2002 and

its recent two-year extension, the Terrorism Risk Insurance Extension Act of 2005, caused a great deal of uncertainty in the marketplace for complex risk, for Fortune 1,000 companies, and for risks where there is a high concentration of terrorism exposure within a portfolio, Davis said.

"Outside the specialty stand-alone terrorism market and a few select markets that were willing to offer terrorism coverage prior to TRIA's inception, it really changed the landscape of U.S. terrorism risk," he said. As TRIA was set to expire at the end of 2005, "it became quite clear that a vast majority of the P/C marketplace was going to elect to exclude this type of exposure." Close to 85% of the market on capacity is looking to exclude terrorism, he added. "We were fortunate that it was extended."

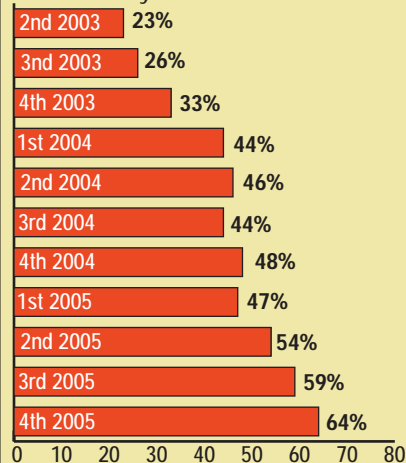
### Defining the Details

Major changes in the insurance industry began shortly after Sept. 11, when lawsuits by the lessee of the Twin Towers, Larry Silverstein, against his multiple insurers sought to determine just how many insured events took place that day: one or two? Additionally, Silverstein had leased the WTC properties just weeks prior to the attacks, and many of his insurance policies were not yet finalized.

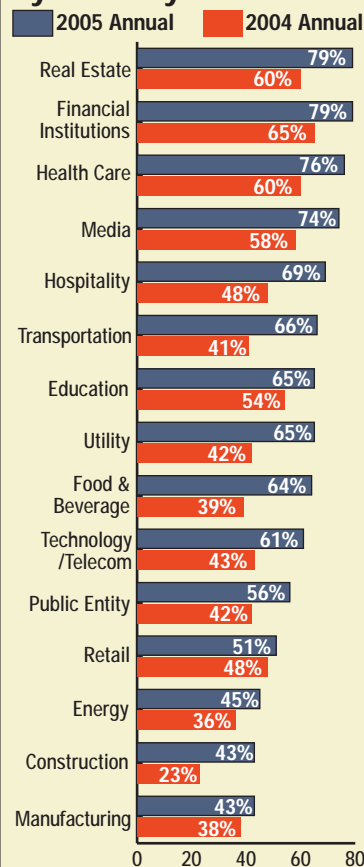
## Terrorism Insurance: What's Happening Now

### Terrorism Take-Up Rates By Quarter

There has been an almost continuous increase in the take-up rate—the percentage of companies buying the coverage—over the 11 quarters that Marsh has been tracking the purchase of property terrorism insurance by its clients.



### Terrorism Take-Up Rates By Industry



Source: Marsh & McLennan Cos., Marketwatch: Terrorism Insurance 2006

Language in the policies was examined under the microscope of the public eye, and although two trials brought two different results—10 insurers were held responsible for one event only; nine were held responsible for two events—the real outcome was a major upheaval in contract certainty for the industry at large.

It's certainly become a sensitive area with insurers, said Ernie Csiszar, president and chief executive officer for Property Casualty Insurers Association of America.

"Some of our members have gone to midyear renewals," Csiszar said. "Because of what happened with the World Trade Center and the uncertainty in the litigation we've seen come out of that, there is a much greater sensitivity to see that the contract is in place."

Davis agreed: "Everyone is pressing for fast, final policy issuance and uniformity for temporary contracts or binders issued at the time of the acceptance of these policies," which proves how "crucial" insurance is to disaster recovery and the economy.

### Concentration of Risk

The biggest peril facing the United States today is "homegrown" terrorists: individuals who carry out an attack within their own country, said Andrew Coburn, director of terrorism research for cat modeler Risk Management Solutions Inc. of Newark, Calif.

Insurers are preparing for this newest wave of terrorism by controlling aggregate exposure, Coburn said. "They're looking at where they have concentration of risk in cities or around targets...and they're shaping their portfolios to levels of loss that are acceptable to them. They're using the same analyses to buy reinsurance. It's the age-old tradition of diversifying their risk."

"Concentration of risk is the \$64,000 question for most insurers," Davis said. "It gets back to the lack of confidence that insurers have in terrorism modeling capabilities." While terrorism risk models have improved

substantially since Sept. 11, insurers are still concerned about what the models can't yet determine: the frequency and severity of potential events.

"A lot of the modeling firms have been providing event scenario analysis that is literally translating into hundreds of billions of dollars of either economic or insured loss from CNBR [chemical, neurological, biological or radiological] events," Davis said. "Events of that magnitude ... you're talking about events that are not just capital-raising events, they're liquidity-making events for the insurance community."

Csiszar also expressed skepticism that terrorism can be properly modeled for the insurance industry: "Unless you can get inside an irrational human being's mind, how do you model this?"

### The New Models

The main difference between terrorism peril and other types of peril is its localized nature, said Frank Fischer, primary insurance marketplace practice leader for AIR Worldwide Corp., a Boston-based modeling firm. AIR has been upgrading terrorism models each year since developing its first in 2002.

"Terrorism modeling follows not the scientific or meteorological rules, but what's inside people's minds: why do they attack?" Fischer said. AIR derived its information from a panel of experts on terrorism and counterterrorism. "The really different component is the where, when and how often."

AIR works on the assumption that attacks will happen at specific targets: symbolic targets such as the World Trade Center, Sears Tower and the Transamerica Pyramid, or municipal facilities such as places of worship, schools, infrastructure and bridges.

Modeler RMS has upgraded its terrorism risk model annually since 2002 to reflect the evolving terrorism threat worldwide, Coburn said. The fifth version of RMS's terrorism model was released June 5. "I think

the first generation of our modeling was theoretical," Coburn explained. RMS did not have a lot of data on the Jihadist left when it began its model, but unfortunately, he said, there's been "a huge amount" of additional data available since.

"The models have evolved from a theoretical structure to a much more data-driven model," Coburn said. Jihadi terrorists are "achieving bigger impact with more attack modes...they are using smaller bombs to achieve a greater effect. We've seen them greatly increase the number of people they've killed with car bombs."

The insurance implications of these less-spectacular types of attacks would be more frequent, smaller losses that would mount up over time, according to RMS's recent report on Terrorism Risk: "The biggest impact on the insurance industry and other businesses would be a destabilizing of financial confidence and a period of economic hard times."

External influences such as rating agencies, insurance regulators and the passage of the original TRIA in 2002 have had a major impact on the path taken by terrorism risk modeling, Fischer said. A "key point" in the evolution of terrorism insurance was an A.M. Best Co. questionnaire on terrorism: "It forced a lot of clients that were not looking at it closely to take a look at it. A.M. Best was trying to find out what is the key information that could put this company in financial jeopardy: 'Do you keep track of your data?' 'Do you know what your risks are?' It forced a lot of clients who said 'I'm not going to think about it, it's not going to happen again' to really focus on it," Fischer said.

Terrorism modeling soon began to incorporate workers' compensation losses and life losses in addition to personal property losses, Fischer said. Take-up rates for terrorism insur-

## The Stand-Alone Terrorism Market: Market Capacity at Second Quarter 2006\*

Insurer (Group)	Insurer	Max. Capacity Q2 2006 (\$ Millions)
Ace USA	Illinois Union	\$25
American International Group	Lexington, WorldSource, AIU	\$100
Arch Insurance Group	Arch Specialty	\$10
Axis Specialty Ltd.	Axis Specialty Ltd.	\$100 to \$150
Berkshire Hathaway	National Fire & Marine	\$500 to \$1,000
Hannover Re	International Insurance Co. of Hannover	\$10
Lloyd's	Various syndicates	\$50 to \$600
Montpelier Re	Montpelier Re Ltd.	\$50
QBE	QBE	\$10
Glacier Re	Glacier Re	\$25
Transatlantic Re	Transatlantic Re	\$50

\* as of April 20, 2006      Theoretical Maximum: \$930 million to \$2.0 billion  
Source: Marsh & McLennan Cos.

ance, which fizzled initially, have increased greatly over the past few years.

According to a Marsh & McLennan Cos. report published in June, *Marketwatch: Terrorism Insurance 2006*, take-up rates for terrorism insurance nearly tripled in the fourth quarter of 2005 compared with mid-2003, when Marsh began tracking the purchase of terrorism coverage. Marsh is the largest insurance broker according to the *Best's Review* ranking of Top Global Insurance Brokers. Real estate firms, financial institutions and health-care facilities saw a 75% increase in terrorism insurance take-up rates, and media companies saw a 74% hike.

"Despite uncertainties over what terrorism insurance markets will look like in the not-too-distant future, businesses from every industry sector continue to purchase an ever-increasing amount of coverage," the report stated. "...Beyond 2007, the situation is unclear."

Marjorie Young, vice president of Wall Street broker E.G. Bowman, suspects that terrorism insurance eventually will be excluded, like war insurance: "They'll tack it on as exclusion. This is only my guess; it will become a specialty government supplement or written by the government, like flood is, by specialty insurance companies. Like kidnap and ransom currently is.

"There are one or two companies that do write it right now as a stand-

alone. I'd hate to see what would happen to them if this hits again," Young said. E.G. Bowman's Manhattan offices are about a half-mile east of Ground Zero. "The impact of it could be so humongous, especially if they hit New York again."

### TRIA versus an Alternative Solution

There's an ongoing "very active, vibrant debate" within the lobbying community and poli-

cyholder groups, such as the Real Estate Roundtable and the Coalition to Insure Against Terrorism, about proposals for a permanent federal backstop for terrorism insurance, said Joel Wood, senior vice president for government affairs for The Council of Insurance Agents & Brokers.

"What we're seeing is not so much a change in the model for terrorism itself or reinsurance for terrorism, but sort of an evolution among insurers of how to construct a backstop that would work in the marketplace that would also fit all the political parameters," he said. That's due to a heightened concern today about CNBRs, he added.

Aon's Davis noted there's the additional question of insured versus uninsured losses for CNBR attacks; the market has to be able to price against natural catastrophe losses as well as terrorism losses. "It's important to note that the ground still shakes and the wind still blows, as indicated by the 2005 windstorm activity," he said. "From a long-term perspective, Aon feels that there has to be some form of public-private partnership for U.S. terrorism risk.

"We view TRIEA or its replacement as something that's directly linked to the economy. It's not just an insurance issue; it's an economic security issue," Davis said.

The major difference between the insurance market today and that prior to Sept. 11 is that things are "tougher" today: there's no reinsur-

ance, Csiszar said. He suggests a multipronged approach to a permanent backstop, "including...market reforms, so this can be priced appropriately." That would include no price suppression from regulators.

"You need to start a market for insurance in a capital market instrument—cat bonds; how viable are terrorism bonds? We talked about them and it's worth a discussion because 10-to-15 years ago there was no such thing as a cat bond. Today there is a relatively viable market in these bonds," Csiszar said.

"The whole notion of some type of reserve for terrorism events is a good one," he added. "Lastly, you need some type of a pool with a federal backup to that pool."

"A lot of people are saying cat bonds could be a solution to terrorism risk," Davis said. Cat bonds are priced and placed in the market on the basis of providing both a frequen-

cy and a severity load to a set of events within the parameters of a natural catastrophe, he explained. "Aon's position in the short-term is there will never be an adequate solution."

Wood suggests a voluntary pooling arrangement crafted on the premise of last year's House bill for the TRIA extension, which did not mandate coverage. "TRIEA as it exists will not be reinstated short of another event occurring, or short of some traumatic changes in Congress," he said.

TRIA proponents in the past found a roadblock in former Treasury Secretary John W. Snow, who in a June 2005 report to Congress said TRIA had served its function as a temporary backstop and should not be renewed in its present form. Yet insurers could find a sympathetic ear in Treasury Secretary Henry M. Paulson, who has publicly supported a federal backstop.

As chairman and chief executive officer of global investment bank Goldman Sachs Group Inc., Paulson told the House Capital Markets and Insurance Subcommittee in July 2005 that "reinsurance and, consequently, insurance participation in the terrorism insurance market likely will decline significantly" if Congress didn't act to renew TRIA.

A report from the President's Working Group on Financial Markets is due by the end of September. Under the terms of TRIEA, the group must submit a report on the long-term availability and affordability of terrorism insurance to Congress by Sept. 30. The group includes the Treasury Secretary and chairs of the Federal Reserve, the U.S. Securities and Exchange Commission and the Commodity Futures Trading Commission. And as head of the Treasury, Paulson is expected to chair the group.

Reinsurance Association of America President Frank Nutter, speaking at RMS's fifth annual Terrorism Risk Management Seminar May 31 in Manhattan, said banking groups nationwide are pushing for a pooling mechanism similar to London's Pool Re. "The industry is doing a better job this year in pulling together to assess what strategy to make a case for," Nutter said.

Nutter suggests reinsurers fold CNBR "into a three-layer financing structure" consisting of private industry capacity, new private market financing via a pooling mechanism, and federal participation. But the industry has "a poor record" of being able to unite behind one solution, he said. "There are a lot of creative people, but the Congress is not very good at sorting out competing proposals."

"There is no unanimity on what this long-term solution might look like," Csiszar agreed. "We're going to have to come to some consensual agreement. I can tell you the Congress won't act the second time around." **BR**

## Comparing TRIA and the TRIA Extension

	Original TRIA (2002)	TRIA Extension (2005)
Terminates	Dec. 31, 2005	Dec. 31, 2007
Make available	Must make available coverage for certified "acts of terrorism" on same terms and conditions as for other covered risks	No change
Covered acts	Foreign terrorism in United States (including war for workers' compensation)	No change
Certification level	\$5 million	\$5 million
Program trigger	\$5 million	\$50 million in 2006 \$100 million in 2007
Covered insurance	Commercial property and casualty	Commercial property and casualty, excluding auto, burglary, surety, professional liability, farmowners multiple peril
Deductibles (percent of direct earned premium)	15% in 2005	17.5% in 2006 20% in 2007
Federal reinsurance quota share	90% in 2005	90% in 2006 85% in 2007
Industry retention for mandatory recoupment	\$15 billion in 2005	\$25 billion in 2006 \$27.5 billion in 2007
Cap on liability	\$100 billion	\$100 billion
Special advisory bodies	None	The President's Working Group on Financial Markets
Required studies	Market conditions study	Group life Nuclear, biological, chemical, and radiological (NBCR)

Source: Marsh & McLennan Cos., *Marketwatch: Terrorism Insurance 2006*