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The Growing Threat of CBRN Weapons

By Weimeng Yeo

Synopsis

Chemical, biological, radiological, and nuclear (CBRN) weapons attacks constitute a sizeable portion of terrorism risk. This risk has become a growing concern as there is evidence that the insecurity in the Middle East has emboldened terrorist groups to acquire and develop such weapons.

Commentary

THE CURRENT instability in the Middle East, particularly in Iraq and in Syria, may have shifted the paradigm about the use of chemical, biological, radiological and nuclear (CBRN) weapons by terrorist groups.

In the past, there has been a consensus among counter terrorism experts that the use of a CBRN weapon by terrorist groups is unlikely as these armaments were expensive, difficult to acquire, complicated to weaponise as well as to deploy. Moreover, with the operational environment being curtailed by national security agencies, counter terrorism experts agreed it would be a challenge for any terrorist groups to orchestrate such attacks, particularly in the West. There are at least five reasons for this apparent shift.

Driving forces of possible shift

Aspiring terrorist groups: The conflict in Syria and the insurgency in Iraq have energised the salafi-jihadi groups and have emboldened their supporters to orchestrate large scale high-casualty attacks. More worrying is the fact that salafi-jihadi groups have been linked to several CBRN terrorist attacks. Horrific images and witness accounts have led to allegations that militants have used chemical weapons against Kurdish militants in Syria and security forces in Iraq.

In Iraq and Syria, the strongest salafi-jihadi group is Islamic State (IS). Apart from its ideology, and an even more virulent view of jihad than that of its Al Qaeda counterpart, IS with more than 30,000 fighters has shown willingness and capability to orchestrate successful large-scale attacks overseas. Counter terrorism experts have warned that IS has been working to build up capabilities to execute mass casualty attacks outside their area of operation, a departure from the group's focus on encouraging lone wolf attacks.

Access to financial resources: IS has access to extraordinary levels of funding that make the

procurement of supplies to develop CBRN agents a smaller hurdle to overcome. According to a study by Reuters in October 2014, with the resources generated by IS-controlled territory and the income collected from their illegal activities such as kidnapping, extortion and smuggling, it is estimated that IS possesses assets of more than US\$2 trillion, with an annual income amounting to US\$2.9 billion.

While this is a conservative estimate and much of their financial resources would be allocated to run their organisation as well as maintain control of their territory, it still offers them ample funding to have a credible CBRN programme.

Increased number of safe havens: A failing state can offer a safe haven in which militants can function freely and shelter from authorities seeking to disrupt their activities. IS gains in Iraq and Syria have provided it the safe havens in which they have the capacity to develop such weapons. Currently, IS has control of almost 50% of Syria and has seized much of northern Iraq, including the major city of Mosul. Thus, members of the militant group are not merely fighting on the front lines but they also have authority over substantial swath of territory in both Iraq and Syria. The fear is that there are people working in IS-controlled campuses of the University of Mosul or in some CBRN facility in the Syrian city of Raqqa, the group's de facto capital, to develop such weapons.

Accessibility of CBRN arsenal: Despite commendable efforts by the Organisation for the Prohibition of Chemical Weapons (OPCW) to render Syrian CBRN stockpiles obsolete, it is still unclear whether the Assad regime has destroyed its CBRN arsenal. As such, access to CBRN materials in Syria is still a concern as there are many potential CBRN sites that could be pilfered by a terrorist group. For example in April 2013, militants targeted the al-Safira chemical facility, a pivotal production centre for Syria's chemical weapons programme.

Role Of foreign Jihadists: The role played by the foreign fighters who have travelled to Syria and Iraq in the past few years also needs to be taken account. IS' success in attracting foreigners has been unparalleled with more than 20,000 individuals joining their group. Several of these foreign jihadists have attended universities, providing IS a pool of individuals with the requisite scientific expertise to develop and use CBRN weapons.

To illustrate this point, in August 2014, a laptop owned by a Tunisian physics university student fighting with IS was discovered to contain a document on how to develop bubonic plague and weaponise it. Many in the counter terrorism field have concerns that individuals with such a background could be given a CBRN agent and then be trained to orchestrate such an attack. With their training, they might even return to their countries of origin to conduct attacks back in their homeland.

Growing interest to acquire CBRN arms

The interest in acquiring a CBRN weapon by terrorist groups remains unabated. There is enough information to show that IS has at least a nascent CBRN programme. Fortunately, obtaining a CBRN capability to kill hundreds, much less thousands, is still a major challenge. Al-Qaeda in the past has tried to acquire such weapons with limited success while the counter terrorism forces globally have devoted significant resources to prevent terrorist groups from making any breakthrough.

Current evidence suggests that the salafi-jihadists are still unable to orchestrate a mass CBRN attack, and at best can produce crude CBRN agents that are more suited for smaller attacks. As a result, terrorist groups will continue to resort to conventional attacks. However, at the same time, with its sizeable financial resources, success in recruiting skilled individuals and the availability of CBRN materials in Iraq and Syria, IS has increased its probability of carrying out a massive CBRN attack. As it is not "if," but "when" before a mass CBRN attack could occur, counter-strategies must be put in place.

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