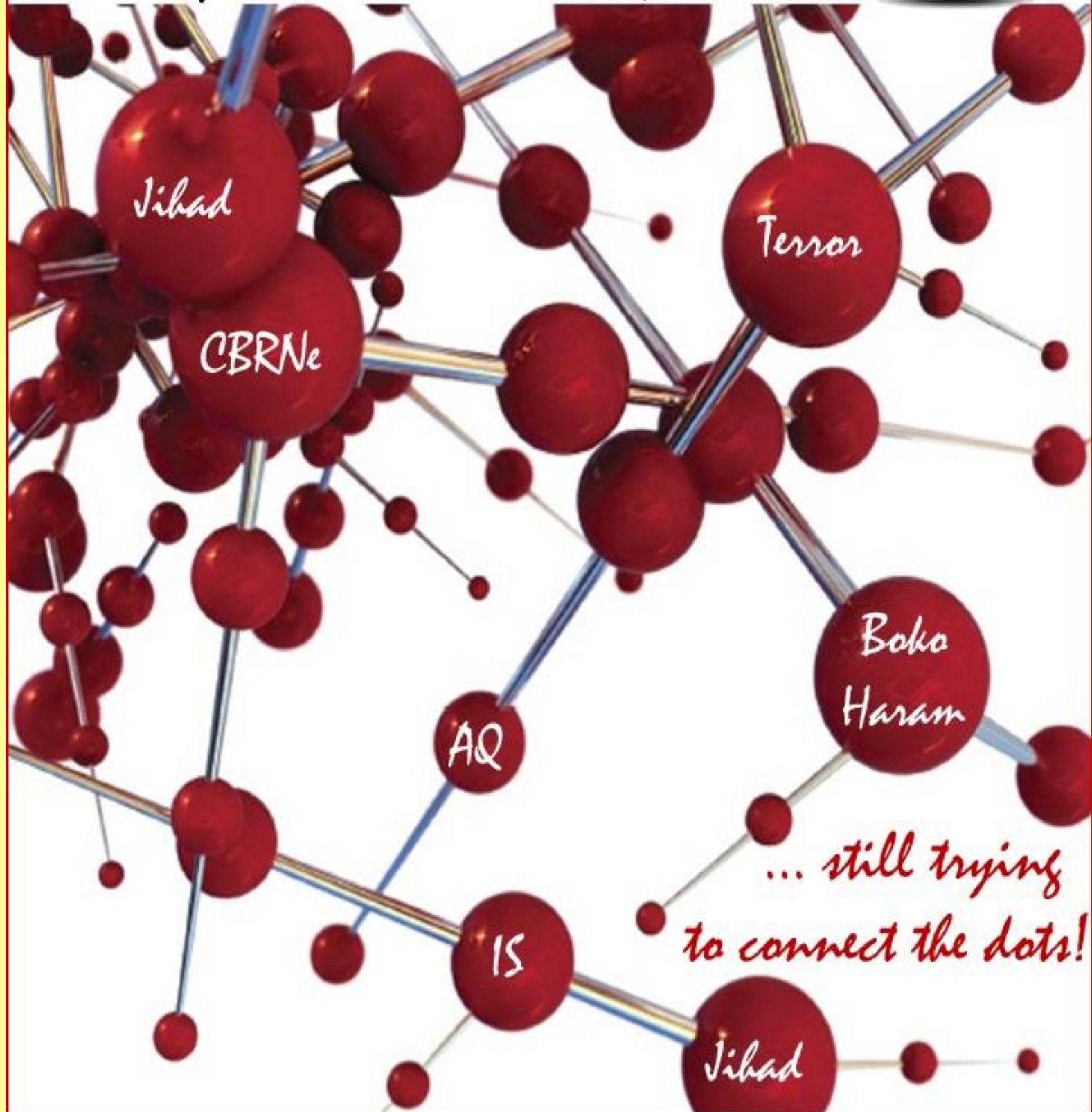


April 2016

CBRNE

NEWSLETTER TERRORISM

E-Journal for CBRNE & CT First Responders



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CBRNE-Terrorism Newsletter – 2016©

April 2016

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Editorial

Brig Gen (ret'd) Ioannis Galatas, MD, MA, MC

Editor-in-Chief
CBRNE-Terrorism Newsletter



Dear Colleagues,

April 2016 – another troubling month full of incidents worldwide...

Two new threats evolved. One was old (hijacking of Egypt Air MS181 during internal flight [Alexandria to Cairo, Egypt] that ended without victims in Cyprus; hijacker was a rather disturbed person claiming family problems – but he did it!); the other is not exactly new (threatening people at European beaches during coming summer time) since similar attacks have already executed mainly in African resorts. But these two threats can be repeated at any given time and at any place attracting international tourists and locals.

Pope Francis visited refugees' hotspots in the Greek island of Lesbos and upon return he took ten refugees in his plane back to Italy. Big media coverage worldwide but not much is expected in solving this huge problem Greece (and Italy) is facing. Situation in Greece is still explosive due to closed borders (FYROM) and apart of bla bla and some EU money allocated no viable solution is seen. Greek government still absent from what is happening with refugees have left governance to some NGOs – some of them acting in a suspicious way. Refugees and illegal immigrants are fighting each other and between them and new Muslim villages are popping up in various places in Greece. Their overall behavior is problematic – i.e. they urinate or have open sex inside Kilikis town hospital in open view. Greeks start to feel uncomfortable with that and initial solidarity is slowly reversing sending a message that tolerance has its own limits. NATO's presence in the Aegean Sea continues to be a joke and so is the supposed Turkish control of immigrants' flows from their territory. By the way: there are about 1.2 million Christians in Syria but only VERY few are among the incoming refugees. Are they excluded to move to Europe? Is it accidental or part of a wider plan? Or did they choose to stay and fight for their homes and country instead of fleeing with hands down?

At the same time Europe is adjusting to incomers (legal and illegal) demands and ethics by excluding pork meat from its restaurants or planning to forbid sexy advertisements that "upset" Muslims – just to name a few. For many years the UK was leading but now Germany is following claiming the lead. The funny thing is that all admit that the multiculturalism experiment failed and that integration is difficult and for a significant percentage impossible (read about a recent related UK poll). Carefully examining my Greek passport I noticed that there are pictures of monasteries but with the cross on top of them. Artistic error or intentional removal?



And a funny incident in troubling times. A German teacher in a small city asked a Greek student never to wear her T-shirt given by her grandfather from Crete Island because it had a print saying: "I do not need any therapy. Just travel to Greece" with the excuse that it meant that "Germany is a mess!" I called it "funny" because you cannot take such people seriously! It is those people who

claim "We are paying you to sit and do nothing!" No! You are not paying us; you are lending us money and you get them back two or three times more! But still we manage to survive and enjoy life and sun in ways you will never even come close to! Stop doing that and act as true Europeans keeping in mind that life is too short to be that bitter!



On 17 April 2016, the lower house of Congress voted 367 to 137 in favor of impeaching President Dilma Rousseff. The impeachment case is now set to pass to the Senate, where a majority vote is required to approve the motion. If the Senate approves the impeachment motion, Rousseff will have to step down from the presidency for 180 days to defend herself in an impeachment trial. This vote is expected in early May. On April 17th, supporters and opponents of Rousseff and the impeachment process held demonstrations in cities across Brazil, including Brasilia, Rio de Janeiro and São Paulo. In Brasilia, city officials had installed a .6 mi/1 km-long metal fence to separate the opposing sides as participants gathered outside Brazil's Congress building. Any country facing such a serious political crisis would experience instability. However, for Brazil this is just one of a series of crises the country has been dealing with for many years. Recent Brazilian crises include: political instability; economic recession; social instability; corruption and most recent Zika Virus. Did I forget to mention that Brazil will be hosting the 2016 Global Summer Olympic Games starting August 5, 2016? What are the short and long term effects of the impeachment trial? Will Brazil be able to Host the 2016 Summer Olympic Games? Can Brazil keep tourist and citizens safe from domestic crime, international terrorism (recent direct ISIS threats), and the Zika Virus? Time flies fast and soon we will know the answers!

As you will read in the Newsletter there are many strong voices warning about chemical and radiological (even INDs) attacks against European targets. Jorge Berto Silva, deputy head of counter terrorism for the European Commission quoted: "With CBRN [chemical, biological, radioactive and nuclear materials], there is a justified concern." For years CBRN experts made similar warnings but nobody cared considering the threats as "exotic". It is not easy to execute such attacks but not impossible.

Kabul, Afghanistan recently experienced a huge suicide bombing killing 28 and injured more than 300 people – the biggest attack in the last five years. Bloodshed equivalent to that of Brussels but main stream media did not consider it as important and the day after the whole thing has been forgotten. Perhaps because a different kind of people are living in that country suffering a war with no end – for what?



But in the midst of chaos an Afghan school teacher delivers books by bicycle to children in remote areas, giving them a chance to learn to read. Saber Hosseini, a teacher from Bamyan in central Afghanistan, selects books from his library, loads them onto his bicycle and sets off for remote villages which have no schools. The teacher has started his ride seven months ago. His collection has grown from 200 to

about 3 thousand 500 books. The teacher now plans to open the first library in his town (watch the related video at: <http://www.presstv.ir/Detail/2016/04/16/461045/Afghan-Teacher-Library/>). There is still hope when BRAVE MEN like this teacher walk on our planet!

The only good thing in April was the news that Germany plans to strip citizenship from returning jihadists. Newsletter's audience know that this was my proposal from the very beginning. If they know the numbers they know the people and their IDs. So let them enjoy the life they choose into their new homeland and fulfill their dreams (and die). I am not sure that this proposal will overcome the usual problems with civil rights and rest of civilized objections – read also about the verdict on Norwegian killer trial. But it is a good proposal and hope others will follow (even French).

Take care First Responders!

The Editor-in-Chief





March 25, 2016: Greek Independence Day parade



American (Muslim) invader warns: "We are taking Europe from the

Europeans and they are too stupid and weak to even fight back”

Source: <http://www.barenakedislam.com/2015/09/09/must-seeshare-african-muslim-invader-warns-we-are-taking-europe-from-the-europeans-and-they-are-too-stupid-and-weak-to-even-fight-back/>

September 9, 2015 video:

“As Europeans take us in and give us free food, healthcare, and housing, it’s not about bettering our lives, it’s about conquest of the West and ending European culture. Europeans are more afraid of being called ‘racists’ or ‘Nazis’ than having their daughters and wives raped by Africans. We are going to destroy the white European blood lines and take their land and they are going to pay us to do it. HA HA HA!”



EDITOR’S COMMENT: See p.6!

Brazil cuts security budget ahead of Summer Olympics

By Kim Brunhuber

Source: <http://www.cbc.ca/news/world/rio-olympics-security-chief-1.3504725>



The Olympics security force will be comprised of some 48,000 police, ambulance and fire personnel, bolstered by 38,000 members of Brazil’s armed forces. (Kim Brunhuber/CBC)

Mar 25 – The challenge is itself Olympian: protect more than 1,500 athletes and an expected half-a-million tourists for two weeks

in August while Rio de Janeiro hosts the Summer Games. Also, do that with security budget that, this week, became about \$550 million US smaller.



On Monday, Brazil's government cut its security budget by more than 30 per cent. And while most of those cuts will deal with future investment, the government announced that some will affect its plans for the Olympics, such as establishing a specialized Urban Pacification Police unit in Maré, Rio's massive complex of 15 slums near the airport.

Instead, this unit will only be set up sometime after the Games.

Eliana Sousa, director of the Maré Development Network, says now the government will have to rely on the army, as it did during the World Cup when more than 1,000 security forces were sent in to occupy the *favela*.

"The army stayed here in Maré permanently for 15 months and 600 million reals, and what do we have from the public security point of view?" she asks. "Nothing. Nothing has changed."

With the Olympics now less than five months away, some here feel Brazil isn't taking the risk of terrorism seriously enough.

"What worries me the most is that Brazil's intelligence agency alleges that a terrorist attack during an Olympic Games in Rio de Janeiro would be low-risk because we haven't had any events" related to terrorism, says Paulo Storani, a former captain in Rio's special operations police force, now a security consultant and professor.

The size of the Brazil's Olympic security force — some 48,000 police and firefighters, bolstered by 38,000 from Brazil's armed forces — is about twice that for the London Games in 2012.

But the sheer numbers aren't reassuring, Storani says, calling it an effort to compensate for the fact that the country didn't invest in the necessary technology and equipment.

"Unfortunately because of the lack of planning and executing, it didn't happen," he says. "So now they have to invest in the mobilization of that number of people."

"If we depend on the structure that is being prepared for these Games, we are extremely vulnerable to these attacks, just like what happened in Paris and Brussels," Storani says.

Electronic eye

The view from inside the cordon is different, mind you. "Brazil has adopted all the possible necessary measures in order to confront any attacks," says the man in charge of Olympic security, Andrei Rodrigues, special safety secretary for major events at Brazil's ministry of justice.

Rodrigues gave me a tour of the Olympic security's command and control centre. The room is like a large movie theatre, but instead of one screen, the wall is covered in dozens of them. In effect, it is a compound electronic eye with hundreds of facets, each one with a different view of the Games.



In the lead-up to the Olympics, Brazil's police will be helped by security forces from other countries. (Kim Brunhuber)

"We have the capacity to receive images from all the cameras installed across the Olympic areas in real time," Rodrigues says.

Here in the command centre, Brazilian security forces will work with colleagues from around the world to monitor the city. They'll even screen visitors before they land.

"Brazil adopted systems of security which receives data from passengers that check in from their country of origin," Rodrigues says. "And immediately, in real time, the federal



police in Rio de Janeiro in Brazil receive their data to treat the information before they arrive." Brazil has had very little history of terrorism. But this year the country just passed new security legislation, which widens the definition of terrorism.

"Security works like that," Rodrigues says. "Always trying to make it better and better."

The 2014 World Cup — that massive international event that Rio also hosted — was just a trial run. Since then, organizers have been modernizing, Rodrigues says, sending hundreds of police to other large sporting events, like the Pan-Am Games in Toronto last summer to learn the newest techniques. "So we have been collecting the best practices worldwide to employ in big events. From this point on, we adapted them to our Brazilian realities," he says.

The security forces, already wary, are now even more on edge because of the Brussels bombings. Rodrigues notes that the recent attacks show that even in the most developed countries, and in the most secure and monitored locations like airports, terrorists can still strike.

"It's hard to say that it guarantees 100 per cent of safety, that we are immune from these kinds of attacks."

Kim Brunhuber is a CBC News Senior Reporter based in Los Angeles. He has traveled the world from Sierra Leone to Afghanistan as a videojournalist, shooting and editing pieces for TV, radio and online. Originally from Montreal, he speaks French and Spanish, and is also a published novelist.

Rio Olympics pushed to side amid turmoil in Brazil

Source: <http://www.cbc.ca/sports/olympics/summer/generic/rio-olympics-brazil-crisis-1.3503701>

Mar 23 – **Brazil's economic and political crisis has relegated Rio de Janeiro's Olympic preparations to an afterthought with South America's first games just over four months away.**

Rio's Olympics are being sidelined by an even bigger show: Brazilian President Dilma Rousseff's fight against impeachment with millions on the streets marching against her. All of this amid multiple corruption scandals with the country mired in the worst economic recession since the 1930s.

"If this was five years ago, we could have even lost the games," organizing committee spokesman Mario Andrada told The Associated Press. "I have never experienced such political turmoil in my whole life," he added. "If you ask me what's next on the political front, I don't have a clue."

Brazil's leaders were hoping attention from the Olympics — and the 2014 World Cup — would burnish the country's image. Instead, they may have done the opposite with the ominous impeachment getting intense coverage, highlighting graft trials, endemic corruption and a sharp fall in the value of country's currency.



Earlier this month an estimated three million people took to the streets across the country in anti-Rousseff demonstrations, which were reported to be larger than protests in 1984 demanding elections and an end of the country's military dictatorship.

Andrada sounded buoyant, saying: "We are almost there. The things that we need from the government — they are smaller, day-to-day things."

Signs of trouble

However, there are worrying signs.



The city of Rio de Janeiro, which is building many of the new Olympics venues, has rescinded contracts on at least two venues — the tennis and equestrian center — and delays have been reported on at least four other Olympic projects. The city says about 95 per cent of the building work is done and venues will be delivered in time.

"The political crisis at the federal level does not affect the last building mile for the preparation of the games in any way," the city hall said Tuesday in a statement.

On Monday, the head police for the state of Rio de Janeiro, Jose Mariano Beltrame, said his budget had been reduced by 2 billion reais (\$600 million US), a cut sure to impact Olympic security.

Sergio Praca, a political scientist at the respected Getulio Vargas foundation, said the Olympics would not escape the government chaos.

"The federal bureaucracy is completely paralyzed right now; for lack of money, for lack of knowing where all of this is headed," he said.

"So all the security planning, any planning that has to do with the Olympic Games is made more difficult now."

Olympics 'the last thing on everybody's mind'

It was different in 2009 when Rio was awarded the games, championed by then-President Luiz Inacio Lula da Silva. He called it a "sacred day" and praised the "strength of Brazil's economy," which shrank by 4 per cent in 2015 with no improvement in sight.

"This is a day to commemorate because Brazil has left its status as a second-class nation," Silva said in Copenhagen as thousands back home celebrated on Copacabana beach. "Today we're getting the respect that Brazil has been deserving."

The promises now seem hollow, and so does the legendary Silva.

A few weeks ago he was hauled into a police station for questioning in a graft and money-laundering investigation.

Last week Rousseff named him her chief of staff, which would grant him some legal immunity — an appointment subsequently blocked by a court ruling.

Hours later he told a screaming rally: "There will be no coup," a reminder of the military dictatorship that ended 31 years ago.

"I assure you the Olympic Games are the last thing on everybody's mind right now," Praca said. "This was supposed to be a great year for Brazil and Rio, but it's been anything but that — even if the Olympic Games go well."

It's possible that Rousseff will be out as president when the games open on Aug. 5, which may leave the ceremonial opening of the games to vice president Michel Temer. Lula's future is also murky with some newspapers suggesting he and some family members could face jail time.

"Part of me wishes the Olympics Games would not happen here just so people don't see how politically disorganized the country is, the economic chaos and the recession," Praca added. "This is the worst time in Brazilian history to hold the Olympic Games. Brazil's image, which had gotten a lot better in the last few years, will now completely tank."

Lower expectations

Organizers, led by Rio Mayor Eduardo Paes, have been downplaying expectations for at least a year as endless problems have surfaced: virus-infested venues for sailing, canoeing and rowing; the mosquito-borne Zika virus; \$500 million US in spending cuts; charges the \$10 billion spent to ready the city is benefiting mostly construction companies and real estate developers.

Paes has repeated often that Rio "is not a developed city like London or New York or Chicago. You can't expect as much from us."

Several email requests for comment from the Switzerland-based International Olympic Committee went unanswered.

This is not the first time in recent memory that unprecedented events have pushed the Olympics off the radar.

The May 2008 Sichuan earthquake in China killed tens of thousands and left millions homeless. It muted protests in the three months before the games began, sparking a wave of goodwill toward the Beijing Olympics that had been battered by pro-Tibet protests,



noxious air pollution and attacks on the torch relay as it circled the globe.

Paes, seen by the IOC as the main force behind the games, was caught on a tapped telephone call earlier this month with Silva — one of dozens of calls released by a judge investigating Silva. The calls also included Silva talking with Rousseff and show the powerful speaking candidly — and often crudely.

Viewed as a potential 2018 presidential candidate, Paes seems to lament how the games are going.

"You have no idea how I'm suffering. It's screwed," he tells Silva.

Silva reminds Paes that other mayors across Brazil have bigger problems, and less political and financial clout.

"But you, with all those problems — my dear friend. You still are blessed by God because of the Olympics." "That's true," replies Paes. "It's true."

Sports Minister quits

Jaques Wagner, who heads Rousseff's office, said Wednesday that Sports Minister George Hilton has resigned.

The sports ministry said Wednesday, shortly after Wagner spoke, that it could not confirm the resignation, illustrating the confusion engulfing Brazil's federal government as Rousseff tries to fight off impeachment charges.

Reports surfaced last week that Hilton had resigned, only for him to remain in office.

Hilton has had a marginal role in organizing the Rio Olympics.

Hilton recently left a political party that was part of Rousseff's coalition government — but is no longer — and changed parties.

Wagner said Ricardo Leyser, who has worked in the ministry, was likely to take over as sports minister.

"He [Leyser] is the guy who has followed the whole Olympic process," Wagner told reporters.

EDITOR'S COMMENT: If one combines the above two articles may doubt if coming Olympics are both viable and peaceful to be. My personal belief is that Brazilians still believe that they are immune from terrorism mainly of their background and distance from Syria and Iraq. What they are forgetting is that IS lacks morality, disrespects human life, have the money and the people willing to kill themselves in exchange for a few dozen of virgins! A virgin organism is more susceptible compared to another already exposed to the deadly virus of terrorism.

UNICEF says 87 million children growing up in conflict zones at risk of brain damage

Source: <http://www.albawaba.com/news/report-unicef-says-87-million-children-growing-conflict-zones-risk-brain-damage-820944>

The UN children's agency, UNICEF, says some 87 million children under the age of seven are growing up in conflict zones across the world, in conditions that can adversely affect their brain development.



Exposure to extreme trauma may hinder the development of brain cell connections, essential for health, emotional well-being and ability to learn, UNICEF said in a statement on Thursday. The statement said that extreme trauma puts children at risk of living in a state of toxic stress with lifelong consequences for their cognitive, social, and physical development. The agency further noted that brain development during the first seven years of life largely depends on breastfeeding, learning opportunities, and a chance to grow up in a safe environment.



"In addition to the immediate physical threats that children in crises face, they are also at risk of deep-rooted emotional scars," said Pia Rebello Britto, chief of Early Child Development program at UNICEF.

"Conflict robs children of their safety, family and friends, play and routine...Yet these are all elements of childhood that give children the best possible chance of developing fully and learning effectively, enabling them to contribute to their economies and societies, and building strong and safe communities when they reach adulthood," she added.

Slightly more than a third of Europe-bound refugees making perilous sea crossings from Turkey to Greece are children, a significant rise since the 10-percent count in June 2015, UNICEF said in a separate report last month.

It also said that one in every three Syrian children has been exposed to war since birth, as the war in the Arab country enters its sixth year.

Why Israelis Are Worried About Donald Trump

By Gregg Roman and Eylon Aslan-Levy

Source: <http://www.meforum.org/5921/israelis-worried-about-trump>

Mar 24 – **As with so much else, the only consistent feature of Trump's remarks is their off-the-cuff and contradictory nature.**



Trump's foreign policy thinking might be truly as shambolic as the sentences in which it is expressed. Alternatively, there might indeed be method behind the madness. Yet whether or not one is charitable towards the controversial tycoon, all indications suggest that a Trump presidency would recklessly jeopardize the stalwart alliance between the United States and Israel, and thereby endanger the security of the Middle East's sole democracy.

On the one hand, Trump's comments appear virtually impossible to interpret into coherency. At his AIPAC speech, Trump announced that he would dismantle the Iran Deal, then five minutes later declared that he would enforce it. Sometimes he expresses a certain indifference to the Jewish state: similarly to Bernie Sanders, Trump has announced a policy of neutrality between Israelis and Palestinians, adding that he "want[s] to go in with a clean slate" in lieu of

pledging to defend the security needs of the US's most dependable regional ally. Disturbingly, Trump has stated that "a certain amount of surprise, unpredictability" would be key to his negotiating strategy, announcing a game plan involving yet more chaos into an increasingly chaotic Middle East.

At other times, Trump has blamed Israel for the enduring conflict, speculating, "I don't know that Israel has the commitment" to make peace, and effectively exonerating the Palestinian side when he said that peace depends on "whether or not Israel," rather than the rejectionist Palestinian leadership and jihadi forces, "wants to make the deal ... they may not be."

To be sure, Trump has made pro-Israel noises — and very loud ones this week at AIPAC's policy conference. "My daughter is married to a Jew who is an enthusiastic Israel supporter," Trump has said, which is about as compelling proof of pro-Israel affinities as "my best friend's a Mexican." With customary braggadocio, Trump has asserted that "the only one that's going to give Israel the kind of support it needs is Donald Trump." But there is little in his other utterances to commend this sweeping pledge. Just before ascending the AIPAC stage, Trump astonishingly hinted that he [expected Israel to repay American military aid](#).

As an analysis of Trump's recent speeches has shown, he commits a "misstatement" every five minutes. How can a man so inclined to mistruths be



trusted with the delicate business of diplomacy and global politics? And a man who has suggested that the US should withdraw from NATO, at that.

Those inclined to buy Trump's protestations that he is "currently [Israel's] biggest friend" will struggle to rationalize his ersatz record of public statements. Trump is a man of principles, to the extent that those principles are expediency and opportunism. On the campaign trail, he has demonstrated a remarkable ability to say or do whatever will maximize votes, then shamelessly flip-flop if need be. It is exceedingly difficult to decipher any discernible commitment from Trump to values or causes of any kind, other than his own brand. A President Trump would likely play just as recklessly with America's regional alliances as President Obama, further endangering the growing threats to the liberal world order America has fought so tirelessly to sustain just when it most needs rehabilitating. So much for Trump's seemingly anarchic record of public statements. Yet the real danger may lie in a method, the outlines of which one can begin to detect behind the madness.

Given the historic temptation for U.S. presidents to attempt to solve the Arab-Israeli conflict and Trump's self-perception as a master dealmaker, it appears that Trump is convinced that he can engineer a brilliant diplomatic breakthrough. Indeed, at AIPAC he was at pains to stress his authorship of a book on negotiations. But *The Art of the Deal* is a shoddy grounds for geopolitical chess-playing. His statements betray no understanding of the nuances of the fragile geopolitics, and every indication that he impatiently and impetuously believes that all that peace requires is that an

American president rely on his business acumen to force a deal.

But as Senator Marco Rubio put it, the Arab-Israeli conflict is "not a real estate deal." It is replete with complexities that demand perseverance, trust-building and ingenuity — in short, traits that are difficult to imagine in a presidential candidate who had yet to appoint a foreign policy team until a few days before his March 21 AIPAC appearance.

An impatient rush to achieve a final-status agreement without any attention to the underlying, historical and structural reasons underlying the impasse would likely explode spectacularly in Israel's face and risk further conflagration. Israel understands that repeating this "peace summit" strategy will not work without attending to the underlying causes of rejectionism and instability on the Palestinian side, and will resist the imposition of tried-and-failed methods. The collision between Israel's sober realism and Trump's grandiose confidence in his own abilities is a recipe for unnecessary friction between Jerusalem and Washington.

All of the other Republican candidates — and even Hillary Clinton to some extent — believe that the next president must reaffirm and repair the U.S.-Israel relationship. They recognize that Israelis are most willing to make sacrifices in pursuit of peace when they are most secure, while Israel's enemies are least willing to compromise when they see daylight between Washington and Jerusalem. Trump's apathy towards Israel, or else his hubristic belief in his own negotiating powers as a panacea, risks further damage to this irreplaceable transnational alliance.

The writing is on the wall. It is not too late for Republicans to heed it.

Gregg Roman is director of the Middle East Forum.

Eylon Aslan-Levy is a British-Israeli writer and political commentator.

Smugglers prepare new human trafficking route to Italy

Source: <http://www.dw.com/en/report-smugglers-prepare-new-human-trafficking-route-to-italy/a-19145087>

Mar 28 — The smugglers intended to start transporting refugees via the new Italian route in the first week of April, according to the Sunday edition of the "Frankfurter Allgemeine Zeitung" newspaper.



CBRNE-TERRORISM NEWSLETTER – April 2016

They would reportedly use small cargo vessels and fishing ships to ferry their customers from the seaside resort Antalya in Turkey, the Turkish city of Mersin near the Syrian border, and the Greek capital Athens.



According to the paper, the price for such trip is between 3,000 and 5,000 euros (\$3,400 - \$5,600), which is much more expensive than traveling the usual route from Turkish shores to one of the Greek islands. However, refugees face growing obstacles attempting to reach Western Europe through Greece,

with several countries along the Balkan route closing their borders to migrants. Last week, the EU also forged an agreement with Ankara about shipping migrants back to Turkey, slowing the influx to a trickle. The traffickers responded to growing demand for alternative routes in recent weeks by preparing their new venture, according to the Sunday article. Some of the smugglers aimed to offer two trips per week, and at least one claimed he could fit 200 people on a boat. They also advised migrants to stay below deck until the vessels reached international waters. In addition to migrants in Turkey and Greece, hundreds of thousands of people were waiting to cross to Italy from Libya, EU officials said. The Italian interior ministry has registered almost 14,000 arrivals this year.

France – The Jungle of Calais

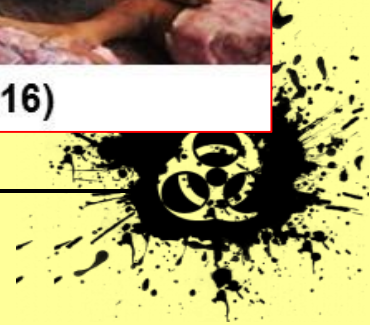




Lucca, a 12-year-old German shepherd, served in the US marine corps for six years, protecting the lives of troops by sniffing out munitions was awarded with the PDSA Dickin medal, the highest award for animals serving in military conflict.



China: Yulin “[dog+cat] meat” festival (June 22, 2016)





German train operator introduces women-only carriages amid fears over 'migrant sex attacks'

Source: <http://www.mirror.co.uk/news/world-news/german-train-operator-introduces-women-7640234>

Mar 28 – **A German train operator has announced it is introducing women and children-only train carriages amid fears over sex attacks in the country.**

The **Regiobahn line between Leipzig and Chemnitz** will introduce the carriages to increase security for women. The carriages will be next to the train conductor in a bid to make women feel safer.

A spokesman for the railway said: “The local proximity to the customer service representative is chosen deliberately.”



Germany is still reeling from a string of sex attacks in Cologne on New Year's Eve, allegedly carried out by dozens of migrants.

In total more than 800 complaints were made to police and the incidents have sparked criticism over German Chancellor Angela Merkel's decision to refuse to limit the number of refugees allowed into the country.

The operator said the move was to increase security for women and children

But the railway has said the measure is not a direct

reaction to the Cologne incidents but is about increasing security generally.

He said: “Some women have raised with me that a solution to the rise in assault and harassment on public transport could be to introduce women-only carriages.

“I would consult with women and open it up to hear their views on whether women-only carriages would be welcome – and if piloting this at times and on modes of transport where harassment is reported most frequently would be of interest.”

The measure is also currently in place in countries such as Brazil, Mexico and Egypt.

EDITOR'S COMMENT: After excluding pork meat from restaurants now women-only trains. Mighty Germans bend to Muslim commands! Notice the last sentence: Brazil (on top of crime list); Mexico (on top of drug lords' assassinations) and Egypt (a Muslim country). I am not aware if Germany even appears in these lists! But I am sure that UK and Sweden will find the idea fantastic!

Italy reports upsurge in migrants crossing from Libya

Source: <https://euobserver.com/migration/132815>



Mar 29 – The Italian coastguard reported on Monday (28 March) it had rescued 1,482 migrants off the Libyan coast in two days, a new indication that the number of migrants attempting to cross the Mediterranean to Italy is on the rise.

Some analysts had feared that the EU's focus on shutting down the so-called Balkan route would force migrants to aim for other ways of getting into Europe.

Last week, the United



Nations refugee agency said in 2016 almost 14,500 people had arrived in Italy via Libya, which was 42.5 percent more than in the same period last year, AFP news agency reported.

Crossings into Europe are watched closely by EU governments to see any side-effects of a migrant swap deal with Turkey was concluded at a summit in Brussels earlier this month. The deal, aimed at stemming the flow of people via the Aegean Sea, came into effect on 20 March. Since then, Greece has reported falling numbers of people arriving on Greek islands. On Thursday (24 March) the Greek government said according to Kathimerini newspaper that no migrants had arrived at all, although the following day 161 people arrived, and on Saturday 78.

However, it is too soon to say whether the drop was caused by the EU-Turkey deal, or other factors like difficult weather. Also, the crossing attempts from Libya may be unrelated to the EU-Turkey deal, although they will be considered in any assessment of whether European policies to stem migration flows are working.

Meanwhile, there are still around 50,000 migrants in Greece hoping to move further to the north, mostly to Germany.

Over the weekend, the German paper Frankfurter Allgemeine Zeitung reported that smugglers have begun offering new routes, after countries along the so-called Balkan route had increased border security.

The paper said on Sunday that smugglers offer trips from Greece across the Adriatic Sea to Italy, for between €3,000 and €5,000.

For his part, French defence minister Jean-Yves Le Drian warned last week that roughly 800,000 migrants were waiting in Libya to make the crossing to Europe.

A spokesperson for the Tripoli navy has since labelled that claim as “exaggerated”.

On Tuesday, EU commission spokeswoman Natasha Bertaud said the “sharp decrease” of migrants on the Turkey-Greek route was “encouraging”.

“Less than a 1,000 people arrived last week, compared to average daily arrivals of 2,000 a day in previous weeks,” said Bertaud.

She also noted the commission would “continue to monitor closely” the developments along the Mediterranean route from Libya.

“Our latest information in line with [EU border agency] Frontex is there has not been anything to suggest that there is a significant increase along this route yet.”

Profile of Syrian refugees in Greece (April 2016)

Source: Greek press

This is the profile of refugees and illegal immigrants found in Attica Prefecture, Greece, according to a survey of KAPA RESEARCH for the Union of Greece Regions.

- 73.8% of respondents are men and 26.2% women. Of these, 74% come from Syria, 12.5% from Afghanistan, 11.6% from Iraq, Iran and 0.9 to 1.1% by another country.
- They speak Arabic and about 25% speak English as well.
- Regarding their professional skills, 2/3 declared that they were economically active in their country employed in crafts (19.6%), public sector (12.5%), trade (11%) and at a bank or other private company (7.5%) while 10% were involved in agricultural / livestock professions.
- 28.8% of them have 9yrs education; 11.4% does not have any education and 6% have a bachelor's or master degree.
- The majority are Muslims (83%); 58.1% pray daily.
- The economically non-active population (37.5%) consists of pupils/students (15.5%), unemployed (10.8%) and housewives (11.2%).
- Regarding the conditions that made them leave their home: bombings' nightmare (65.4%); civil war (33.5%); terrorism (32.7%) and frequent hostilities (28, 8%). Six out of 10 have lost a member of their family or friend from bombing (26.2%); stray gunfire (14.4%); armed conflicts (10.5%); terrorist attacks (10.1%) or government forces' attacks (9%).



- 76.3% came to Greece because it was easy to cross the border and 19.1 because it was cheap. 40.1% say that it feels good to very good to be in Greece and 26.5% bad or very bad. The survey was conducted in 637 refugees in hot spots/immigrant centers in Attica during the period of 15-16 March 2016, 2016 by random sampling. To collect the data personal interviews (face-to-face) were employed. 34 researchers and 6 supervisors conducted the survey. The questionnaire was filled in Arab, Afghan and English.

Behavior of illegal immigrants' refugees in Greece

Source: Various Greek media

- Constant frictions between people from Afghanistan and Syria.
- Afghanis usually travel alone and most of them are young men. Syrians are traveling mostly as families. Few rape/intention to rape cases have been recorded.
- They do not follow orders and in many occasions are refused to go to existing hot spots or camps. They do not get out from the buses if they do not like the shelters provided. There is constant mobile communication between those sheltered in one place and those about to arrive.
- Often they protest (in Athens or in high-ways) complaining about the closed borders in FYROM.
- Violent incidents are common and weaponry of any kind is used.



- There is no control of NGOs and individuals deployed in areas where there are big gatherings. Certain individuals both Greek and foreigners are often spreading rumors about borders' opening (especially at Oidomeni Jungle camp next to FYROM's borders hosting more than 10.000 people). High percentage of thefts and petty crimes in areas close to camps/hot spots.
- There are problems in handling sick people according to Muslim traditions (women doctors only for women and male doctors only for men). Many do not know how to use a thermometer (place it over their clothes); pregnant women blame Greek medical staff because they gave birth in Greece instead of the country they made plans for! Cases



of hepatitis A, leptospirosis and tuberculosis have been recorded in children and adults (and rescue personnel).

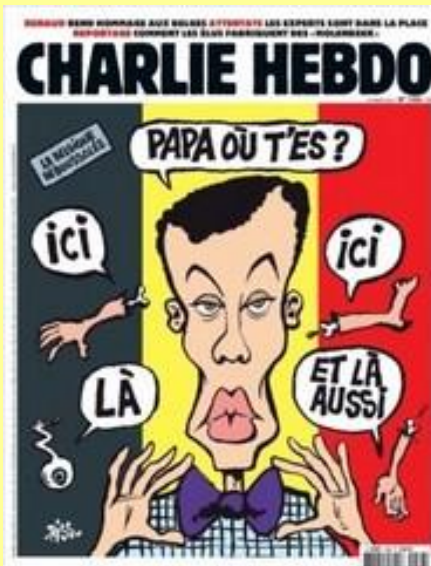
- They do not eat food if not prepared according to Muslim tradition (pork meat). They reject offering not in polite way but by throwing sandwiches to the face of those providing them. In many instances, they also throw away the food provided by the military.
- They have occupied the railway going through the borders for day and this mean huge financial losses for the hosting country and commercial contracts in progress.
- Narcotics are widely used – especially from Afghanis (usually provided by Greeks in busy places).
- **Official numbers:** ~50,000; unofficial (but more realistic): 100,000 (as of April 2016).



Charlie Hebdo Addresses Brussels Attacks

Source: <http://artforum.com/news/id=59053>

The new cover of *Charlie Hebdo*, which hit newsstands in France this morning, comments on last week's terrorist attacks in Brussels. The first edition of the satirical weekly to come out since terrorists killed thirty-five people and injured 300 features a caricature of Belgian pop star Stromae surrounded by floating severed limbs.



Today's *Charlie Hebdo* headline is a question "Papa où t'es?" (**Dad, where are you?**), that references Stromae's popular song *Papaoutai*, a smash hit in France and the bestselling single in Belgium in 2013. Dismembered arms and legs provide a gruesome response, answering: **"here," "there," and "also over there."**

The cover art by *Charlie Hebdo* staff-cartoonist Riss, is provocative but not out of character. In an interview with *Le Figaro* Didier Pasamonik, a comic book historian, commented, "There's nothing new under the sun." Indeed, after the attacks in Paris last November 13, the newspaper's cover featured a man riddled with bullet holes drinking champagne accompanied by the phrase: "They have guns.

Screw them, we have champagne." And after the Kouachi brothers killed twelve members of the *Charlie Hebdo* staff in January 2015, the paper responded with a cover featuring a caricature of a crying prophet Mohammed under the headline "All is forgiven."

Don't go higher than the fifth floor and avoid staying near the lobby: The **safest hotel rooms during a terror attack** revealed

Source: http://www.dailymail.co.uk/travel/travel_news/article-3510335/The-hotel-rooms-offer-safety-terror-attack-disaster.html

Mar 27 – **When most holidaymakers stay at a hotel their only concerns are the nightly rate, view from their room or noise that could disrupt their sleep.**

But, with a growing terror threat in countries normally considered 'safe', a leading security expert says an emergency plan should be a priority for hotel guests.

Rob Walker, head of information and analysis, travel security, at London-based International

SOS and Control Risks, has revealed to MailOnline Travel the hotel rooms that offer the most safety in the event of an attack, fire or disaster, plus a number of tips to stay safe.

Walker, a former infantry officer in the British Army, said travelers should book a room higher than the first floor (or second floor in North America) but lower than the sixth floor (seventh floor in North America).



A room on those floors would be high enough to be safe from opportunist burglars but low enough to jump to safety from a balcony or window and within reach of most fire department ladders.

Walker added: 'We also recommend travelers request rooms on the side of the building further away from the lobby, which is likely to be the main entry point for any attacker.'

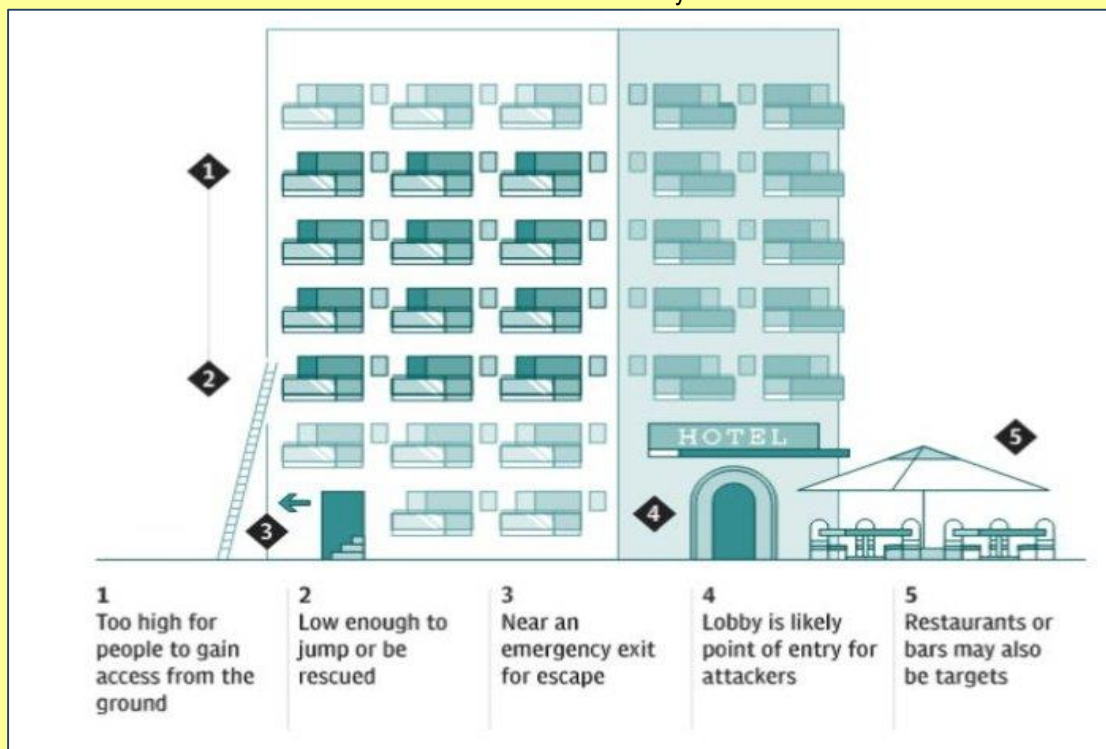
'It is preferable to also choose the side away from other public areas, such as hotel restaurants, as those areas can be a target area, and rooms that are not easily accessed from the street, so as not to be an easy target for criminals.'

routes or venues where protests are traditionally held) and whether there's a recent history of hotel-related security incidents at the destination.

When checking in, guests should make sure their room has the appropriate security fittings, including deadbolts, a spy hole and evacuation procedures, and they should take note of the nearest emergency exits and fire retardant kit, said Walker.

He recommends packing a doorstop, which can be wedged under the door to prevent people from entering.

He said: 'They are an added level of security when you are in the hotel room.'



'Yet, ideally it is good to be near the emergency exit stairs.'

Walker said it's best to avoid rooms with interlocking doors, but if unavoidable make sure they are locked and consider using a door wedge as an extra precaution.

He encourages holidaymakers to have a plan in case of an emergency at their hotel and consider the safety features of their accommodation – something that is rarely done by British tourists.

Before travelling they should find out whether the hotel is in or near neighborhoods to avoid (choose hotels away from high-crime areas or

Guests should do a sweep of the room when they arrive, in case it is occupied by an intruder.

Walker said: 'One well-known airline advises their staff to prop open the room door with their luggage while they check the room for other people – hiding under the bed, in closets or behind the shower curtain.'

He added: 'In areas with heightened security threats, look for hotels set back from the main thoroughfares, with access controls, like surveillance systems, card-access required for



elevators, metal detectors, and visible guards.' Another thing to consider is a hotel's communication capabilities, as smaller, independent hotels may not have the infrastructure or capacity of international chain hotels.

Walker said: 'This can be an important consideration, especially if staying in an area prone to natural disasters or where terrorism threats are a heightened concern.'

If there's one object tourists should have with them at all times it's a fully charged mobile phone with access to the local telephone network and data.

That way, said Walker, people can call out and request help or inform people if something goes wrong.

He would also keep a small 'grab bag' containing important items such as a passport or other travel documents, bottle of water, mobile phone and chargers that can be picked up quickly in an emergency.

International SOS provides medical and travel security assistance to corporations, large universities and non-governmental organizations (NGOs) around the world.

Recently, it has provided advice to hundreds of clients following recent terror attacks, including

some members who called from their hotel rooms while they were caught in terror attacks at hotels in Bamako, Mali, and West Africa.

Following last week's attacks in Brussels, International SOS advised travelers to minimize movement, follow instructions from local authorities and be vigilant for further incidents.

While attacks have occurred at hotels in countries such as Mali, Egypt, Tunisia and India in recent years, there are growing fears that hotels in the UK and the rest of Europe could be targeted in the wake of terror incidents in Paris and Brussels.

Walker said some of his advice is applicable to all destinations, while certain tips are specific to more volatile countries.

He added: 'It's important to stress that this is all location-dependent to a great extent, and, especially in locations affected by a range of threats – street crime, protests, terrorism, earthquakes – there is a degree of trade-off or compromise in accommodation selection.'

While the advice cannot guarantee survival, it can improve one's odds of escaping without serious injury.

Iranian actress Hedieh Teherani was arrested for attending a gathering not authorized by the ministry of the interior

Source: <https://www.clarionproject.org/news/iranian-film-star-arrested-animal-rights-protest>



Apr 03 – **A famous Iranian actress was arrested by security forces in Tehran for campaigning for animal rights.** Authorities said Hedieh

Teherani, was present at a gathering in Tehran's central Lala Garden for participating in a gathering that was not authorized by the ministry of the interior.

The arrest was announced by the Iranian news outlet tabnak.ir, which is connected to the Iranian Revolutionary Guards. The arrest was also reported by the Iranian website of the Young Journalists Club.

The issue of animal rights came to the fore recently after several Iranian municipalities a large number of street dogs by shooting or burning the animals to death.

Christians Are Still Persecuted Around The World. Here's Where

Source: <http://www.thedailybeast.com/articles/2016/04/03/christians-are-still-persecuted-around-the-world-here-s-where.html>

Apr 03 – **A tragic Easter evening at a crowded park in Lahore, Pakistan, is the**

latest reminder that outside of the Western world, Christianity



is increasingly a targeted minority.

The Taliban faction, Jamaat-ur-Ahrar, claimed responsibility for the suicide attack that killed more than 70 and wounded hundreds, mostly children. More than 5,000 militants were rounded up in Pakistan and all but approximately 200 were released during the government's investigation.

Attacks against Christians are a pattern in Pakistan in recent years. In March of 2015, for example, 14 people were killed and more than 70 injured after suicide bombers targeted two churches in Lahore, and at least 80 were killed in a church bomb attack in 2013 in the city of Peshawar.

Human rights organizations have an uphill battle when it comes to raising Western awareness of incidents like these. David Curry, CEO of Open Doors U.S.A., part of an international organization that tracks and brings

Open Doors [reports](#) a significant increase in attacks against Christians during 2014-2015. Last year, more than 7,000 Christians were killed for their faith, which they note is “almost 3,000 more than the previous year.” The largest areas of growing Christian persecution occur in the Middle East, Africa, and Central Asia. Those numbers are expected to scale upward.

The Center for Inquiry (CFI), an organization which Campaign for Free Expression promotes the rights of religious and nonreligious individuals globally, has seen the same patterns. “We were the sole secular humanist organization to press the State Department to label ISIS's crimes against Muslims and Christians as genocide,” says Paul Fidalgo, the communications director for CFI.

Open Doors agrees with the genocide assessment, noting that persecution in the



awareness of Christian persecution, sees the Western focus on persecution in America and Europe as part of the problem.

“I don't believe most Americans have an accurate understanding of the real state of Christian persecution around the world,” says Curry. News coverage is selected according to consumer demand, he adds. “But for news consumers to clamor for such coverage, they need to be aware of the extent of the problem.”

Middle East and Africa, “increasingly takes the form of ethnic cleansing.”

In March, pressures from human rights organizations finally succeeded in getting the U.S. State Department to apply this genocidal label to the Islamic State. Secretary of State, John Kerry, provided a laundry list of war crimes by IS that helped to secure that official condemnation, including the horrific beheading of 49 Egyptian and Ethiopian Coptic Christians in 2015.



The difficulty in addressing these human rights violations is significantly stronger, however, when it comes to recognized states. In many countries, suppression of minority religious groups is codified in legal systems in the form of [blasphemy laws](#). These laws serve as a means to justify and prosecute religious and nonreligious minorities. (The United States still has a few unenforceable [blasphemy laws](#) left on the books.)

A 2012 report from Pew Research shows that 22 percent of “the world’s countries and territories” have blasphemy laws, and 11 percent penalize apostasy. In many locations, punishments can result in fines, but in others, blasphemy is on par with treason and can result in death.

The safety of individuals in countries with blasphemy laws is difficult to secure by foreign advocates. Frequently, governments, like Saudi Arabia, whose human rights record is repeatedly questioned by advocacy groups, see international pressure to improve human rights as a guide for challenging their sovereignty. (Saudi Arabia has a seat on the United Nations Human Rights Council.)

State responses like these belie the significant individual human cost they dismiss. In a few individual cases, the end result is freedom. In Sudan, a 27 year old Christian woman, Meriam Ibrahim, was sentenced to death for apostasy after converting and was turned in to the authorities by her brother. Groups like Open Doors and Center for Inquiry both called for her release, and she was eventually allowed to receive asylum in the United States.

Other individuals, like Pakistani Asia Bibi, a Christian accused of insulting the Prophet Muhammad, are still uncertain what the future holds. She’s been on death row since 2010. Her strongest advocate, Punjab governor Salman Taseer, was assassinated for his support in 2011. She is currently the subject of ongoing protests and threats while her case is appealed.

Even in countries that boast a form of official secularity and religious freedom—such as

Ethiopia, Nigeria, and Bangladesh—the state unofficial intolerance religious groups, or failure to address social intolerance, only increases the suppression of religious groups. “Bangladesh is perhaps the clearest example,” notes Fidalgo, “where you have secular activists and Christians being murdered, more or less with impunity.”

For those who are aware of this global situation, calls for change are growing. Through official statements and social media, many Muslims have expressed their support and solidarity with those who are persecuted. For example, Mirza Masroor Ahmad, the exiled world head of the Ahmadiyya Muslim Community—a group also persecuted in Pakistan for their belief in a prophet after Muhammad and which is constitutionally unrecognized by the state as Muslim—released a statement expressing his sympathies and condolences, condemning the Lahore attack. “Never can such attacks be justified in any shape or form,” he says, “and so all forms of terrorism and extremism must be condemned in the strongest possible terms.”

Effective international solutions, however, are still a long way away and those engaged in human rights want to see actions with teeth. “Right now few leaders are offering more than condolences after major attacks on Christians,” says Curry, “They need to go to the countries, meet with its leaders and people to find bipartisan ways to protect Christians and promote religious freedom to all.”

We have to “look beyond our borders,” adds Fidalgo. We need to recognize that “people truly are suffering in unthinkable ways—being beaten by mobs, imprisoned, executed, flogged—for holding certain beliefs or questioning the majority.”

“And then we need to start bringing to bear our diplomatic and economic influence and making serious efforts to make change. Sometimes we are doing that, but not nearly often enough, nor forcefully enough.”

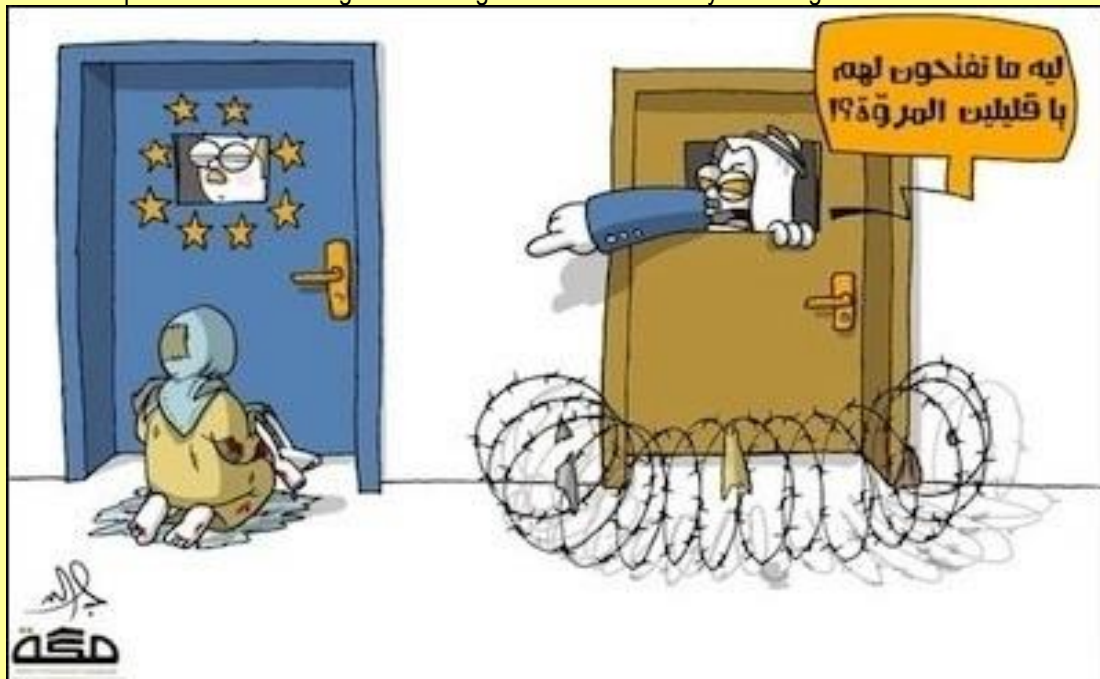
Brandon G. Withrow teaches religious studies at the University of Findlay, is the author of nine books, his most-recent (co-authored with Menachem Wecker) is [Consider No Evil: Two Faith Traditions and the Problem of Academic Freedom in Religious Higher Education](#).



Gulf Arab States Close Doors to Syrian Refugees

By Raheem Kassam

Source: <http://www.meforum.org/5938/arab-gulf-closes-doors-to-syrian-refugees>



In this cartoon from the Saudi daily *Makkah*, a man in Arab Gulf attire points a refugee to a door with an EU flag, shouting, "Why don't you let them in, you discourteous people?!"

Mar 31 – U.N. Secretary General Ban Ki Moon has surfaced, once again to lecture the Anglosphere and the Western world about its "duties" to hurriedly absorb nearly half a million more Syrian migrants. The war-torn country's surrounding nations, he argues, have done the heavy lifting already. Now the U.N. chief wants you and your communities to do more.

There is a misconception that *all* Syria's neighbors have shrugged their shoulders towards their Muslim brethren, scorning the [Ummah](#) out of rugged self-interest. It's not strictly true. But the dichotomy presented – that it is us or them – is a false one, and one that European and American leaders should not be afraid to reject outright.

The *New York Times* [reports](#) that the Sec. General opened a conference in Geneva today, demanding "an exponential increase in global solidarity", insisting that "Neighboring countries have done far more than their share" and imploring "Others [to] now step up." And, of course, the stress was on European Union member states and the United States of America to do more.

The news follows quickly on the heels of Oxfam – one of the world's most political charities – [demanding](#) that France, the United Kingdom, the United States, the Netherlands, and Denmark all take in more "refugees" and faster.

Of course, of the nearly 5 million fleeing Syria, most remain in the Middle East, with countries

U.N. Secretary General Ban Ki Moon wants the West to absorb nearly half a million more Syrian migrants.

like Lebanon, Turkey, Egypt, and Jordan inundated by refugees. In part, this is what has spurred Turkey on to shipping their problems off into Europe – [especially the Kurdish one](#).

It is noteworthy too, that Oxfam and Ban Ki Moon's criticisms were levelled at Western nations not because we have the infrastructure or capability to deal with the influx (we don't) – but because we are, apparently, "rich". (We'll just casually ignore our gargantuan debt crisis for the moment, shall we?)



But while the United Nations lumps the responsibility onto the West, you might ask why countries like Saudi Arabia, which claims to have absorbed around half a million Syrians, do not provide any data to support their statements. Indeed, in 2013, net migration of those deemed to be Syrian nationals stood at around just 20,000, with criticism aimed at the country for only accepting Syrians who already have families in the Kingdom.

In fact countries that could take more, and haven't remain free of criticism, presumably because they aren't signatories to the 1951 UN Refugee Convention. This isn't a sign that we are better. It's a sign that we are dumber. We as Western nations afford moral and political equivalence for almost all other countries around the world nowadays (most recently, Cuba and Iran) but we don't make the same demands of these countries as we place upon ourselves.

Raheem Kassam is a Shillman-Ginsburg fellow at the Middle East Forum and editor-in-chief of Breitbart London.

Law Enforcement Agencies Face a Host of Challenges in Countering Drone Threats

By Melissa Hersh and Michael Hopmeier

Source: <http://www.govexec.com/excellence/promising-practices/2016/04/law-enforcement-agencies-face-host-challenges-countering-drone-threats/127106/>

Apr 04 – It's no surprise that the proliferation of commercial drones operating in United States has spawned interest in technologies to counter such drones when they pose a threat. What's not well understood, however, is that taking cyber control of another aircraft—even to stop it from crashing or deliberately threatening people—isn't permitted under U.S. law. Taking control of a remotely-piloted aircraft is tantamount to cyber hijacking. Tampering with the ground control station of a drone is unlawful even if that tampering is performed by law enforcement. Just as it's illegal for law enforcement officials to listen into a phone conversation and then impersonate the voice on the call to alter the instructions being given to the receiving party. Getting a warrant for such an operation is highly unlikely even in extenuating circumstances where security is at

What about Malaysia? Why can't they take more migrants and refugees? Indonesia? India? China? Argentina? Has Ban Ki Moon lobbied his home nation, South Korea? It's almost as if there's a whole world out there.

But the onus is, apparently, on Britain, France, and America. We are destined to follow Germany's lead, a country now inundated with migrants not just from Syria, because Mrs. Merkel stupidly threw her doors open and declared, "Come one, come all!"

Perhaps we should look to the words of Batal, a Syrian refugee who spoke to Bloomberg, for why the pressure is being placed on Western countries and the Anglosphere: "In Europe, I can get treatment for my polio, educate my children, have shelter and live an honorable life... Gulf countries have closed their doors in the face of Syrians."

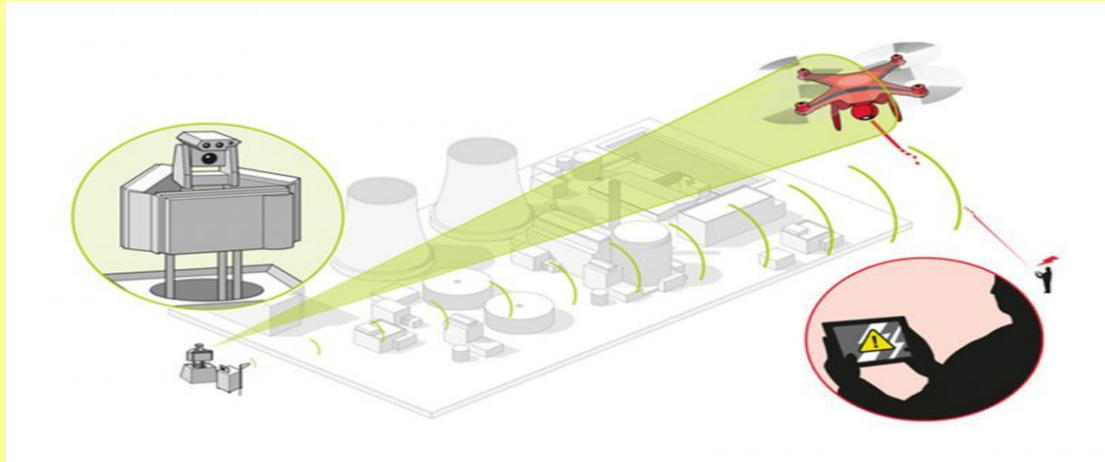
stake, thus making routine use by law enforcement nearly implausible. Furthermore, if the call is encrypted, the technology used to impersonate the voice may prove futile.

The very same First and Fourth Amendment rights are at the heart of the counter unmanned aerial system debate. A CUAS is a system to detect, track, respond to and mitigate the effects of threat drones—those that would break laws, injure people, disrupt society and damage things. While the overwhelming majority of commercial systems currently available are capable of detecting data links, assessing the data, and then taking control of the data to create an alternate outcome, what's the legal basis for doing so? And, if the communications are encrypted, is there any assurance that the process will work?



Unfortunately, it's not easy for buyers of these systems to separate fact from fiction. There's

result in interference with medical devices or systems that affect industrial and infrastructure



relatively little data available on reliable CUAS because [we don't yet have standards against which to measure reliability](#). Not only must operators distinguish what's legally permissible from what's functionally possible, end-user due diligence also requires separating marketing claims from actual capabilities. CUAS operators must also be able to weigh the risks and rewards of their decisions.

There's another glitch here as well, and it's a big one. Since commercially marketed CUAS tend to be radio frequency (RF)-centric, they are technically hampered by needing to know in advance the RF signature of the platform they are going up against. In short, the offending drone must be able to cooperate and communicate with the CUAS for there to be successful engagement. Recent [advances in fully autonomous flight](#) don't depend upon receiving or transmitting RF signals, and this is bad news for current RF-centric products.

The real need is for CUAS able to operate successfully in the absence of known RF signals. Non-cooperative engagement is vital for meeting the needs of emerging technologies that [allegedly elude electronic interference](#) (regardless of their legal permissibility). Equally important are CUAS operators who understand the rules of engagement and risks of collateral damage, including unintentional disruption of aircraft control systems and wireless systems of all kinds.

Furthermore, there are serious concerns about using what amounts to electronic warfare in civilian environments, something that could

processes. RF spectrum management has strategic, operational, tactical and economic components. Currently, there is no agreement among the [Federal Aviation Administration](#), [Federal Communications Commission](#), [National Telecommunications and Information Administration](#), the [Department of Homeland Security](#), and the [Defense Department](#) on commercial CUAS spectrum management issues. This must be resolved.

Buyers need to be able to ask and answer questions about [what, why, how, when, and where to deploy a CUAS, and who's responsible](#). The only way to ensure that the technology under consideration is reliable is to understand what goals it's supposed to enable an operator to accomplish. Having an operational plan is a good start. Knowing the threats and vulnerabilities in one's zone of concern is not just useful for understanding what system should be considered, but is vital. Not all environments are the same.

There's currently no accreditation body or agency providing validation services for CUAS capabilities or operator training. While there will likely be such entities in the future, for the time being buyers should look to universities engaged in test and evaluation as well as reputable, independent safety companies.

Technical due diligence, operational planning, and procurement decisions that consider off the shelf options, custom-made solutions, and upgradeability are all necessary for reliable and accountable use. However, there's no use case if there's no



permissive regulatory environment.

Michael Hopmeier is President of Unconventional Concepts, Inc., an engineering and policy consulting firm specializing in national security issues. He is also a consultant and senior advisor to numerous government agencies and organizations.

Melissa S Hersh is a Washington D.C.-based risk analyst and consultant. She is also a Truman National Security Fellow and Non-Resident Fellow at the Stimson Center.

Understanding the current Armenia-Azerbaijan 2016 dispute

Source: <https://www.cia.gov/library/publications/the-world-factbook>

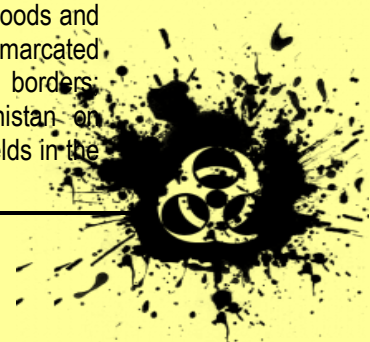


Armenia

The dispute over the break-away Nagorno-Karabakh region and the Armenian military occupation of surrounding lands in Azerbaijan remains the primary focus of regional instability; residents have evacuated the former Soviet-era small ethnic enclaves in Armenia and Azerbaijan; Turkish authorities have complained that blasting from quarries in Armenia might be damaging the medieval ruins of Ani, on the other side of the Arpacay valley; in 2009, Swiss mediators facilitated an accord reestablishing diplomatic ties between Armenia and Turkey, but neither side has ratified the agreement and the rapprochement effort has faltered; local border forces struggle to control the illegal transit of

Azerbaijan

Azerbaijan, Kazakhstan, and Russia ratified the Caspian seabed delimitation treaties based on equidistance, while Iran continues to insist on a one-fifth slice of the sea; the dispute over the break-away Nagorno-Karabakh region and the Armenian military occupation of surrounding lands in Azerbaijan remains the primary focus of regional instability; residents have evacuated the former Soviet-era small ethnic enclaves in Armenia and Azerbaijan; local border forces struggle to control the illegal transit of goods and people across the porous, undemarcated Armenian, Azerbaijani, and Georgian borders; bilateral talks continue with Turkmenistan on dividing the seabed and contested oilfields in the



goods and people across the porous, undemarcated Armenian, Azerbaijani, and Georgian borders; ethnic Armenian groups in the Javakheti region of Georgia seek greater autonomy from the Georgian Government

Religion: Christian Apostolic 92.6%, Evangelical 1%, other 2.4%, none 1.1%, unspecified 2.9% (2011 est.)

Population: 3,056,382 (July 2015 est.)

Religion: Muslim 96.9% (predominantly Shia), Christian 3%, other <.1, unaffiliated <.1 (2010 est.)

Population: 9,780,780 (July 2015 est.)

Azerbaijan Kills Armenian Troops With a Suicide Drone

Source: <http://warisboring.com/articles/azerbaijan-kills-armenian-troops-with-a-suicide-drone/>

Apr 05 – An unnerving sight appeared Monday during fighting between Armenia and Azerbaijan over the disputed Nagorno-Karabakh region. What appeared to be an Israeli-made suicide drone hit a bus carrying Armenian soldiers and then exploded.

There is an unconfirmed video appearing to show the strike, which killed seven Armenian volunteers according to RIA Novosti. **And the drone captured in the video looks a lot like an IAI Harop — a canister-launched flying bomb which can detect the source of radio transmissions or be manually guided onto a target.**



The **IAI** (Israel Aerospace Industries Israel Corporation) **Harop** is an unmanned combat air vehicle (UCAV) developed by the MBT division of Israel Aerospace Industries. Rather than holding a separate high-explosive warhead, the drone itself is the main munition. This SEAD-optimised UCAV is designed to loiter the battlefield and attack targets by self-destructing into them. It has been designed to minimize its radar-signature (low-observability).

An Armenian Ministry of Defense spokesman alleged Azerbaijan is [using Harop drones](#) in the fighting. If the footage is accurate, it's a rare and alarming glimpse at one of the 21st century's most significant trends in warfare — the increasing proliferation of lethal drones beyond the arsenals of advanced militaries. Small armies that do not have the resources to develop combat drones on their own can now buy them elsewhere, and send them on one-way missions in very real, very violent wars. But it's worth noting that suicide drones are hardly new weapons (they go back to World War I). And arguably, there are only a few major differences between a remotely-piloted kamikaze drone — guided by an operator on the ground — and a cruise missile or precision-guided bomb.



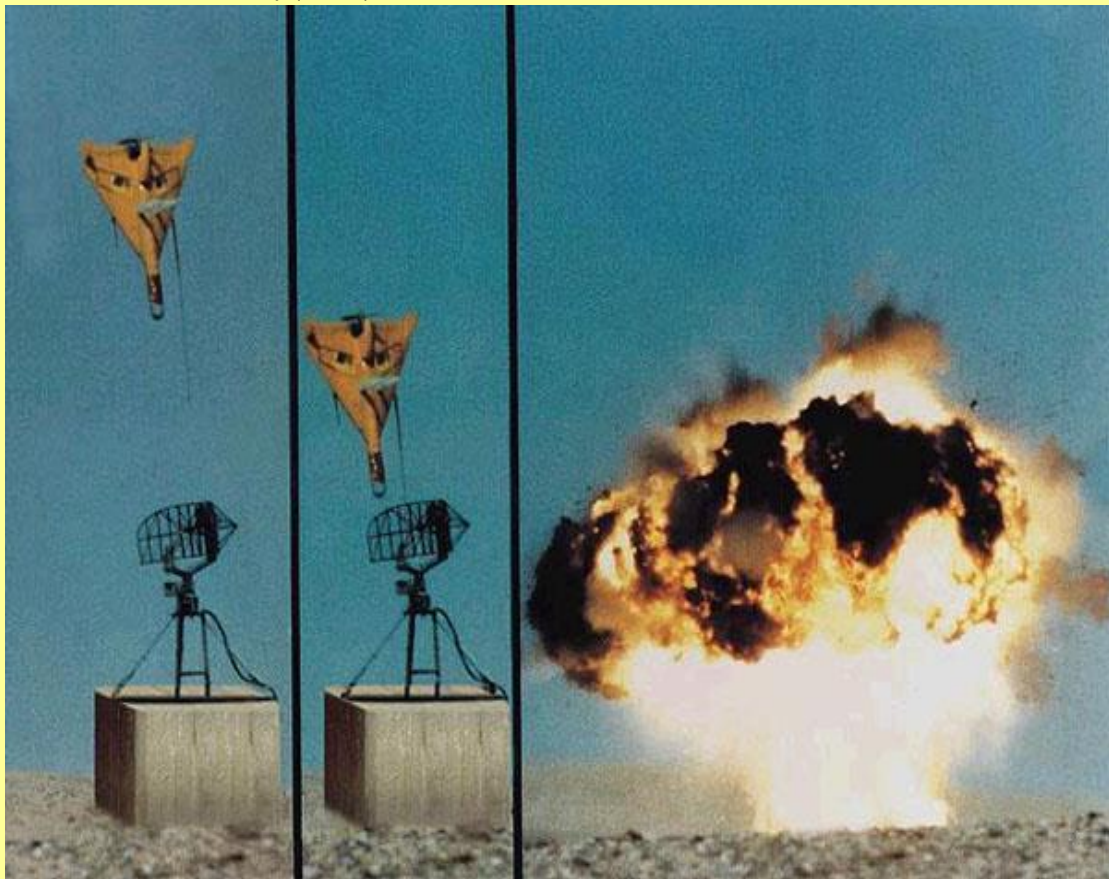
Most large militaries have deadlier, faster and longer-range precision weapons than suicide drones. **One distinction is that the Harop's payload is smaller — it weights 51 pounds — and they cost much less than most precision-guided missiles when factoring in the cost for the aircraft needed to carry them. A Harop, on the other hand, simply carries itself and loiters above the battlefield, ready to plunge onto a target.**

Armenia and Azerbaijan have fought sporadically for Nagorno-Karabakh since a brutal war in the early 1990s. Both countries are former Soviet republics, and when the Soviet Union cracked up, Christian Armenians in the region broke away from predominantly Muslim Azerbaijan.

The current fighting may be the worst since the 1990s. Armenian Pres. Serzh Sarksyian said the clashes could escalate to "full-scale war."

Russia has a military base in Armenia and is a close ally, but has also supplied tanks to Azerbaijan, making the Kremlin an arms dealer for two states which have hoarded weapons to fight ... each other.

Israel is another player, which sells drones and air-defense systems to Azerbaijan in exchange for Caspian oil and safe access for Israeli intelligence agents. And like Israel, the Azerbaijani government is wary of Iran. Then there's the fact that Israel has positioned itself as a source for advanced drones on par with the best Western versions — but more affordable for poorer countries. It has another suicide drone known as the Harpy (below).



"Israel has taken the same capital, technology-intensive route to drone development as the United States, producing UAVs that fill key roles within a broader surveillance-strike complex," *The National Interest* noted in 2015.

Emphasis on *strike*. Israeli drones are designed for patrolling vulnerable borders and fighting quick, sporadic wars that occur every few years. Turns out, Azerbaijan too has borders to protect and fights short wars every couple of years. What's far more foreboding is that both it and Armenia have been gearing up to fight a bigger one.

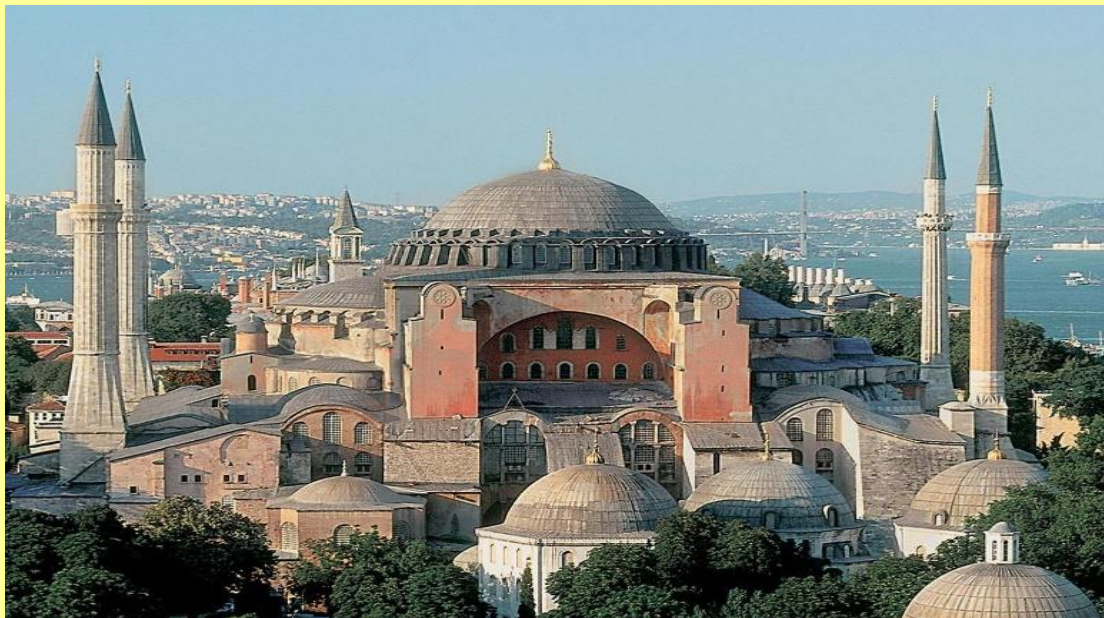


New Hagia Sophia replica mosque in Amsterdam

Source: <http://www.sabah.com.tr/webtv/dunya/amsterdamda-ayasofya-camii>



"The capital of the Netherlands dreamed for 20 years for a mosque replica of Hagia Sophia (!) that opened its doors to the faithful. The first Friday's prayers will take place with the official opening of the mosque where more than 2,500 believers can pray inside and will be attended by Turkish President R.T.Erdogan "



EDITOR'S COMMENT: Dedicated to all those in favor of Turkish candidacy as a full EU member state!



Greece – We offer them peace, shelter, food and support despite closed border but...



Europe's Muslims hate the West

Source <http://www.politico.eu/article/brussels-attacks-terrorism-europe-muslims-brussels-attacks-airport-metro/>



Apr 06 – The first reaction to the Brussels massacres among postmodern European intellectuals was predictable: **What did we, Europeans, do to them, our Muslims? How could followers of a religion that is proudly called “the religion of peace” commit these kinds of atrocities?**

People like Peter Vandermeersch, the Belgian editor-in-chief of Dutch newspaper NRC-Handelsblad, and Belgian writer David Van Reybrouck, both accomplished intellectuals, argued that Belgium must have done something terrible to deserve this. Their line of reasoning: The terrorists' fury must be a reaction to their inhumane treatment at the hands of the West.



So, we blame ourselves in order to remain blameless. Safer to blame our own societies and socioeconomic conditions than to blame the religious and cultural concepts with which terrorists poison their own minds.

According to reports, the unemployment figure in Brussels' infamous Molenbeek neighborhood — now referred to as the jihadi hothouse of Europe — is 30 percent. This is a relatively high figure in Western Europe, but not unusual in southern European countries or the Arab world. There is poverty in Molenbeek, but that poverty is relative. There is no starvation, no homelessness, no lack of medical infrastructure, no lack of schools.

Compared to average living standards in Morocco or Egypt, the average living standard in Molenbeek is comfortably middle-class. Like in any other Western European country, many Belgian institutions and organizations offer support when families need housing, food, education, and health care. Opportunities for success, and to study and become a respected member in society, are countless compared to those that exist in many immigrants' countries of origin. Still, there is deep resentment among the younger generations of immigrant Moroccan families.

Immigration into the Netherlands from Morocco and Turkey is an expensive phenomenon for the taxpayer: In the modern welfare state immigrants are more dependent on the welfare state than the average citizen. Because of a

lack of higher education and the lack of non-skilled jobs, immigrants absorb a higher part of unemployment and social security payments than the average citizen. As a group, they receive more money than they pay in taxes. They also show up much higher in crime statistics than their numbers would justify. There are many success stories, but there are also disappointing trends. Like radicalization. And the situation in Belgium is even worse.

There is no question that unemployment is much higher among Muslim immigrant communities than among the general public. There are two possible explanations.

The first goes something like this: The Belgian people are terribly xenophobic and anti-Moroccan, and deny their Moroccan neighbors opportunities to succeed in life. But if this were the case, the theory can be applied to every Western European country, as unemployment figures for Moroccan and other Muslim migrants across Europe are remarkably higher than average. This would indicate that European xenophobia has reached unbearable levels. Why would Muslims choose to stay in societies that showed such deep disrespect for their migrant population? Because they realize that an unemployed citizen in a European welfare state run by infidels has a better material life than an employed citizen in pious Morocco?

Life in Belgium is exceptionally good and safe for migrants — if they are willing to integrate into their new cultural environment.

The notion that Moroccan-Belgians suffer from widespread exclusion, discrimination, and suppression is ridiculous — and yet completely acceptable among the politically-correct crowd. Life in Belgium is exceptionally good and safe for migrants — if they are willing to integrate into their new cultural environment, if they are willing to act as individuals, study with passion and openness, and accept the secular system of the West.

There is no difference at all in socioeconomic status between youngsters from a low-education, blue-collar Belgian background and youngsters from a Muslim migrant background. Both have to struggle, both have to overcome

weak socioeconomic family situations. In Spain, youth unemployment has reached 50 percent and the welfare state is less developed than in Belgium, yet Spanish citizens aren't blowing themselves up in metro stations.

The other explanation for the high unemployment figures among Muslims in Europe has nothing to do with exclusion and discrimination. A large segment of the migrant population is doing just fine, but a significant number — some say as many as 50 percent — have not rid themselves of the mental and cultural conditions that have kept their home country in its



“developing country” status. The denial of equal rights to women, the lack of separation of state and church, bad education, excessive

religiosity, patriarchal machismo — these are all on display in areas with a high percentage of migrants, including Molenbeek.

Almost 60 percent of Europe’s Muslims reject homosexuals as friends and 45 percent think that Jews cannot be trusted. More than half believe that the West is out to destroy Islam.

In December 2013, Professor Ruud Koopmans of the Berlin Social Science Center published a study on “Fundamentalism and out-group hostility,” in which he compared hostility among Muslim immigrants with hostility among Christian natives in Western Europe. He writes: **“Almost 60 percent agree that Muslims should return to the roots of Islam, 75 percent think there is only one interpretation of the Quran possible to which every Muslim should stick and 65 percent say that religious rules are more important to them than the laws of the country in which they live.”** In regards to Christian citizens he concludes: “Less than 4

percent can be characterized as consistent fundamentalists.”

On hatred of Jews and homosexuals among Europe’s Muslim population, Koopmans finds: “Almost 60 percent reject homosexuals as friends and 45 percent think that Jews cannot be trusted. While about one in five natives can be considered as Islamophobic, the level of phobia against the West among Muslims — for which oddly enough there is no word; one might call it ‘Occidentophobia’ — is much higher still, with 54 percent believing that the West is out to destroy Islam.” Recorded rates of Christian hate toward Muslims hover around 10 percent.

What did “we” do to “them”? We opened up our cities, our houses, our wallets.

Belgium to become an Islamic country by 2030?

<https://www.youtube.com/watch?v=UQjL31sdtzo>



“Occidentophobia” is an interesting term. It expresses a refusal to accept the essential concepts of life in the West. Young men like the perpetrators of the Brussels attacks have refused to embrace the social codes of Belgian life. They were raised on the idea that their religious ethics trump the ethics of the infidels (close to non-existent, in their eyes, in any case). Their second-rate socioeconomic status was therefore a humiliating affront, an indignity to be destroyed.

Muslim integration into Europe societies is successful when Muslims are willing to give up the mental confinement of their home

countries — countries, let’s not forget, which they left in search of a better life. For as long as they refuse to adapt to a European state of mind, they will perpetuate resentment and a culture of violence.

What did “we” do to “them”? We opened up our cities, our houses, our wallets. And in our secular temples of progress — our metro stations and airports and theaters — their sons are killing themselves, and taking our sons and daughters with them. There is nothing for which we need to apologize. “Occidentophobia” originated in the Muslim community. We need to demand they abandon it.

Leon de Winter is a Dutch novelist and political commentator.

EDITOR’S COMMENT: The very same day that Brussels suffered the double terrorist attacks imprisoned fanatic Muslims in three Greek prisons were celebrating the event as shown in the photo below.



In most Greek prisons Muslims represent approx. 60% of inmates – mainly from Algeria, Tunisia, Pakistan and Somalia.

► See the related video (in Greek) at: https://www.youtube.com/watch?time_continue=5&v=lmrhRtuyza

The Mainstream Media Spreads Another False 'Islamophobia' Story

By Raheem Kassam and Liam Deacon

Source: <http://www.meforum.org/5940/molenbeek-hit-and-run-how-the-mainstream-media>

Apr 04 – The journalists and publications which [implied the hit and run in Molenbeek borough of Brussels this weekend was a 'far right' anti Islam attack](#) had no evidence to suggest that it was as they reported, but they knew what story they wanted to write.

That's why most hesitantly wrote "during" a "far right demonstration" instead of bluntly labelling the driver a "far right activist" as did the *Daily Mail*, the first publication to report on the story.



Instead of acknowledging the categorical error, or clearly reporting the truth as it emerged, however, the *Mail* quietly edited their original article, burying the factual change three quarters of the way down the page, and failing

The 'Islamophobia' industry was quick to seize upon the Molenbeek attack.



to issue a correction or clarification.

The *Daily Mail* amended its false headline claiming the perpetrator of a hit-and-run attack in Brussels was a "far-right" activist. Other media outlets haven't made corrections.

Its headline shifted from "Muslim Women Is Mown Down by Grinning Far-Right Activist" to "by Grinning Driver" (see above) and the critical new details only appeared in the sixth paragraph:

Police later announced that they had arrested two men, believed to have been the car's driver and passenger, who have been named as Redouane B. and Mohamed B – both of whom are thought to be residents of Molenbeek.

Numerous other articles in the *Independent*, *Express*, *New York Post*, and others have yet to be amended or followed up with the truth. Some, like *Evening Standard*, only published their misleading story this morning, after all the facts had become widely available.

Journalists who bothered to check with sources in Brussels were able to ascertain the man was not "far right," but a local Muslim teenager, a fact reported two days ago by those [such as](#) Channel 4's Paraic O'Brien.

The *Times*, a well respected paper known as the UK's "paper of record," was one of the only major publications to report the perpetrators names from the start. However, it only did so in the fifth paragraph, opening with the unnecessarily unclear passage, "A woman was seriously injured when she was struck by a speeding car during scuffles between Belgian police, far-right protesters and local youths."

This reporting may have something to do with the fact that the "far right" was mostly well behaved in Molenbeek this weekend. The only significant disturbance came from ["rioting"](#) local migrant youths and bored, violent "anti-fascists."

Predictably, the "Islamophobia" industry was quick to seize upon the fantastical story.

Britain's Tell MAMA organisation, which was once backed by the government and says it "supports victims of anti-Muslim hate" and "measures and monitors anti-Muslim incidents" tweeted about the story no less than *ten* times (right).

As one Twitter user exclaimed: "Its amazing, these people are more outraged by fake tales of 'Islamophobia' in Brussels than the deadly terror attacks!"

Similarly, just last week, the [murder of Asad Shah](#), a well loved Muslim from the persecuted Ahmadiyyah sect, rocked the British media.

However, the *Guardian* and others [completely omitted](#) the fact the killer was a Muslim, and the rest of the media lost interest when blame could not be pinned on "Islamophobia."

The latest incidents highlight how the UK media is desperate to report false "Islamophobia" stories, often failing to correct its reporting when it becomes clear that the crimes in question have no link to "Islamophobia."



In December last year the media was led to believe that a normal Muslim family was the victim of "Islamophobia" when it was simply trying to go to Disneyland. The story soon unravelled as it became clear that the family [had connections](#) with the same "army of darkness" mosque attended by the recent San

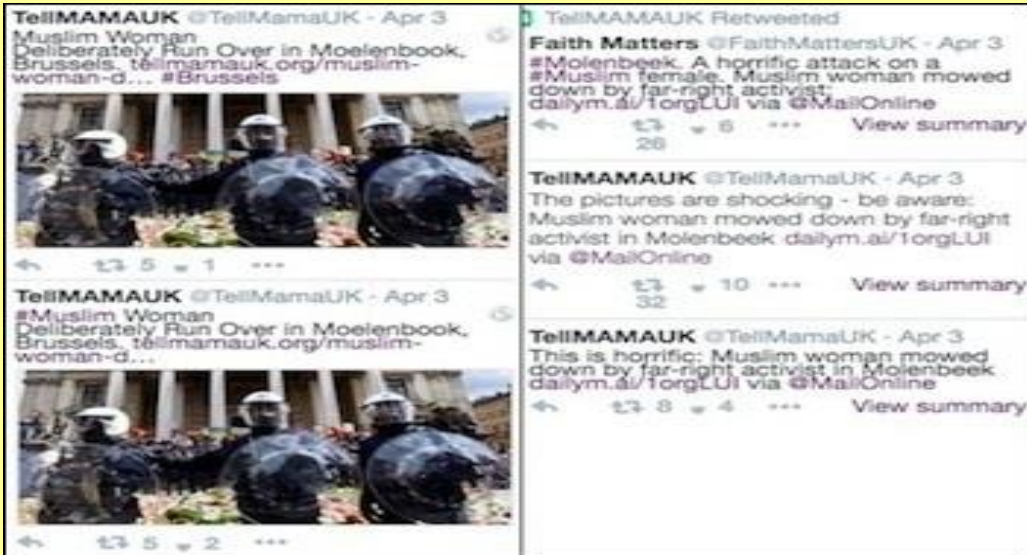
Bernardino terrorist attackers. Breitbart London [noted](#) the discrepancies in their story almost immediately.

In September 2015, the BBC [used a three-year-old video](#) of a non-"Islamophobic" incident to highlight the "rise in Islamophobia."

In June 2015, the BBC promoted a story about

a man who couldn't get a job because he had a Muslim name. But Breitbart London [exposed](#) the fact that not only did he change his name, he also removed all reference to an extremist, Islamist school from his curriculum vitae (resume).

At the point of publication, none of the media outlets involved in the false reporting have responded to Breitbart London for comment. But



Britain's 'Tell MAMA' organisation, which claims to fight anti-Muslim prejudice, tweeted about the Molenbeek attack 10 times.

the *Daily Beast's* Dean Obeidallah [did tell us to "f**k ourselves."](#)

Raheem Kassam is a Shillman-Ginsburg fellow at the Middle East Forum and editor-in-chief of Breitbart London.

Liam Deacon is a reporter at Breitbart London.



Male Norwegian politician raped by asylum seeker says he feels GUILTY that his attacker will now be deported because the man might suffer back in Somalia

Source: <http://www.dailymail.co.uk/news/article-3528236/Male-Norwegian-politician-raped-asylum-seeker-says-feels-GUILTY-attacker-deported-man-suffer-Somalia.html>

Apr 07 – A Norwegian politician has spoken of how he felt guilty that the Somali asylum seeker who raped him was deported.

Karsten Nordal Hauken, from Ås, Akershus, was raped in his home and the perpetrator was subsequently caught and jailed for 4.5 years.

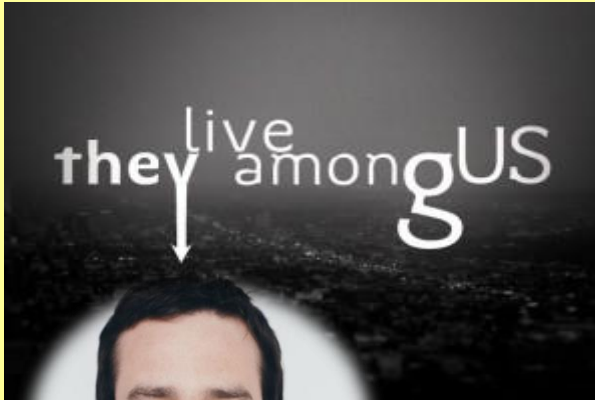
However, when Nordal Hauken found out that the man was to be deported back to Somalia after serving his time, he reveals he felt guilt that the man would possibly face hardship in his old country.

Nordal Hauken has told his story as part of a television series on Norwegian state broadcaster NRK called Jeg mot Meg [Me against Myself] about mental illness and psychological struggles.

Nordal Hauken, who describes himself as a 'young Socialist Left Party member, feminist and anti-racist', was attacked in his own home.

The politician reveals that he struggled to come to terms with being a heterosexual male rape victim, and subsequently self-medicated with alcohol and cannabis.





'I am a heterosexual man who was raped by a Somali asylum seeker,' Nordal Hauken writes for NRK.

'My life fell into ruin, but now I feel guilty about him being sent out of the country.'

He reveals how he was called up by the prison shortly before the perpetrator was to be deported to Somalia, having served 4.5 years in prison for the rape.

'I felt relief and happiness that he would be gone forever. I felt like the Norwegian State had taken responsibility to carry out the

ultimate revenge, like an angry father confronting its child's attacker.

'But I also had a strong feeling of guilt and responsibility. I was the reason that he would not be in Norway anymore, but rather sent to a dark uncertain future in Somalia

He adds: I see him mostly like a product of an unfair world, a product of an upbringing marked by war and despair.

Arabic soon Sweden's second language

Source: <http://sverigesradio.se/sida/artikel.aspx?programid=2054&artikel=6404320>

Apr 05 – Arabic is set to overtake Finnish as Sweden's second largest language spoken as a mother tongue, according to a new survey.

In 2012, there were an estimated 200,000 people who spoke Finnish as their native language in Sweden, while 155,000 had Arabic.

But since then, many more Arabic speakers have come to Sweden as refugees, while the number of native Finnish speakers is declining.

"Most speakers of Finnish are also immigrants. But they came several decades ago and are now dying," the study's author Mikael Parkvall, a linguist at Stockholm University, tells Radio Sweden. "They have to some extent passed the language on to their children but not to the extent that it would compensate for their own deaths."

But conclusions about the number of people using a certain language in Sweden are not completely straightforward. Parkvall's own assessment is based on many different sources, ranging from official school and immigration data, as well as surveys and comparisons with other countries.

Unlike other countries, Sweden does not gather any official language statistics, since it's seen as too close to ethnic registration. This lack of official data is something Parkvall finds unfortunate.

"Tons of democracies actually do know which languages are spoken within their borders," he adds.



Christian Converts Flee German Asylum Centers After Muslim Intimidation

Source: <http://www.breitbart.com/london/2016/02/25/christian-converts-flee-german-asylum-centres-after-muslim-oppression/>

Feb 25 – **Christian converts are being expelled from an asylum home in Berlin according to *Junge Freiheit*. Six Iranian Christians who were former Muslims themselves have fled the center fearing for their safety and their lives.** The incidents all occurred at a center for migrants seeking asylum near the Tempelhof airport in the German capital.



One of the Iranians told German media, “We would read the Bible in our Twelve-bed room. Immediately, the Muslims come into the room to insult us, because we have converted from Islam to Christianity,” and one of the other victims of the abuse said, “suddenly seventy people stood in front of us called us names and said they wanted to beat us. We were afraid for our lives!”

According to reports at the center it took over 20 police officers and a K9 unit in order to stop the Muslim

mob from committing acts of violence against the Christians.

The National director of the asylum centers admitted: “yes, there is harassment against Christians,” not just in Berlin but all across Germany and in many asylum homes.

Fearing for their continued safety the Iranians have all taken refuge in the care of the Lutheran Evangelical Church in Berlin.

The church is headed by pastor Gottfried Martens who said, “In my estimation, at least half of our church members living in the refugee camps are living in fear,” and said many Christians are, “discriminated against, harassed, threatened, beaten in exceptional cases, beaten hospitalized or attacked with weapons.”

The pastor said he was greatly concerned

with the safety of the Christians adding, “Many do not dare to identify themselves as Christians. Christians put on headscarves, so that no one recognizes that they are not Muslims.”

He said that Muslims often do not recognize any conversion of religion away from Islam and that, “again and again Christians ask me to take them away from the (asylum) home, because there they have such fear. Some no longer dare to stay in the homes.”

The authorities in the German capital are also looking into the incident and say that it is under investigation. A spokesman for Angela Merkel’s Christian Democratic Union party said, “We must make sure that no one is harassed because of their faith, threatened or physically assaulted.” He demanded that there must be consequences for the Muslims involved. The spokesman also said that there needs to be a consistent vigilance against bullying and attacks by Muslims on vulnerable minorities like Christians and gays in asylum centers, saying that people who try to tell people what religion to believe or not to believe are not welcome in the country.

Breitbart London has reported other cases of Muslim bullying and violence in migrant homes where Christians and homosexuals have been the targets of violence and threats.

Often the government solution is to simply create segregated centers for groups at risk of violence. These reports also come after the news that the German government is looking to spend 100 million euros to tackle “right wing extremism” instead.

Horror as China tears down THOUSANDS of crucifixes in crude bid to eradicate Christianity

Source: <http://www.express.co.uk/news/world/659545/Horror-as-China-tears-down-thousands-of-crucifixes-in-crude-bid-to-eradicate-Christianity>

Apr 09 – More than two thousand crosses have now been forcefully removed from churches as part of a government campaign to regulate “excessive religious sites”.

The nation’s leadership launched the crusade to eradicate Christianity in the coastal province of Zhejiang almost two years ago.



Several members of the public have since been arrested for attempting to halt the government's crude attempt to suppress the



Christian faith.

Among the arrested was prominent human rights lawyer Zhang Kai, who was detained after he mounted a legal campaign to challenge the removal of the crosses.

Mr. Kai was detained for six months before he was "forced" to appear on the State channel to "confess" his crimes against the Chinese government by supporting the anti-establishment protest of the demolition of crucifixes.

Local Christian leaders condemned the forced confession from the lawyer, who also represented a group Christians who were detained for suspected financial crimes last

year after they protested at the demolition of crosses, in a public letter.

Christian charity China Aid confirmed just before Easter that more than 2000 crosses had now been demolished by the government as part of their "Three Rectifications and One Demolition" campaign.

It also claimed that since the beginning of 2016 to early March, 49 Churches had been destroyed in the rampage to abolish Christianity.

Restriction in the country make it difficult to provide an accurate estimate of how many Christians live in China, but Government figures suggest there are more than 28 million people, both Protestant and Catholic, practicing the faith to date.

Last year it was revealed that China is on track to have the world's largest population of Christians with the figure surging to more than 247 million by 2030.

At the time Release international, which aids prosecuted Christians across the globe, expressed concerns over the Chinese Government's merciless approach to remove the religious symbol from the city of Wenzhou, which is known as the Chinese Jerusalem for its strong Christian presence.

Chief executive of Release international, Paul Robinson, said: "There are concerns that this campaign to curtail the visible Christian presence in the province could gather momentum and spread across China." After a series of appeals, the Mr Kai was released by Zhejiang authorities.

Why China is removing crosses from hundreds of churches

Source: <https://www.washingtonpost.com/news/worldviews/wp/2015/05/08/why-china-is-removing-crosses-from-hundreds-of-churches/>

May 2015 – A draft of official regulations relating to religious structures in the eastern Chinese province of Zhejiang was publicly released this week, offering a glimpse into the means by which local authorities seek to curb religious expression.

According to the Associated Press, since early 2014, officials in Zhejiang have toppled crosses from some 400 churches deemed of be in violation of building codes. On some occasions, the actions have sparked altercations with local congregations.

The New York Times has more: "In painstaking detail, the 36-page directive sets out strict guidelines for where and how churches in Zhejiang can display crosses. They must be placed on the facades of buildings, not above them. They must be of a color that blends into the building, not one that stands out. And they must be small: no more than one-tenth the height of the building's facade."



The rules put new legal force behind a continuing campaign in Zhejiang to remove crosses from the tops of churches, as the government works to hide the most visible sign of Christianity's explosive growth in the province. Wenzhou, a coastal city in Zhejiang with more than nine million people, is often referred to as China's Jerusalem because of its heavily Christian population and big churches.



Estimates regarding its Christian population vary from 50 to 100 million people. The prevalence of a large Catholic community has spurred Pope Francis to make overtures to Beijing.

As my colleague William Wan reported a few years ago, long-ingrained fears of foreign infiltration and imperialist plots underlie China's official wariness of religion. Christianity also poses an obvious challenge to a nominally atheist, authoritarian leadership that has a hard time accommodating a plurality of belief systems.

"To continue to forcefully remove and ban the cross on the rooftop of the church buildings demonstrates the Chinese regime's determination to contain the rapid growth of Christianity in China," says Bob Fu of China Aid, a U.S. based Christian rights group.

In recent months, my colleague Simon Denyer has been following what some have characterized as Beijing's war on Islam. Out of supposed concern over extremist radicalization and counter-terrorism, Chinese authorities in the restive far western region of Xinjiang have clamped down on the cultural practices of the Uighurs, a Turkic Muslim minority.

Local authorities compelled Muslim shopkeepers to sell alcohol, even though it violates their own traditions. In one instance, a Muslim man was jailed for six years for refusing to shave off his beard.

Blasphemy Convictions Intensify in Sisi's Egypt

By Raymond Ibrahim

Source: <http://www.meforum.org/5945/blasphemy-convictions-egypt>



Egyptian poet Fatma Naoout was sentenced to three years in prison in January for criticizing the slaughter of animals during the Islamic festival of Eid al-Adha

Apr 06 – Despite Egyptian President Abdel Fattah al-Sisi's many pluralistic words and gestures, which have won him much praise from the nation's Christians and moderates, he appeases the Islamist agenda in one very clear way: by allowing the controversial defamation of religions law, colloquially known as the

"blasphemy law," to target Christians and moderates in ways arguably worse than under the Muslim Brotherhood and Morsi.

► Read the rest of this interesting article at source's URL.

Raymond Ibrahim is a Judith Friedman Rosen fellow at the Middle East Forum and a Shillman fellow at the David Horowitz Freedom Center.




Euobserver

 Source: <https://euobserver.com/static/about>

EUobserver is an independent online newspaper which values free thinking and plain speech. We aim to support European democracy by giving people the information they need to hold the EU establishment to account.

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The screenshot shows the Euobserver website interface. The main headline is "Migrants injured in Greece-Macedonian border clashes". Below the headline is a photo of migrants sitting on the ground, with a sign that says "KITYNOMIA POLICE". To the right, there are two smaller article teasers: "EU asylum reform ideas hit wall of opposition" and "EU cities want say on refugee policy". The website header includes the Euobserver logo, social media icons, and a search bar.

Free Press

EUobserver is the only independent news media covering EU affairs in Brussels and all 28 member states. We are not funded by the EU institutions. We generate our own income from subscriptions, advertising and news-syndication. We also receive institutional grant support from Adessium Foundation. In 2014, we were awarded a project grant from the Open Society Foundations.

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EUobserver is committed to achieving the highest standards of due accuracy and impartiality. We adhere to the Munich Declaration of the Duties and Rights of Journalists. We reserve the right to refuse any submitted content if the content fails to meet our standards. We promptly correct factual errors and welcome additional information or opinions. Please email us for any corrections, clarifications or updates.

EDITOR'S COMMENT: We aim to support European democracy by giving people the information they need to hold the EU establishment to account. Yes indeed! By addressing FYROM as Macedonia! Perhaps much DEEPER investigation is required to know what the official names of European countries are! Unless they are part of the "name game" supported by many of our European friends and allies...

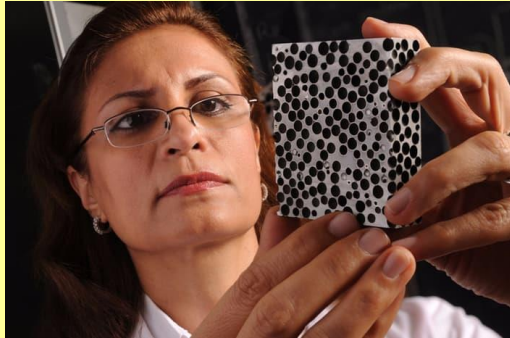
Lightweight metal foam turns armor-piercing bullets into dust

 Source: <http://www.gizmag.com/metal-foam-bullets/42731/>

Apr 10 – **Composite metal foams (CMFs)** are little-known materials that are beginning to show some big promise. Last year we saw researchers adapt these lightweight materials to stop various forms of radiation in their tracks, and now the same team has ramped things up to offer protection from something with a bit more force: an armour-piercing bullet, which was turned to dust on impact.



In its most simple form, foam metal is made by bubbling gas through molten metal to form a frothy mixture which then sets as a lightweight matrix. This leaves a material that offers a lighter alternative to conventional metals, while still maintaining a comparable strength.



Afsaneh Rabiei, a professor of mechanical and aerospace engineering at North Carolina State University, last year produced a foam metal shield that could block X-rays, various forms of gamma rays and neutron radiation, giving it potential as a lightweight alternative to the bulky radiation shielding currently available.

Building on this previous work, Rabiei then set about building high-strength armor. The shield was comprised of boron carbide ceramics as the strike face, with composite metal foam (CMF) as the bullet kinetic energy absorber layer and Kevlar panels as backplates. To test its durability, Rabiei and her team took aim with a 7.62 x 63 mm M2 armor-piercing projectile, which was fired in line with the standard testing procedures established by the National Institute of Justice (NIJ).

"We could stop the bullet at a total thickness of less than an inch, while the indentation on the back was less than 8 mm," Rabiei says. "To put that in context, the NIJ standard allows up to 44 mm (1.73 in) indentation in the back of an armor."

But Rabiei imagines her work will provide more than just ultralight, bullet-destroying body armor. Other potential applications include space exploration and transportation of nuclear waste due to its aforementioned abilities to block radiation.

► You can check out the bullet's demise in the video (click on source's URL), while the research was published last year in the journal [Composite Structures](#).

The politics of asylum accommodation in the U.K.

Source: <http://www.homelandsecuritynewswire.com/dr20160411-the-politics-of-asylum-accommodation-in-the-u-k>

Apr 11 – **A new study offers a first examination of recent changes in the nature of asylum accommodation in the United Kingdom**, arguing that in the model existing today, economic calculations and narratives of "worthiness," "welfare," and "prioritization" intersect to make asylum-seeking a "market" in which neoliberal norms of market competition, economic efficiency, and dispersed responsibility are central.

Wiley notes that in this context, the framing of asylum seekers as a "burden" emerges, along with an economic rationale that values asylum accommodation for the profit it may bring, rather than the questions of social justice it raises.


"My research illustrates that the contracting out of asylum accommodation has had significant impacts on local authorities. The expertise developed within local authorities for working with asylum seekers and refugees has often been lost," said Dr. Jonathan Darling, author of the paper, which is published in *Transactions of the Institute of British Geographers*. "With local authorities facing unprecedented financial pressure, asylum support services have rapidly diminished, leaving only charitable provision in some parts of the U.K. This reflects wider fears that the wellbeing of all involved in dispersal — asylum seekers and the communities they are dispersed to — are being ignored in favor of providing cheap housing and minimal services."

— Read more in "*Privatizing asylum: neoliberalization, depoliticization and the governance of forced migration*," [Transactions of the Institute of British Geographers](#) (23 March 2016).



Forgive me, I meant to do it!!!


Source: <http://www.nigeriatoday.ng/2016/04/forgive-me-i-meant-to-do-it/>



Apr 10 – Blair and Bush Jr claimed that Saddam had weapons of mass destruction ready to be unleashed within 24 minutes of decision taking! Both were prime minister of Great Britain and president of the United States of America respectively. Bush Jr needed to avenge his father Bush Sr because Saddam didn't like the older Bush and said bad things about him. And as we say in Yoruba *eni a bu baba re, a gbe san!* And Bush Jr was holding the sword at the hilt and ready to stab Saddam. And what Bush Jr wants Blair gives him! So, they get Powell to grovel in the desert and find pictures of toys that looked like nukes buried in the sand.

These were played in front of the nations of the world and presto Saddam did have weapons of mass destruction actionable in fifteen minutes. So onward western soldiers, matching unto war!

Years later, after hundreds of protests and thousands of deaths of British and American soldiers and millions of Iraqi civilians are dead and displaced, or placed where they have nothing doing, Blair would apologize and Bush Jr would simply smirk his lips and each plead that they thought they were right when they did what they thought was right. But now that it has been proved that they were wrong they accept that they were wrong then but they thought they were right. And if they thought they were right then, it means that they were right. **Which does not mean that there were weapons of mass destruction but still they were right. Sorry o!**



The latest addition to this abuse of apology is Jacob Zuma of South Africa. Some twenty-four million dollars was spent on upgrades in his Nkandla homestead in Kwa Zulu Natal. As part of security, a swimming pool was installed where water can be drawn in case of fire, amphitheater for collecting people in case

of emergency, Visitor Centre for dangerous visitors, Cattle Enclosure in case Fulani cattle men come to Nkandla and a Chicken run for chicken races. The chapter institution called the office of the public protector found that these five items could really not be considered security items and so the president should pay for them. Zuma laughed and said only clever blacks' thinks there is something called corruption that has taken place in Nkandla, blacks who keep dogs! One ANC Member of Parliament said that the woman who occupies the position of public protector does not know her weight, does not know her position. Zuma got parliament to write its own report on Nkandla and explain those five items which parliament did.

Well, while the president and his members of parliament were laughing and picking their teeth with the abuse of the public protector, Malema of the EFF and his older brother Maimane of the DA walked up to the Constitutional Court and filed against the president and the parliament in the matter of Nkandla and there arose the hatchtagpaybackthemoney. There were protests and protest matches up and down the country. Quickly, Zuma went to a court in Cape Town and the court said Zuma did not have to pay anything back. So, he and the ANC laughed more and picked more of their teeth dissing the public protector. It was generally a difficult time for the protectors of the constitution. There were even murmurings on the corridors of power that the constitution could be changed; was it not just a piece of paper?



Then on Thursday, March 24, the Constitutional Court pronounced



on the behavior of Jacob Zuma and the South African parliament in the matter of Nkandla. Both the president and the parliament had behaved against their constitutional responsibilities. They had failed to protect the constitution that they swore to uphold. They were guilty. Zuma must pay back part of the money spent on his homestead.

On the following day, Friday, March 25, President Zuma speaks to the nation and apologized for doing what he did. He had not meant to disrespect the nation's constitution, it was just that he was following a different interpretation and no harm meant. And now that it has been pointed out that he was wrong he accepts he is wrong and he will pay back the money. In fact he had always meant to pay it back anyway. So he apologizes on his behalf and on behalf of the government. Those who were thinking that the president was going to resign were not disappointed. He did not resign!

Is an apology punishment for an offence? Not one dictionary claims this meaning for apology. If apology is not punishment for an offence, why is an apology sufficient for some guilty people? The fact is that an apology does not mean, in these days of tyrannical democracies,

that you are wrong, and the other person is right. It just means that you value your position more than your ego, more than your pride, more than your dignity, perhaps even more than your soul. This apology is the equivalent of the Yoruba compromise of all compromises, which says that there is nothing wrong prostrating for a dwarf, because why, because when you stand up, you will still be taller than the dwarf!

In the meantime though you have sold your ego, you have rubbished your pride, you have diminished your dignity and you have exhausted your valued earnings and you are worth nothing to those who used to hold you up. You will continue in your position, earning your fabulous salary and luxuriating in the position to which you were voted. But both in your face and behind your back *nwon a ma yinmu si o!* They would say of you that you said you would do this and you would that, that you would reduce hills and level valleys but you could not turn a pebble from one place to the next, you could not move a handful of soil from one ditch to another, *o danimo re!* **You ask for forgiveness in spite of the fact that you meant to do it!!!**

The Human Rights Risks of Countering Violent Extremism Programs

Source: <https://www.justsecurity.org/30459/human-rights-risks-countering-violent-extremism-programs/>

With national and international institutions scrambling to adopt Countering Violent Extremism (CVE) programs, the UN Special Rapporteur for counterterrorism and human rights, Ben Emmerson, has issued a [timely report](#) cautioning about the human rights risks of these programs. The Human Rights Council, and especially the chief sponsors of CVE initiatives, should take heed. They should hit the pause button on CVE and develop concrete means for addressing the myriad concerns Emmerson raises. We list some potential ideas for doing so at the end of this piece.

Conceptual Issues

Emmerson's report begins by identifying two conceptual weaknesses underlying CVE. First, what exactly does "violent extremism" mean and how does it differ from "terrorism"? The report notes that although CVE initiatives are underway, there is no "generally accepted definition of violent extremism," and the term is often used interchangeably with terrorism. For example, the UN Secretary General's Plan of Action to Prevent Violent Extremism suggests

that violent extremism "encompasses a wider category of manifestations" than terrorism. But the conditions conducive to "violent extremism" that it identifies are "almost identical" to those identified as conducive to "terrorism" identified in the UN's 2006 Global Counter-terrorism Strategy.

Given that the underlying conditions conducive to both terrorism and violent extremism are virtually the same, it's hard to



see the value-added of the concept of violent extremism. However, the introduction of the new concept carries significant costs, both in terms of human rights and resources, as detailed in Naz Modirzadeh's [post](#) on the Secretary General's plan over at *Lawfare*. The second conceptual challenge relates to our understanding of the so-called "radicalisation process" that forms the basis of many CVE programs:

Many programs directed at radicalization are based on a simplistic understanding of the process as a fixed trajectory to violent extremism with identifiable markers along the way. That has sometimes elided factors that are recognized in hindsight as having contributed to an individual's radicalization with predictive markers of general application. A more accurate understanding is that the path to radicalization is individualized and non-linear, with a number of common 'push' and 'pull' factors but no single determining feature. A confluence of issues at local, national and supranational level may all play a part in promoting or avoiding radicalization and, when considering influencing factors, States have tended to focus on those that are most appealing to them, shying away from the more complex issues, including political issues such as foreign policy and transnational conflicts.

We agree. One point of clarification though is in order. Often government programs try to get around the lack of predictive markers via checklists of "push" and "pull" factors that identify individuals at risk of violent extremism. While some of these factors may well be useful in *conducting a post-facto analysis* of a particular individual's decision to undertake a violent act, they do not provide a basis for *predicting* who among a population is going to become violent. While some of the factors identified may be relevant (e.g., a significant history of violent behavior), most — such as anxiety, unmet personal needs, frustration — are commonplace in a wide swath of young people and therefore lack utility as a predictive tool.

Human Rights Risks of CVE

The report highlights the risks CVE poses to a wide range of core human rights, including

non-discrimination, freedom of expression, and freedom of movement.

Impact of measures that target specific groups or individuals. Emmerson notes that although on paper most CVE strategies are framed in generic terms, in practice they "tend to target specific groups determined to be most 'at risk' of being drawn to violent extremism." As noted in the December 2015 submission to the Special Rapporteur from the ACLU, Article 19, and the Brennan Center, "CVE initiatives in the United States and Europe focus overwhelmingly on Muslim communities, with the discriminatory impact of stigmatizing them as inherently suspicious and in need of special monitoring."

Emmerson highlights critical questions about programs that aim to "counsel, support and mentor individuals who are considered 'at risk' of or 'vulnerable' to violent extremism," including:

- The validity of the theory behind intervention programs: i.e., the "misguided" assumption that "there are reliable criteria that can be used to predict who will commit a terrorist act";
- How individuals referred to programs "are identified, what indicators are taken into consideration, and who is qualified to refer";
- The scarcity of independent evaluations of the effectiveness of these programs; and
- The lack of transparency about these programs, including how rights to freedom of thought, religion, privacy, and non-discrimination will be respected.

Many of the concerns identified by Emmerson are evident in the UK's ["Prevent" strategy](#), the most recent version of which imposes a statutory duty on public sector employees, including teachers, doctors, and social workers, to report individuals perceived to be at risk of being drawn into both violent and *non-violent* extremism. Extremism includes "vocal or active opposition to fundamental British values, including democracy, the rule of law, individual liberty and mutual respect and tolerance of different faiths and beliefs." Inevitably, there have been multiple reports of Muslim children being identified as potential radicals for things far removed from terrorism, including a



classroom discussion of “ecoterrorism” and expressing support for Palestine. Perhaps the most egregious example was the targeting of a four-year-old whose garbled version of “cucumber” was misinterpreted as “cooker bomb.” In light of Prevent’s “real potential for inhibiting people’s human rights,” David Anderson, the UK’s independent reviewer of terrorism legislation, has called for an independent review of the strategy.

Similar programs are also being introduced in the US in the three CVE pilot cities of Boston, Los Angeles and Minneapolis. While details of these programs remain unclear, it appears that — like Prevent — their goal is to enlist teachers and social and mental health workers to monitor and report to law enforcement on children in their care. Leaked National Counterterrorism Center [guidelines](#) appear to instruct educators and social workers to monitor and evaluate students on a five-point rating scale according to factors like “perceived sense of being treated unjustly,” “expressions of hopelessness, futility,” and “connection to group identity (race, nationality, religion, ethnicity).” It has recently been reported that the FBI plans to set up “Shared Responsibility Committees,” modeled on those deployed in the UK under Prevent, to identify American Muslim youth who are potential violent extremists. Earlier this year, the Bureau also rolled out its Don’t Be a Puppet game (reviewed [here](#)) which aims to help school children identify extremists in their midst. In Minneapolis, school staff have said they will monitor Somali children to identify “identity issues and disaffection — root causes of radicalization”; similarly, the Boston pilot program has put forth a plan to introduce “multidisciplinary teams” consisting of a social workers, psychiatrists, medical, and school staff to conduct interventions.

Conscripting teachers to hunt for extremists, Emmerson suggests, is not a good idea:

Educators should not be required to act as watchdogs or intelligence officers, nor should they be obliged to act in ways that might impinge the right to education, academic freedom or freedom of expression, thought, religion or belief. Such measures may lead pupils and students to self-censor to avoid being branded ‘extremist’, cause teachers and

other staff to view pupils and students as potential threats, or avoid discussing certain issues or inviting guest speakers whose views may be controversial. The lack of certainty about what elements to take into consideration may also lead educators to be overly cautious and needlessly report through fear of sanctions.

He concludes by warning against the “possible counter-productive impact of reporting measures if they lead individuals to avoid open discussions for fear of being branded ‘extremist.’” These very concerns motivated the largest teachers union in the UK to vote for withdrawing the Prevent strategy from schools and colleges.

The last aspect of CVE counseling and outreach programs addressed by Emmerson is the perception among targeted communities that these initiatives are simply intelligence gathering exercises in disguise. While he is careful not to take a view on whether or not this is the case, he concludes “a clear distinction needs to be made between measures to counter violent extremism and the security aspect of countering terrorism.”

Measures that limit expression and ban online content. Emmerson begins by emphasizing that holding or peacefully expressing “extreme” views “should never be criminalized, unless they are associated with violence or criminal activity.” Nonetheless, he recognizes “a dangerous grey zone of expression that lies somewhere between peaceful expression and incitement, and that needs to be addressed” and lists various attempts of governments to respond (e.g., legislation to criminalize “extremist” speech that does not amount to incitement, the creation of offenses such as “advocating,” “inducing,” “encouraging,” or “glorifying” terrorism, as well as lending material support to terrorism). These new offenses, the report notes, impose liability “based on the content of the speech, rather than the speaker’s intention or the actual impact of the speech.” Although Emmerson doesn’t take a clear position on the compatibility of such measures with human rights law, he obviously recognizes the risk that these provisions provide an



avenue for governments to suppress speech they don't like.

Measures adopted by States to “block, filter and ban specific content or entire websites” on the Internet, the report notes, constitute an interference with freedom of expression, as well as the right to privacy. As such, the report concludes, these measures must be authorized by accessible and precise domestic law in pursuit of a legitimate aim, necessary and proportionate, and subject to independent judicial oversight.

Measures that limit the movement of individuals. As part of CVE, some states are considering barring the entry of individuals considered to be “extremist” or of restricting their internal movements. According to the Emmerson, “such measures are particularly problematic where the proscribed conduct is very broadly defined, where the involvement of the judiciary is limited, or where the burden of proof is very low.”

More generally, Emmerson cautions against the securitization of programs for the promotion of development, education, good governance, democracy, and human rights. States are obliged to “respect, protect and promote the rights of all individuals regardless of any broader agenda.” He particularly highlights the safety risks for humanitarian actors for associating with CVE programs as well as the principle that “the provision of humanitarian aid should be based on an identified need and not because a group has been determined to be ‘at risk’ of radicalization.”

This is an important warning. Non-governmental groups working on issues such as peace-building are already starting to reframe their work as part of CVE, no doubt influenced by the availability of funding for such work. This approach carries significant risks, including potential reputational damage once it becomes known that they are working as part of a counterterrorism initiative.

Recommendations

The Special Rapporteur includes several recommendations, which are listed below along with some thoughts as to how they might be implemented:

Increased research to gain a better understanding of the phenomenon of violent

extremism. While more knowledge is always a good thing, we would caution against research that assumes that there is a checklist of factors that can be used to predict who will become a terrorist in the future. Based on interviews with prominent counterterrorism researchers, a recent *New York Times* [article](#) concludes:

“Despite millions of dollars of government-sponsored research, and a much-publicized White House pledge to find answers, there is still nothing close to a consensus on why someone becomes a terrorist.”

Despite this lack of consensus, US government funding remains focused on finding a silver bullet for violent extremism. We recommend that researchers should be given greater freedom to critically examine the underlying premises of government CVE programming and also to evaluate factors that are politically inconvenient for governments, such as the impact of state violence, both domestic and foreign.

Finally, there is no point doing good research if governments simply ignore it. Credible empirical studies amply demonstrate that there are no predictive markers of who is likely to become a terrorist. CVE strategies acknowledge this fact, but at the same time promote programs that rely on such markers.

States should focus their CVE efforts on tackling the conditions conducive to the threat of terrorism (e.g., unresolved conflict, bad governance) and ensuring respect for human rights. This is an obviously sensible recommendation, but must be read in conjunction with Emmerson's strong caution about the securitization of these endeavors. Specifically, States must fulfill their human rights obligations “without framing this obligation as part of any broader agenda, including the prevention and countering of violent extremism.”

Emmerson makes an important additional recommendation relevant to programs that mix a security agenda with non-security programs, such as peace-building, development, etc. First, “before embarking on a new area of engagement for CVE, a proper analysis of the impact on all those involved as providers or recipients must be undertaken.” This type of impact analysis



should, in our view, be part of the program design and evaluation process, and should cover the impact of a security framing on the underlying goal of the program, including any potential reputational consequences and the risk of diversion from primary objectives. It should apply to national and international programs, including those conducted by NGOs with government funding. Ideally, an independent and credible third party with experience in the substantive area of programming and the relevant region should conduct the analysis. In addition, the UN and its member states should develop robust procedures to ensure that development or human rights programs do not become proxies for security aims.

All strategies and policies adopted by States to counter violent extremism must be firmly grounded in and comply with international human rights law. This admonition is found in

practically every UN document on CVE and serves as a basis on which to build human rights protections into these programs. Unfortunately, there are few concrete examples of how this obligation is implemented. NGOs asked this question of the US government in December 2014 and have yet to receive a response. It is not enough for governments to simply state that they will respect human rights (or civil rights and liberties); they need to be transparent about what they are doing and explain how they will specifically address the concerns highlighted by the Special Rapporteur relating to non-discrimination, freedom of expression, and freedom of movement.

In sum the critical issues raised by Special Rapporteur's report must be concretely addressed, and his entirely sensible recommendations should serve as a blueprint for developing substantive safeguards.



German government to ban 'sexy' ads to stem immigrant-refugee sexual assaults

Source: <http://en.protothema.gr/german-government-to-ban-sexual-ads-to-stem-immigrant-refugee-sexual-assaults/>

Apr 11 – **The German government is considering withdrawing all ads with sexual content that could 'arouse' immigrants and refugees,** according to German newspaper "Bild". Citing German magazine 'Spiegel', Bild **claims** that German Minister of Justice Heiko Maas is ready to announce a law that prohibits provocative commercials that might 'aggravate' Muslim refugees and immigrants, following a rise in sexual assaults against hundreds of women in the city of Cologne on New Year's Eve. **Even the slightest exposure of a female breast, a see through top, a woman in a bath or any part of skin is on the German government's 'censor' list.** The ban will also apply to male models. Some experts doubt whether this initiative will quell the urges of the potential rapists and sexual attackers from the within the immigrants and refugees. After the sexual attacks in Cologne the city's Mayor said the women should 'keep the immigrants at an arm's length', causing an uproar in German society, while Police in towns in Sweden have advised women to not go outside after certain hours.

EDITOR'S COMMENT: Until recently I thought that it was the UK leading the Eurabia project. But Germans are doing their best to become the real leaders reminding me a nasty quote saying "if you cannot avoid rape, relax and enjoy it!"

The UAE's Fragile Good Life

By Daniel Pipes

Source: <http://www.meforum.org/5949/uae-fragile-good-life>

Apr 11 – In a region of civil war (Syria, Yemen, Libya), hardening dictatorship (Turkey, Egypt), nuclear build up (Iran), and potential water

calamity (Iraq), where in the Middle East outside Israel can one find the good life?



Surprisingly perhaps, in the United Arab Emirates, a country in the Persian Gulf.

Despite the country's many challenges – proximity to Iran and Iraq, almost no natural fresh water, oil prices tanking, 8/9ths of the population foreign, violent Islamists lurking – its 10 million inhabitants live well.

Two basic facts set the scene. First, the UAE has the near-unique distinction of being (along with Switzerland), a country ruled by committee, a unique one: the seven rulers of the seven individual emirates. Further, those rulers are embedded in extended and influential families. This combination makes it difficult for one individual to dominate the country or to rule as a narcissist. At the same time, each sovereign (notably, the emir of Dubai) enjoys wide latitude within his

tribal past and oil-rich present creates a society in which the usual give-and-take of politics barely exist, replaced by an all-encompassing paternalism joining the power of a government that need not tax with the protectiveness of a tribal chief. Rather than democracy, the rulers host political soirées open to all.

Paternalism implies simple rules: No challenging the rulers. Never try to reduce their



power. Maintain public decorum and discretion.



The result is a society focused on family and social relations, mall-shopping, entertainment, travel, and other innocent pleasures for children, families, and couples. Eroticism, edginess, and radicalism are unwelcome.

[Dubai's Global Village feels like a Disneyland spinoff](#)

News from the UAE tends to be bland, about the emir's meetings, oil price fluctuations, store openings,

own domain, giving each emirate a distinct character.

Second, a compact between rulers and ruled means the former enjoy a broad authority in return for providing stability and prosperity. As in other Persian Gulf monarchies (with the slight exception of Kuwait), a combination of

bridge closings, times of prayer, and sports scores. The flamboyant Atlantis Hotel in Dubai brings Las Vegas to mind, except gambling, booze, and prostitution are to varying degrees illegal. Global Village, also in Dubai, feels like a Disneyland spinoff.



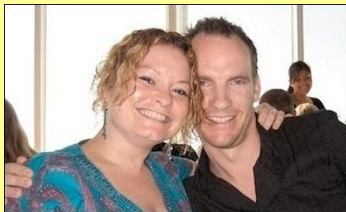


In private, residents (subjects and expatriates alike) are largely left alone. Political discussions, political ideologies, alcohol, drugs, sex – are all ignored on condition of prudence and never threatening the public order. Ceiling cameras are ubiquitous but videotapes are reviewed only when there's specific cause.

Although the system mostly works, it feels confining to foreigners accustomed to the hurly-burly of a free political marketplace, maximal self-expression, and the right to challenge mores. Anyone wanting to range outside acceptable Emirati boundaries is advised to live somewhere else, as punishments can be dauntingly severe.

Two examples: A British duo who met at an all-you-can-drink champagne brunch and unwisely wandered off to a beach to make out (their version) or engage in intercourse (the government's version) soon found themselves in a shot-gun marriage, fined, suffering mental problems, serving a 3-month jail term, and then deported.

[Michelle Palmer and Vince Acors, off the beach](#)



An Australian woman irritated by a car taking up two disabled parking spaces knew Emirati customs well enough to obscure the license plate on her photograph before posting it on Facebook; nonetheless, the owner

of the offending vehicle complained to the authorities about being insulted. They promptly arrested the Australian, strip-searched, convicted, jailed, then deported her.

Worse, the ruling family can misbehave with impunity. Issa bin Zayed Al Nahyan, a brother of the ruler of Abu Dhabi, videotaped himself sadistically torturing and nearly murdering an Afghan merchant whom he accused of cheating him out of \$5,000. But – unlike the Australian woman – Issa suffered no consequences because the interior minister, another brother, arranged for him to be found innocent.

Fortunately, due to social constraints, this sort of depravity is quite rare in the UAE. Compared to most Middle Eastern countries, the Emirates have found a formula for success. Committee rule has its limitations but, compared with the dictators dominating nearby countries, it looks pretty good. Hypocrisy is not charming but it beats the religious oppression found in next-door Saudi Arabia.

My conclusion is one of caution. Whatever the UAE's faults, and they are plentiful, pushing for a more democratic government and a free-wheeling society risks spoiling this oasis of calm and opening the country to the furies that dominate the rest of the region. Better to leave it be and encourage its influence.

Daniel Pipes is president of the Middle East Forum.



EDITOR'S COMMENT: Being myself a few times in UAE I would agree with the content of the article. I will also add a few things from personal experience: (1) Emiratis are nice people and have a special warm attitude towards Greeks; (2) I liked their campaign: "Being in UAE, behave like an Emirati!" – this is something that we in Europe miss a lot and this multiculturalism of ours is leading us to dangerous pathways! (3) There is immense infiltration of foreign experts in all gov organizations holding almost all key positions as advisors and consultants. But these experts are not always act for the benefit of the Emiratis and when it comes to CBRN defense, sometimes advise or sell equipment that is not appropriate for local response authorities (i.e. ordinary gas masks for responders that have beards [almost all of them] instead of gas hoods that can effectively do the job); (4) Rulers of UAE are brilliant people and have a vision for their country. They adopt all new ideas and proposals provided you can persuade them with facts and viable planning. I am confident that if they were in Greece all our islands would be connected by bridges!; (5) One of the biggest problems that they should focus on is the knowledge of English language; this will greatly help them to follow what is going on around the world instead of depending on translators that I am not sure they perform well; (6) Specialized training of first responders should be based on a specific plan and conducted by trainers with hands-on experience. There so many training companies but training plans are always changing, modified or deleted without any notice. There is great need for CBRN training for the health/hospital sector that for the time being depend on military defense capabilities. Living in a fragile geopolitical part of the world requires certain preparedness because the unexpected always happens; (7) Time has a different meaning in the Emirates but if you cope with that and understand various aspects of local life, it is indeed to spend some time in this oasis of peace and stability.

Rafael unveils Drone Dome

Source: <http://i-hls.com/2016/04/rafael-unveils-drone-dome-drone-detection-and-neutralization-system/>



Apr 10 – Rafael will soon unveil [Drone](#) Dome: a new end-to-end defense solution designed to detect, identify, track, and neutralize drones. The system comprises of a radar and a



jamming system. **The system provides a solution for defense of strategic targets covering a radius of up to 3 km.**

The Drone Dome System is an innovative end-to-end system designed to provide effective airspace defense against hostile drones (Micro and Nano UAVs) used by terrorists to perform aerial attacks, collect intelligence, and other intimidating activities. Drone Dome has **360° circular coverage** and is designed to detect, track, and neutralize drones classified as threats flying in No-Fly zones. Drone Dome has a very fast response time, it causes minimal collateral interruptions to the surrounding urban environment, with maximum safety to friendly aircraft.

The Drone Dome System is operational under **all-weather condition, 24 hours a day**. First, the threat is detected and identified by the Radar and EO/IR sensors. The data is combined and correlated and alerts the operator of the hostile UAV. The system initiates either automatic interference operation, as per pre-defined rules in the C4I engine, or manual operation by the operator. When the threat reaches the neutralization area, the hostile drone is neutralized by activation of directional GNSS and RF Inhibitor/Jammer system.

As part of Rafael's strategy to forge partnerships with international companies, Rafael will place a joint stand with "Stefanini", a Brazilian global provider of technology-based solutions. The two companies will display some of their advanced solutions at the LAAD SECURITY 2016 in Brazil.

Rafael's systems displayed at the joint stand with Stefanini will include Wisdom Stone – an intelligence analysis support system for automatic analysis of enormous amounts of data and Cyber Dome – End-to-end holistic Cyber defense solution.

Albania – Fashion shows in Orthodox churches



If you have such neighbors you do not need enemies!



Pope Francis visits Greek island that has become the focal point of Europe's hardened stance toward migrants

Source: <http://www.wsj.com/articles/pope-makes-lesbos-visit-in-show-of-solidarity-with-migrants-1460802375>



Pope Francis traveled to the front lines of the migration crisis Saturday, visiting a Greek island that has become the focal point of Europe's hardened stance toward the new arrivals—then returning to the Vatican with three Syrian families.

In a visit to the Greek island of Lesbos, the pope challenged leaders to respond to migrants “in a way worthy of our common humanity” and pointedly called for Europe to remember its roots as “the homeland of human rights.”

The pontiff also made a provocative gesture by returning to Rome with a group of Syrians who are among the 50,000 stranded in Greece as a result of the decision by many EU member states to bar new arrivals.

“I want to tell you that you are not alone,” he told refugees and migrants held at a detention center on Lesbos. “We hope the world will heed these scenes of tragic and indeed desperate need.”

The pope spoke during a five-hour visit to Lesbos, the island that has seen about 500,000 migrants and refugees—mostly Syrian refugees—arrive since last summer. Pope Francis, who has forcefully defended the rights of refugees and migrants, decided to make the visit soon after the European Union struck a new policy of deporting migrants who arrive in Greece to neighboring Turkey, a position the Vatican has harshly criticized.

“This is a trip marked by sadness,” the pope told reporters on the morning flight from Rome. “We are going to witness the greatest humanitarian catastrophe since the Second World War.”

The centerpiece of the trip was the pope's visit to the Moria detention center (photo below), one of five designated EU “hot spots” in Greece. The center is meant to facilitate the processing of asylum applications by migrants, but most residents are slated for deportation under the new EU policy. That process, however, has effectively stalled, leaving the residents uncertain of their prospects.





The pope visited the center with Ecumenical Patriarch Bartholomew of Constantinople—the leader of the world’s Orthodox Christians — and Archbishop Ieronymos of Greece, leader of Greece’s Orthodox community.

During their visit, people chanted “freedom” in English and Arabic. Moria holds more than 3,000 migrants behind a three-tiered, barbed wire fence. Amnesty International—one of a number of aid organizations to have withdrawn from the migrant reception system in Greece in protest of the EU-Turkey accord—has decried conditions inside Moria. Ahead of the papal visit, local authorities whitewashed the walls of the camp and cleaned up its surrounding area.

Murtaza Hasinzada, a 28-year-old tailor from Kabul, Afghanistan, who is being detained on Lesbos, was on hand to see the pope. He arrived on the island a week ago with his wife after traveling for two months via Iran and Turkey in the hope of resettling in Europe. Under the new policy, he is likely to be sent back to Turkey.

“I hope, as everyone hopes in his mind and heart, that I can solve my problem,” Mr. Hasinzada said.

The pope greeted about 250 residents of the center, in addition to dozens of children being held there, and listened to accounts of their plight.

“My future is destroyed,” said Fadee Nanaa, a 20-year-old Christian detainee from Aleppo, Syria. “My country is destroyed. I can’t go back to Turkey and I can’t go to Europe....I say to people all over Europe, I am not a problem.”

One child presented the pope with a drawing that appeared to show children behind a fence, while others handed notes to the pope’s bodyguards. A woman kissed the pope’s hand and handed him a note saying, “Pope is our hope.” At another point, a woman broke through a police cordon and reached the pope, sobbing as she spoke with him.

The pope said concerns in Europe over the arrivals of huge waves of migrants—more than one million Middle Easterners and Africans have arrived since the beginning of 2015—are “understandable and legitimate.”

“We must never forget, however, that migrants, rather than simply being a statistic, are first of all persons,” he said later in the day at Lesbos’s port.

He made reference to the border closings in Eastern Europe and the Balkans that have left Greece grappling with tens of thousands of stranded migrants, many living in squalid conditions, without shelter or basic care.

“Europe is the homeland of human rights, and whoever sets foot on European soil ought to sense this,” he said. “Humanity [should] build bridges and recoils from the idea of putting up walls.”

Patriarch Bartholomew and Archbishop Ieronymos used especially strong language to criticize European immigration policies. “Those who are afraid of you do not see



your faces,” Patriarch Bartholomew told the detainees. “The world will be judged by the way it has treated you.”

Archbishop Ieronymos said the treatment of refugees showed the “bankruptcy of humanity and solidarity that Europe has shown these last few years.”

The three religious leaders signed a joint declaration calling for action to end the refugee crisis, including protection of Christian minorities in countries such as Syria and Iraq that have provided a large share of recent migration to Europe.

The surprise announcement that the pope would return to Rome with three Syrian families—including a mother and her handicapped child and others with health problems—appears aimed at pricking Europe’s conscience. Merely by accepting a dozen refugees, the Vatican has already done more than all but seven of the E.U.’s 28 member states.

The 12 people, including six children, were among the 50,000 trapped in Greece because of the border closings. The families are Syrians and Muslims and hail from Damascus or Deir Azzor, an area occupied by Islamic State, and saw their homes bombed in the war, said a Vatican statement. The Vatican will shelter and support the refugees.

On his flight back to Rome Saturday afternoon, the pope said that religion had not been a factor in the refugees’ selection. Some Christian families had also been considered, he said, but their “paperwork was not in order” so they had been unable to be processed as refugees.

The pope also deplored the role of arms manufacturers and traffickers in fomenting civil war in Syria, and suggested they should have to spend even a day in the Moria detention camp to see the effects of their mischief. “It would do them good,” he said.

A “small” problem hidden from main stream media

Source: <http://www.pronews.gr/portal/20160416/defencenet/>



Legent: Top – **Lesvos live**; Bottom – Historic visit /**MORIA**/ Global solidarity message for refugees





This is NOT Syria's flag!
It is the flag of FSA/ Al-Nusra that together with
ISIS are responsible for
Syria's bloodshed.



Official flag of Syria



Apr 11, 2013: Interview by US journalist of FSA "colonel" al Okaidi.



Okaidi: It is good. My relationship with the brothers in ISIL is good.





It could be a coincidence but the boy on the top of the ladder leading to Pope's plane wears the same (?) hat as the boy in p.57

Weaponized Horror and the Constraints of Conscience

By David P. Goldman

Source: <http://www.meforum.org/5957/weaponized-horror>

Apr 14 – Just after the September 2001 attacks on the World Trade Center, I warned that [radical Islam would horrify the West into submission](#). In Europe, it has taken a giant step towards success. Europe's horror at the prospect of human suffering has made it

When Italian coastguard boats drew alongside, the crews were shocked to see men and women on board begin dangling the infants over the side. The refugees – mostly Kurds and many said to be heading for Britain – calmed down only when they were assured they would not be turned away from Italy.



Alan Kurdi, 3, drowned last year in a failed attempt to sail from Turkey to the Greek island of Kos.

What kind of people threaten to murder their own babies? The normal response would be to arrest them and put them in prison for endangering children. Instead, the British newspaper reported,

The Archbishop of Catania, Luigi Bommarito, was at the dockside to greet the Monica in what he called "a gesture of solidarity". He said: "I'm here to appeal to people not to close their hearts and doors to people trying to survive. We mustn't forget that

supine. Sadly, the more the Europeans indulge in their humanitarian impulses, the more Muslims will suffer. To be kind is to be cruel.

The [Daily Mail](#) recently described an incident off the coast of Italy:

The 240ft Monica had been spotted in international waters during the night.



in the last century many immigrants also left Italy."

The Monica incident is multiplied ten thousand-fold at the diplomatic level. Turkey's president and de facto dictator, Recep Tayyip Erdogan, last October threatened European officials with 10,000 to 15,000 drowned migrants, according to minutes leaked to a [Greek news site](#) and widely reported by [European mainstream media](#)—with no official denial. Erdogan demanded 6 billion Euros up front and 3 billion Euros a year to stop the refugee flow, telling European officials,

We can open the doors to Greece and Bulgaria anytime and we can put the refugees on buses, What will you do with the refugees if you don't get a deal? Kill the refugees? the EU will be confronted with more than a dead boy on the shores of Turkey. There will be 10,000 or 15,000. How will you deal with that?

The leader of a prominent Muslim country who claims to speak for the Muslim world threatened the Europeans with 10,000 to 15,000 *Muslim* deaths. When in world history has one side in negotiations threatened to kill its *own* people in order to gain leverage?

Some Europeans suspect that [Turkey deliberately encouraged](#) the mass migration that hit Europe in the summer of 2015 by allowing criminal gangs free passage through its territory and across its borders. That is difficult to prove, although it is hard to understand how tens of thousands of Afghans, Iraqis, and Pakistanis made their way through Turkey to Europe without some degree of Turkish collusion. Future investigators will have to settle that issue; what seems clear from the leaked transcripts is that Turkey has turned the migrant crisis into weaponized horror.

The same grisly farce has played out for years in Gaza, where Hamas fires rockets at Israeli population centers from civilian locations, including schools and hospitals, and then complains of human rights violations when the Israelis respond and on occasion kill civilians. Col. Richard Kemp, the former commander of British forces in Afghanistan and an expert on the conduct of war on Israel's borders, observes that the Gaza civilians are not human shields, for their purpose is not to shield anything. Rather, they are human sacrifices, intentionally set to die.

This is the first time in the entire history of warfare that a combatant intentionally set out to maximize civilian casualties on its own side, the better to gain diplomatic leverage. Hamas has read the West well: the reflex response of the secretary general of the United Nations, the European Commission, presidential candidate Sen. Bernie Sanders, and the rest of enlightened world opinion is to recoil in horror at hundreds of civilian casualties, and to denounce Israel for excessive use of force. Hamas knows what will come out of the mouth of Ban Ki-Moon or Sen. Sanders as surely as I know that a gumball will come out of the machine when I crank in a quarter.

In an Oct. 15, 2015 essay, *Times of Israel* analyst [Haviv Rettig Gur](#) noted that Palestinian strategists expect to outflank Israel by rallying world opinion against the collateral damage that they staged precisely in order to elicit such a response. He quoted the Palestinian journalist Mohammed Daraghmeh:

Palestine is an international issue. [The issue] won't be decided in a flurry of knives or acts of martyrdom [suicide attacks], or in protests or demonstrations. It will end only when the world understands it has a duty to intervene and to draw borders and lines, as it did in Bosnia-Herzegovina, in Kosovo... One might ask: How long? And I say: The day will come. ... One might ask: Did the peaceful struggle bring about the end of the occupation? And I say: Did the military and armed struggle do so? Only the world can bring the solution.

The West has not imposed a "solution" on Israel only because Americans respond to weaponized horror differently than the UN bureaucracy, the Vatican, or the government of Sweden. Fully [half of Americans support a ban](#) on all Muslim immigration to the US. Elsewhere in the Anglo-Saxon world, the tide of Muslim migrants might tip the balance in the upcoming June referendum on British membership in the European Union.

Perversely, the United States created a monster when the Clinton administration went to war with Serbia in 1998 in order to rescue the Kosovo Liberation Army—a dodgy band of Albanian hoodlums engaged in drug and human trafficking—from the harsh response of the Serbs to their



provocations. Muslims like Mohammed Daraghmeh learned that at least some in the West would take their side in order to stop humanitarian disasters, even if the Muslims themselves set those disasters in motion. The Pope, the U.N. secretary general, and Sen. Sanders encourage the creation of such disasters by responding according to script. I argued in [October 2001](#) that the mass sacrifice of Muslim lives lay at the heart of battle plan of radical Islam:

Al-Qaeda wants no territory, no conversions, no loot, no slaves. It wishes to destroy the West and happily will sacrifice millions of Muslim lives in order to do so. Indeed, the mass sacrifice of Muslim lives may lie at the heart of its battle plan. It has more in common with the Dostoyevsky of *The Possessed* or the Wagner of *Die Goetterdaemmerung* than with the Muslim conquerors of the Middle Ages. Evil for its own sake becomes imaginable only when the Christian civilization of the West abandons Christianity and stares into the abyss of its own destruction....The grand vulnerability of the Western mind is horror. The Nazis understood this and pursued a policy "des Schreckens" (to cause horror) and "Entsetzens" (terror, literally: dislodgement). Horror was not merely an instrument of war in the traditional sense, but a form of Wagnerian theater, or psychological warfare on the grand scale. Hitler's tactical advantage lay in his capacity to be more horrible than his opponents could imagine.

The more the West indulges its humanitarian sentiments—that is, its squeamishness in the face of absolute evil—the more calamities will befall Muslim civilians, because Muslim leaders from Raqqa to Ankara have learned to

weaponize horror. Staging humanitarian catastrophes in order to blackmail the West has succeeded for the most part.

What would be required to persuade the likes of President Erdogan that the West will not accede to blackmail? Sadly, the West would have to watch with indifference as horrors unfolded on its borders. The Pakistani who [threatened to hang himself](#) earlier this month at a refugee camp in Lesbos will not go back to his miserable life in Pakistan unless the alternative at a European refugee camp is even nastier. To be kind is to be cruel: it encourages horrific outcomes staged to manipulate the Western conscience. Paradoxically, to be cruel is to be kind.

German attitudes towards the refugee crisis are sadly understandable, given the lingering trauma of the Second World War, as I [wrote in this space](#) recently. Nonetheless, Germany should round up most of its migrants and send them back to their own countries. That would be a difficult and nasty business. Germans object that they do not want to be concentration camp guards. But that is no excuse; they could hire Ukrainians, just like last time.

Another perverse outcome is the reemergence of Russia as a Middle Eastern power. President Vladimir Putin is not a new Stalin, but rather the last European leader in the mold of 19th-century nationalism. His relative success in Syria stemmed in part from his indifference to collateral damage and his willingness to use Russia's Cold War inventory of dumb bombs. It would be a tragedy for the West if the initiative in crisis response passed to Russia (and perhaps China), simply because those powers lack the constraints of conscience that inhibit the West.

David P. Goldman is a senior fellow at the London Center for Policy Research and the Wax Family Fellow at the Middle East Forum.



Choose your gender... aged four

Source: <http://www.telegraph.co.uk/news/2016/04/19/choose-your-gender-aged-four/>



Apr 20 – A council has written to thousands of parents asking them to help their four-year-old children to choose the gender “they most identify with” before starting school.

Brighton and Hove City Council has urged them to support their child’s choice of “gender identity” in a letter confirming primary school places this week, the Sun reports.

It asked them to leave the gender section of a form blank if their child [had “another gender identity” altogether](#). The letter was sent ahead of the new school year in September.



Brighton and Hove City Council wrote: “We recognize that not all children and young people identify with the gender they were assigned at birth or may identify as a gender other than male or female, however the current systems (set nationally) only record gender as male or female.

“Please support your child to choose the gender they most identify with.

“Or if they have another gender identity please leave this blank and discuss with your child’s school.”

One mother told the newspaper: “Children at school should be free to develop their identity. They are not adults — let them enjoy the innocence and creativity of their childhood.”

Tory MP Andrew Bridgen described the letter as “utterly ridiculous”, adding: “Schools should be teaching kids to read and write, not prompting them to consider gender swaps.”

The council’s move came just months after it sent pupils at Blatchington Mill School in Hove a gender survey with 25 options to choose from. As well as girl and boy, answers included “genderqueer”, “tri-gender” and “gender fluid”.

Author Stephanie Davies-Arai, an expert on child communication skills, said: “If you say the word ‘gender’ to a child they would have no idea what it means.

“If you tell a child they are the opposite gender then they will think you mean the opposite sex. It’s very confusing and it leads to emotional problems for children.”

Councilor Emma Daniel, head of Brighton’s equalities committee, said: “We have inserted the additional text about gender identity in response to calls from families, young people and schools to show an inclusive approach.

“There are increasing numbers of children and young people nationally identifying as trans.”

Ms. Daniel said she was aware of “concerns” about the wording on the form, adding that it would be reviewed to “see whether we can make it clearer that we consider discussions around gender identity to be an option for parents rather than an obligation”.

EDITOR’S COMMENT: People at Brighton and Hove City Council are dangerous! Hope that rest of the educational community in the UK have still their brains intact!

Olympics 2016: Olympic torch begins journey to Rio

Source: <http://edition.cnn.com/2016/04/21/sport/rio-2016-olympic-torch-lit/index.html>



Apr 21 – The Olympic torch has been lit in southern Greece, kicking off the countdown to Rio 2016.



In a solemn and elaborate ceremony worthy of a "Game of Thrones" pageant, women in ancient-Greek style dresses and men in tunics performed symbolic rituals at the site of Ancient Olympia.



The Games were first held there in 776 BC and remained there for 12 centuries.

Acting the role of the high priestess, Greek actress Katerina Lechou lit the torch using a concave mirror to focus the sun's rays, before placing it into a ceramic bowl. An olive branch was cut and a white dove released into the blue spring sky, both symbolizing peace.

The flaming torch, which has its own Twitter account, was handed to its first torchbearer, gold medal-winning Greek gymnast Eleftherios Petrounias (photo right), before beginning its six-day relay across the country.

Another of the runners will be a Syrian refugee, who will carry the torch through the Eleonas refugee camp in central Athens -- part of a conscious effort by the International Olympics Committee to highlight the plight of refugees around the world.



For the first time in history, a team of five-12 refugee athletes from multiple countries will be competing in this year's Games. They will march behind the Olympic flag at the opening ceremony in Rio.



After its sprint through Greece, the torch will travel to Brazil on April 27 to begin a 95-day tour visiting 83 cities, 26 state capitals and 500 towns -- reaching an estimated 90% of the population.

It is the first time the Games have been held in South America, but the torch-lighting ceremony comes during uncertain times for Brazil. President Dilma Roussef faces the possibility of an impeachment trial as early as May after accusations she broke budgetary laws.

Thomas Bach, President of the International Olympic

Committee, said in his speech at the torch-lighting ceremony that this year's Games "will be a message of hope in troubled times".

"In these difficult days that Brazil is facing, the flame is a timeless reminder that we all are part of the same humanity," he said.

"May today's lighting of the Olympic flame be another reminder to everyone to uphold the spirit of the Olympic Games and to build a better world through sport."

The torch's Brazilian tour will involve an estimated 12,000 torchbearers before arriving at Rio's famous Maracana Stadium for the Games' Opening Ceremony on August 5.



Latvia bans wearing Islamic full-face veils in public

Source: <http://www.homelandsecuritynewswire.com/dr20160421-latvia-bans-wearing-islamic-fullface-veils-in-public>



Apr 21 – There are around 1,000 practicing Muslims living in Latvia, a small Baltic country with a population of two million, and **only three women living in Latvia wear the Islamic full-face veil in public**. The Latvian government has decided to ban the practice anyway. The government says the new legislation is necessary to protect Latvian culture and prevent terrorists from smuggling weapons under garments.

Muslim family's Swiss citizenship process halted after sons refused to shake hands with female teachers

Source: <http://www.homelandsecuritynewswire.com/dr20160420-muslim-familys-swiss-citizenship-process-halted-after-sons-refused-to-shake-hands-with-female-teachers>

Apr 20 – **The Swiss immigration authorities have halted the citizenship process of a Muslim family after the family's two teenage sons refused to shake hands with their female teachers.**

The refusal triggered an intense national debate over religious freedom in Switzerland. The two brothers, 14 and 15, had informed the school principal and the education department in the northern town of Therwil that any physical contact with women who are not family members would be a violation of the strictures of Islam.



In Switzerland, however, it is customary for pupils to shake teachers' hands at the beginning of class. The two brothers were initially given exemption, with Therwil educational officials instructing them to avoid shaking the hands of male teachers, too, in order to avoid the appearance of gender discrimination.

The BBC reports that Swiss politicians reacted angrily to the exemption, with Justice Minister Simonetta Sommaruga insisting that "shaking hands is part of [Swiss] culture."

On Tuesday, authorities in the canton of Basel-Country, where Therwil is located, said that the naturalization process for the family had

been suspended.

The Swiss news agency ATS reported that suspensions are not uncommon in citizenship procedures, typically as a result of the authorities requiring supplemental information or documents.

Basel-Country, where Therwil is located, said it had asked a legal opinion on the issue.

The boys' father, a Syrian national, came to Switzerland in 2001 and was granted political asylum. He now serves as imam in Basel.

Here are about 350,000 Muslims in Switzerland, a country with a population of eight million.

Last year a similar issue captured the headlines, when a Muslim family demanded that their daughters be exempted from swimming lessons.



ISIS Chemical Attack Kills 3 Year Old, Wounds 600

<http://i-hls.com/2016/03/isis-chemical-attack-kills-3-year-old-wounds-600/>

Mar 17 – According to Iraqi officials, ISIS launched two chemical attacks near Kirkuk in northern Iraq. A 3-year-old girl was killed, some 600 were wounded, and hundreds more were forced to flee.



“What the Daesh [ISIS] terrorist gangs did in the city of Taza will not go unpunished,” said Iraqi Prime Minister Haider al-Abadi during a meeting with village elders. “The perpetrators will pay dearly.”

This latest attack took place early on Saturday in the small town of Taza, according to security and hospital officials. Taza was struck by a barrage of rockets armed with chemical weapons just three days earlier.

Dehydration, suffocation, and infected burns are afflicting hundreds of wounded, according to Helmi Hamdi, a nurse at Taza’s hospital.

“There is fear and panic among the women and children,” said local official Adel Hussein. “They’re calling for the central government to save them.”

Teams of German and American forensic experts arrived on site to investigate the presence of chemical material.



This attack is one of many ISIS has perpetrated in recent months. The Pentagon estimates that ISIS used chemical weapons at least 12 times in both Iraq and in Syria. CIA Director John Brennan confirmed the estimation during an interview with *60 Minutes*.

“We have a number of instances where ISIL has used chemical munitions on the battlefield,” said Brennan.

So far, ISIS used chlorine and low-grade sulfur mustard in attacks, both not particularly potent. “It’s a legitimate threat. It’s not a high threat. We’re not, frankly, losing too much sleep over it,” said US Army Col Steve Warren.





Mar 25, 2016: Greek Independence Day parade,, Athens
Joint CBRNe Platoon





Mar 25, 2016: Greek Independence Day parade, Athens
Joint CBRNe Platoon

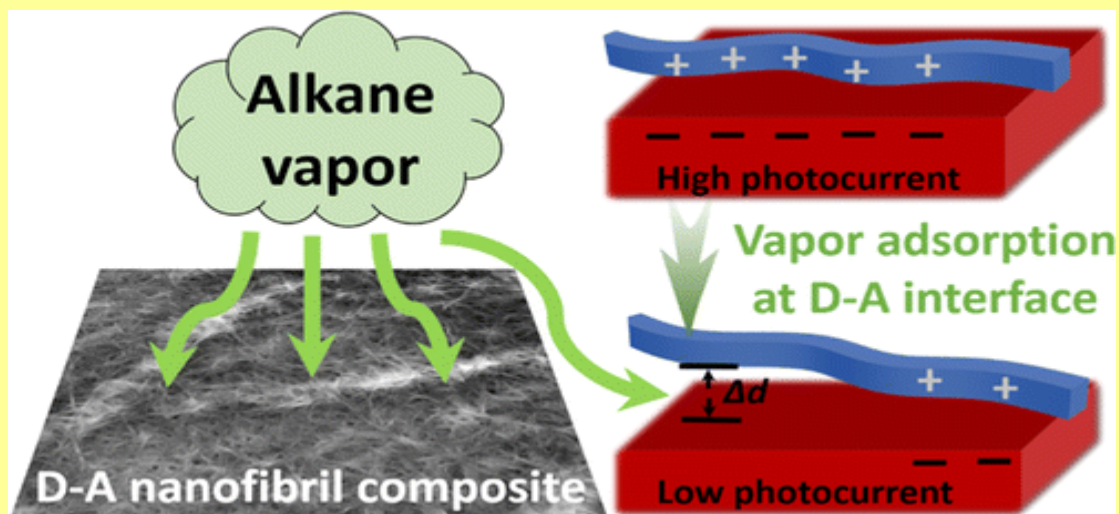


Sniffing out a dangerous vapor for detecting fuel leaks, fuel-based explosives

Source: <http://www.homelandsecuritynewswire.com/dr20160328-sniffing-out-a-dangerous-vapor-for-detecting-fuel-leaks-fuelbased-explosives>

Mar 28 – Alkane fuel is a key ingredient in combustible material such as gasoline, airplane fuel, oil — even a homemade bomb. Yet it is difficult to detect and there are no portable scanners available that can sniff out the odorless and colorless vapor.

But University of Utah engineers have developed a new type of fiber material for a handheld scanner that can detect small traces of alkane fuel vapor, a valuable advancement that could be an early-warning signal for leaks in an oil pipeline, an airliner, or for locating a terrorist's explosive.



The detection of alkane vapors has strong implications for safety, health, and the environment. Alkanes are notoriously difficult to detect because of their chemical inertness at room temperature. Herein, we introduce a tunable photoinduced charge transfer strategy to selectively detect alkane vapors under ambient condition. A unique donor–acceptor nanofibril composite comprising a compatible interface was fabricated, which is preferential for alkane adsorption. Then the enhanced adsorption disrupts the charge transfer across the interface and decreases the photocurrent, enabling the design of alkane gas sensor. We demonstrate a critical relationship between the tunable donor–acceptor interface and alkane response. The composite sensor is able to provide specific distinction between different alkanes based on their kinetics of the response profiles, and outstanding general selectivity against the common polar solvents. The work described herein may provide a basis for a new type of sensing material for detecting inert chemicals at room temperature.

Their discovery was published online in the American Chemical Society's journal, *ACS Sensors*. The team is led by University of Utah materials science and engineering professor Ling Zang, who also is a faculty member with the Utah Science, Technology and Research (USTAR) economic development initiative.

U Utah notes that currently there are no small, portable chemical sensors to detect alkane fuel vapor because it is not chemically reactive. The conventional way to detect it is with a large oven-sized instrument in a lab.

"It's not mobile and very heavy," Zang says of the larger instrument. "There's no way it can be used in the field. Imagine trying to detect the leak from a gas valve or on the pipelines. You ought to have something portable."

So Zang's team developed a type of fiber composite that involves two nanofibers transferring electrons from one to the other.

"These are two materials that interact well together by having electrons transferring from one to another," says Ben Bunes, a postdoctoral fellow in the University of Utah's



materials science and engineering department. “When an alkane is present, it sticks in between the two materials, blocking the electron transfer between the two nanofibers.”

That kind of interaction would then signal the detector that the alkane vapor is present. Vaporsens, a University of Utah spinoff company, has designed a prototype of the handheld detector with an array of sixteen sensor materials that will be able to identify a broad range of chemicals including explosives. This new composite material will be incorporated into the sensor array to include the detection of alkanes. Vaporsens plans to introduce the device on the market in about a year and a half, says Zang, who is the company’s chief science officer.

Such a small sensor device that can detect alkane vapor will benefit three main categories:

- **Oil pipelines.** If leaks from pipelines are not detected early enough, the resulting leaked oil could contaminate the local environment and water sources. Typically, only large leaks in pipelines can be detected if there is a drop in pressure. Zang’s portable sensor — when placed along the pipeline — could detect much smaller leaks before they become bigger.
- **Airplane fuel tanks.** Fuel for aircraft is stored in removable “bladders” made of flexible fabric. The only way a leak can be detected is by seeing the dyed fuel seeping from the plane and then removing the bladder to inspect it. Zang’s sensors could be placed around the bladder to warn a pilot if a leak is occurring in real time and where it is located.
- **Security.** The scanner will be designed to locate the presence of explosives such as bombs at airports or in other buildings. Many explosives, such as the bomb used in the Oklahoma City bombing in 1995, use fuel oils like diesel as one of its major components. These fuel oils are forms of alkane.

The research was funded by the Department of Homeland Security, National Science Foundation, and NASA.

— Read more in *Chen Wang et al., “Interfacial Donor–Acceptor Nanofibril Composites for Selective Alkane Vapor Detection,” ACS Sensors, Articles ASAP (9 March 2016).*

Fears of ISIS chemical attack on England vs Russia Euro 2016 as French security forces run terror drill

Source: <http://www.mirror.co.uk/news/world-news/fears-isis-chemical-attack-england-7639713>



Security personnel created a mock-up of the Marseille fan zone - where England will play their opening group game against Russia in June - at a police academy in Nîmes. Police cadets pretended to be 1,200 injured supporters in the scenario, which saw the use of chemical protection suits and simulated injuries. A French security source told the Sun: “It is a high-risk match for numerous reasons. Politically both countries have

Mar 28 – **French terror cops and emergency services have run a simulated chemical weapon attack amid fears that English fans could be targeted at Euro 2016.**

a bombing campaign against IS (Islamic State) and the game is in a city with many North Africans. “There have been several arrests linked to ongoing terror



investigations and a chemical attack is a possibility.”

Fanzones will be under tight security for the Euro 2016 tournament, French Prime Minister Manuel Valls said today.

Security concerns have mounted in the wake of a series of militant attacks on European cities, starting with Paris on November 13 and last week's bombings in Brussels.

Valls said fanzones, public areas for thousands of soccer supporters to watch games on big screens, would be subject to the same security checks as stadiums.

"We're expecting 7,000-8,000 people during the Euro, and that's only in the fanzones. These fanzones, Interior Minister Bernard Cazeneuve and I discussed it with all the mayors and notably the president of the cities organising the Euro, Alain Juppe, to make sure that safety is ensured, with the same number of forces, the same methods as we have in the stadiums.

"This means, secured areas that are closed, with pat-downs, bag checks, and at the same time the celebration can continue," Valls said during an interview with France 2 television.

In Paris the zone will be situated on the Champs de Mars, below the Eiffel Tower.

Valls said he hoped the tournament will encourage tourists, which have dropped off since the Nov.ember13 attacks, to return to the French capital.

"I hope that the tourists who have not returned (to Paris) since November13 will come back for this occasion, to celebrate, to share a moment, to watch matches on the big screen," he said.

The Paris attacks hit entertainment venues around Paris and killed 130 people.

Three suicide bombers also blew themselves up outside the Stade de France - venue for the Euro 2016 opening match, final and five other matches - where France were playing Germany in a friendly international football match.

Britain's security services are braced for a terror attack involving marauding gunmen on the streets.

Police held a training exercise on the streets of London in June to prepare for such an attack and Scotland Yard has now announced an 'urgent review of tactics'.

Security services have been braced for the threat of roaming gunmen and suicide bombers launching a strike in the UK since the Mumbai terror attacks in November 2008.

DTRA releases 2016-2020 Strategic Plan

Source: <https://homelandprepnews.com/countermeasures/18463-dtra-releases-2016-2020-strategic-plan/>



Mar 29 – The Defense Threat Reduction Agency (DTRA), along with the United States Strategic Command (USSTRATCOM) Center for Combating Weapons of Mass Destruction (SCC-WMD) and the Joint Force Headquarters for Elimination (SJFHQ-E), released its 2016-2020 strategic plan on Thursday.

The four-point plan functions as a roadmap to better protect the U.S. from a potential weapon of mass destruction, along with other disasters that may occur. The plan specifically calls for making the world safer, safeguarding the U.S. and its allies from global

WMD threats through internal functions, functioning as a team, and effectively using the proper resources at their disposal.

“With this strategic plan, we have updated our collective approach guiding each of our organizations as they continue to improve, change, and adapt,” the command group’s statement said. “Our commitment to the mission – to safeguard the United States and its allies from global weapons of mass destruction threats by integrating, synchronizing, and providing expertise, technologies, and capabilities – is supported by the approach we have adopted and the objectives we have chosen.”

The strategic plan is the result of a methodology that accounts for risk and opportunity; including policy alignment to national security defense strategies; scenario-based planning to help anticipate a wide spectrum of evolving threats; interviewing focus groups with the workforce, leaders and external stakeholders; and SWOT workshops to analyze, assess and prioritize internal and external factors affecting mission accomplishments.



A new NATO CBRN Reachback capability

By Col. Xavier Lefebvre

Source: <http://www.cbrneportal.com/a-new-nato-cbrn-reachback-capability/>

Mar 28 – NATO's efforts to counter terrorism include projects to develop and enhance capabilities that fill critical shortfalls and meet NATO's priorities. The requirement for NATO to have access to its own dedicated CBRN Reachback has long been highlighted in various documents, including the 2009 NATO Comprehensive Strategic-Level Policy for Preventing the Proliferation of WMD and Defending Against CBRN Threats. At the Joint Chemical, Biological, Radiological and Nuclear Defense Centre of Excellence (JCBRN Defense COE) in Vyškov, Czech Republic, NATO's CBRN Reachback Element (RBE) and Reachback Operations Room has been established as a unique, integrated CBRN Reachback capability in support of NATO crisis response operations and planning.

Full Operational Capability (FOC) for CBRN Reachback was declared to NATO on 1st January 2016.

► You can read the rest of this interesting article at source's URL.

Colonel Xavier Lefebvre has been working in the CBRN Defense expertise since 2002. He is a former Commanding Officer of the 2ème régiment de dragons (2008-2010) which is the unique French CBRN Defense Regiment. He has been working with NATO for 10 years, in CBRN defense doctrine and in conducting the 2008 and 2014 French commitments in the NRF CJ-CBRN Defense Task Force. From September 2013, as the Joint CBRN Defense COE's Operations Support Director he is in charge of developing the CBRN operational support to NATO Allied Command Operations from the Joint CBRN Defense COE, including a unique NATO CBRN Reachback Element and a planning capability.

All That Glitters Is Not Gold: Toxic Heavy Metals as Weapons of Mass Effect

By Frank G. Rando

Source: <http://www.cbrneportal.com/all-that-glitters-is-not-gold-toxic-heavy-metals-as-weapons-of-mass-effect/>

“Doctor, doctor please listen ...My brain is scattered ... You can be Alice, I'll be the mad hatter”... – lyrics from “Mad Hatter”, Melanie Martin

Mar 30 – In a modest Japanese farming and fishing village in the 1950s, an unprecedented drama unfolded as one of the starkest and most vivid mass toxic exposure events of the 20th Century afflicted the townspeople of Minamata, Japan. Minamata is located on the Western coast of Kyushu, Japan's southernmost island. In Minamata, shellfish and fish have been the protein mainstays of the area, and the backbone of the area's economy for generations.

In 1932, the Chisso Corporation began to manufacture acetylaldehyde, used to produce plastics. In post -World War Minamata, the production of acetylaldehyde utilizing mercury, a neurotoxic and fetotoxic heavy metal, accelerated as the need for plastic products accelerated.

Wastewater containing mercury from the production process was spilled into Minamata Bay where aquatic microorganisms assisted in the transformation of inorganic mercury into methyl mercury; an organic form that is capable of entry and biomagnification in the food chain.

The closed -loop ecosystem of Minamata, and the high consumption of shellfish and fish contaminated with concentrated amounts of methyl mercury evolved into a formula for a tragic environmental disaster that would leave a legacy of human disease and unfathomable suffering.



The consumption of contaminated shellfish and fish from Minamata Bay led to neurological damage and developmental disabilities, such as a form of cerebral palsy and mental retardation, as mercury transcends the placental barrier and concentrates in fetal cells.

The contamination of Minamata Bay with mercury and the neurological and neurobehavioral manifestations of widespread mercury intoxication, continues to serve as a poignant example of environmental injustice and a principal case study in environmental public health and toxicology.

► You can read the rest of this interesting article at source's URL.

Frank G. Rando possesses over 30 years of real world experience as a public safety professional, clinician, educator, emergency and crisis manager, author and consultant in the areas of tactical, disaster and operational medicine, weapons and tactics, law enforcement /criminal investigations, counterterrorism, hazardous materials management and emergency response, toxicology, environmental safety and health, and health care and public health emergency management.

Montenegro expels 58 members of Japanese doomsday cult Aum Shinrikyo

Source: <http://www.homelandsecuritynewswire.com/dr20160331-montenegro-expels-58-members-of-japanese-doomsday-cult-aum-shinrikyo>

Mar 31 – **Montenegro has expelled fifty-eight foreigners, all members of the Japanese doomsday cult Aum Shinrikyo which, in March 1995, launched a deadly nerve gas attack on Tokyo's underground.** Twelve people were killed and thousands injured in Aum Shinrikyo's nerve gas attack on a Tokyo commuters.

AFP news agency quoted a police statement that said they had "received information from partner security services showing that a group of foreign national, who were numbers of a closed religious group, were staying in Montenegro."

Yahoo News reports that on Friday, security authorities briefly detained the sect members at a hotel in **the town of Danilovgrad**, and found they did not hold valid visitor permits, so they were ordered to leave the Montenegro.

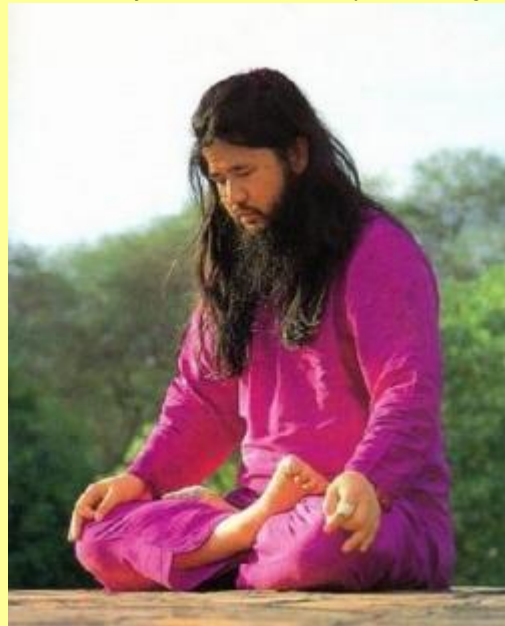
The country's interior minister added in a statement that of the 58 foreign nationals, **43 were Russian, four from Japan, seven from Belarus, three from Ukraine, and one from Uzbekistan.**

The laptops and mobile phones of the cult members were taken by police for investigation, and each of the group's members was interrogated.

The Council on Foreign Relations notes **the religious sect is a cult which combines tenets from Buddhism, Hinduism, and is "obsessed with the apocalypse."**

"At the center of the group's belief is reverence for Shoko Asahara, Aum's founder, who says that he is the first 'enlightened one' since Buddha," the CFR adds. He, and thirteen other members of the cult, were sentenced to death in connection with the attack in Japan, and are still awaiting their executions.

A Department of States [report](#) adds that subsequent Japanese government investigations revealed the cult was responsible for other "mysterious chemical incidents" in Japan the



year before the Tokyo assault — including a sarin gas attack on a neighborhood in Matsumoto which killed seven and hospitalized around 500 residents.



The State Department report adds: “Although Aum has not conducted a terrorist attack since 1995, concerns remain regarding its continued adherence to the violent teachings of founder Asahara that led them to perpetrate the 1995 sarin gas attack.”

ISIS bomb & chemical weapons ‘research center’ in Mosul barely targeted in US strikes

Source: <https://www.rt.com/news/338086-isis-chemical-lab-mosul/>

Apr 02 – “The University of Mosul is the best Daesh [Islamic State, formerly ISIS/ISIL] research center



in the world,” Iraq’s top explosives officer Gen. Hatem Magsosi told The Wall Street Journal. “Trainees go to Raqqa [Syria], then to Mosul University to use the existing facilities.”

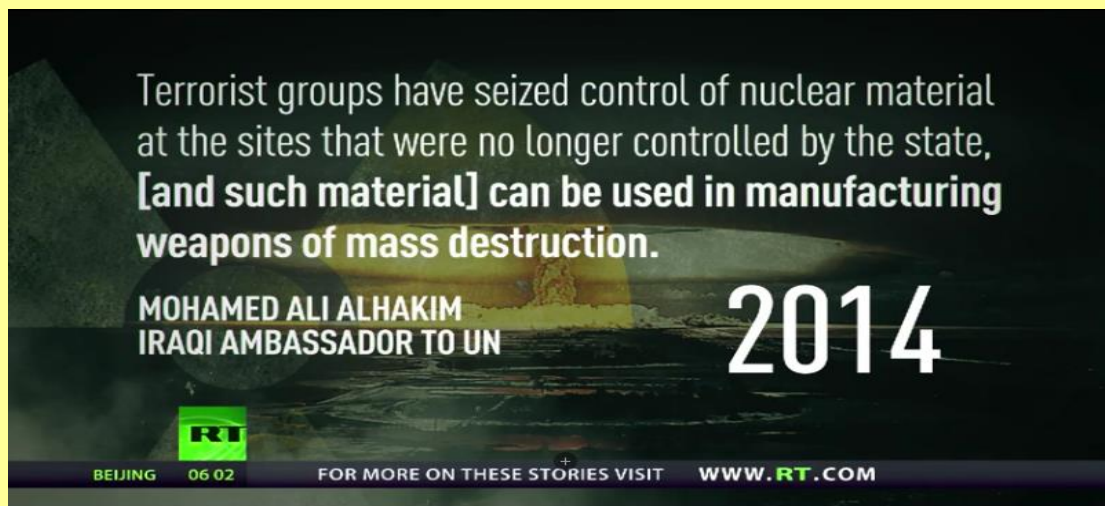
When the facility was seized by ISIS back in 2014, Iraqi officials reported to UN that some 40 kilos of uranium compounds kept there apparently fell into jihadists’ hands.

“Terrorist groups have seized control of nuclear material at the sites that came out of the control of the state,” Iraq’s UN ambassador wrote at the time, adding that such materials “can be used in manufacturing weapons of mass destruction.”



However, the atomic watchdog IAEA said the materials were “low grade” and did not pose any significant security risk, somewhat downplaying the nuclear threat concerns. According to military officials, terrorists are using the well-equipped lab to produce “conventional” explosives and suicide vests, as well as chemical weapons, and peroxide-based bombs.





The lab is well-stocked and has dramatically boosted the terror group's ability to wage attacks in Iraq, Magsosi told the newspaper. He added that once foreign trainees leave the lab, they return to their home countries with enough skills to make bombs like the ones used in the Paris and Brussels attacks. Mosul fell into ISIS hands in the summer of 2014, and by March 2015 dozens of jihadists' scientists and engineers had established their base at the university's chemistry lab. People familiar with the university said that units were set up for the specific purpose of studying chemical explosives, weapons, and suicide bomb construction.

It is not clear how much damage the US-led coalition operating in Iraq



has inflicted on the facility which is well-known to have been under ISIS control for almost two years. The university campus was struck on March 19, according to Col. Steve Warren, a spokesman for the US military in Iraq, without clarifying if it was the first or yet another one in a series of airstrikes on the facility.

"We do know that Daesh [IS] has used some of those buildings for military purposes, and we bombed them," Warren told the publication, adding that the coalition will continue to strike such facilities if they are uncovered.

In mid-March, Warren acknowledged the US military was aware that "there was a series of chemistry departments over there" and "presumably" some of it was still "useful", however could not confirm that the terrorists were "assembling chemical weapons there."

Washington is aware of the reports concerning Islamic State using the campus to produce chemical weapons, US State Department's Elizabeth Trudeau told RT's Gayane Chichakyan at a news briefing on Friday. She added that the US is concerned about the use of chemical weapons by the terrorists in both Iraq and Syria, and stressed that the US will continue "to work with partners to mitigate this threat."

"The coalition has conducted targeted strikes against suspected [Islamic State] chemical weapons facilities including [those] around Mosul. We'll continue to do that as targets are identified," Trudeau said, at the same time refusing to give any comment concerning the seizure of uranium.



Iraq's second-largest city is a strategic center of the self-proclaimed ISIS caliphate, along with the Syrian city of Raqqa. Last week, the Iraqi government announced an operation to retake Mosul from the terrorists. However, recapturing the city will be no easy feat.

According to the Pentagon, it will take between eight and 12 Iraqi brigades – more than 20,000 troops – to gain control of Mosul. Last month, Marine Lt. Gen. Vincent Stewart, director of the US Defense Intelligence Agency, testified at a congressional hearing that recapturing the city is still about a year away.

Chemical weapons practical in stopping army, not terrorism' – ex-CIA officer

Retired CIA officer and State Department official Larry Johnson believes that the fact that the West is “expressing alarm and concern” over something that has been known for years indicates “there is some other agenda for it.”



“The notion that they are going to have this lab and create this global weapon center is laughable,” Johnson told RT. “That said, the fact they we know they’re there and they’re trying to use it that way, they should be destroyed, they should be killed. I think that’s just so obvious, it sort of bothers my mind, that nobody has been willing to target it.”

Johnson, however, pointed out that chemical weapons are “not very good as terror weapons as they are likewise difficult to produce, and they are difficult to use... but in terms of practical use they are real weapons best-designed to try to stop an invading army.”

“You can use the threat and an idea of weapons of mass destruction to get people to act in ways which are really fairly stupid,” Johnson noted. Meanwhile he believes the idea of “nuclear terrorism” is only “raised to scare people, and once people are frightened to basically allow governments to do whatever [they can] to stop it.”

“As we saw in retrospect, the invasion of Iraq uncovered no weapons of mass destruction but, basically, did unleash a wave of radical Sunni Islamic terrorism that we’re still confronting today ... [most] recently the attacks in Brussels.”

While Islamic State terrorists apparently have no capabilities to enrich uranium and create a nuclear device, they could indeed use the stolen materials to try and create a “dirty bomb,” former CIA officer and international lawyer Jack Rice told RT.



Nuclear material is something IS is very well “aware of, something they’re focusing upon and if the West, the Americans and Europeans, were not taking it seriously before, they must be now,” Rice said. “The thing that makes this important is that if they could set off something like that, what it could do, is essentially make an area that they set it off in unusable for potentially years to come. So contemplate the ramifications of something like that in a major metropolitan area, like Paris, or Frankfurt, or Berlin, or New York.”

Rice also wondered why the facility in Mosul hadn’t been struck back in 2014, when it fell into terrorists’ hands.

“This is about excluding their ability to touch something and use it as a tool. To exclude their access is one of the most important things that you can do... The effort from the beginning here has always been to isolate them and to make a distinction between who they are who the rest of the Middle East is,” he added. “But if what you’re doing is putting tools in their hands to continue to commit the acts that they are [doing], it’s not just counterproductive, it makes no sense whatsoever.”

► Watch an interesting video at source’s URL.

D7 BDAS

Source: <http://www.decon7.com>

The D7 BDAS (Biological Decontaminant Accelerated Spray), is rapidly and easily deployable in crisis situations. Rugged in design and materials, tested in extreme environments, the D7 BDAS is a breakthrough product that will significantly enhance the safety of military and first responder personnel from a variety of threats.

Just as it does in bulk form, the D7 BDAS will neutralize harmful VOCs (volatile organic compounds), hazardous industrial chemicals, chemical and biological warfare agents and bodily fluids.

Benefits

- Ready-to-use (RTU) simply aim and squeeze the trigger
- Lightweight rugged design
- Portable and rapidly deployable
- Disinfects blood-borne bacteria and viruses; including HIV/AIDS, SARS, Avian Influenza H5N1, H1N1, tuberculosis, MRSA, C. difficile, and others
- Eliminates molds, spores and odors
- Neutralizes chemical and biological warfare agents, hazardous industrial chemicals and VOCs (volatile organic compounds)
- Works on multiple surfaces, including concrete, asphalt, wood, ceramic, carpet, fabrics, leather, steel, aluminum and others
- Water-soluble and naturally biodegradable
- US EPA-registered, environmentally friendly — passed both U.S. and Canadian eco-testing.

D7 QuickStrike

D7 QuickStrike uses the same intelligent chemistry contained in our BDAS model. Still rapidly and easily deployable in crisis situations yet its lightweight design is suitable for first responders, general commercial and household use. D7 QuickStrike is a breakthrough product that will significantly enhance the safety of first responders, medical personnel, postal carriers, security personnel, high profile clients, preppers and household users from a myriad of threats.

Just as it does in bulk form, D7 QuickStrike will neutralize harmful



volatile organic compounds (VOCs), hazardous industrial chemicals, chemical and biological warfare agents, bodily fluids, bacteria, viruses and molds.

D7 formula

The powerful, proven D7 formula is used by the FBI, Secret Service, DEA and EPA. It eradicates bacteria, viruses, molds, spores, and odors — along with chemical and biological weapons. D7 was used to clean commercial buildings, homes and debris following the Hurricane Katrina disaster. Hospitals, schools and nursing homes have used D7 to eradicate viruses, molds and odors. HAZMAT teams use D7 to clean methamphetamine labs and crime scenes. The Federal government used D7 following the 9/11 anthrax attacks to decontaminate the Hart Senate Building, U.S. Post Office in Washington, D.C. and NBC studio offices in New York City.

D7 can be rapidly deployed and applied as a foam, liquid, mist, or spray.

Safety

Environmentally friendly D7 includes substances found in ordinary household products. D7 is biodegradable and suitable for household use, yet D7 is powerful enough to neutralize viruses, bacteria, molds, odors and toxic chemicals within minutes. D7 is EPA registered and meets the demands of strict regulatory requirements and environmental laws.

D7 is capable of killing up to 99.99999% of germs, viruses' bacteria, and odor causing bacteria.

When products are tested for their ability to kill germs, bacteria and viruses, the terms "log kill" or "log reduction" are used to describe their effectiveness. D7 has a seven log kill rate, the highest rate measurable.

D7 is based on a patented, multi-part aqueous solution including hydrogen peroxide and an advanced four-chain quaternary ammonia formulation developed by Sandia National Laboratories.



ISIS launches chemical weapons attack on Syria's airbase in Deir Ez-zor – report

Source: <https://www.rt.com/news/338426-isis-syria-poisonous-gas-attack/>

Apr 05 – **"The Daesh [derogatory Arabic name for IS] militants attacked the military airfield in Deir Ez-zor with shells containing a poisonous chemical substance. The defenders of the airbase have reported that a number of soldiers were choking," the source said.**

This latest report adds weight to previous evidence implicating IS in using various forms of poisonous gas to attack targets.

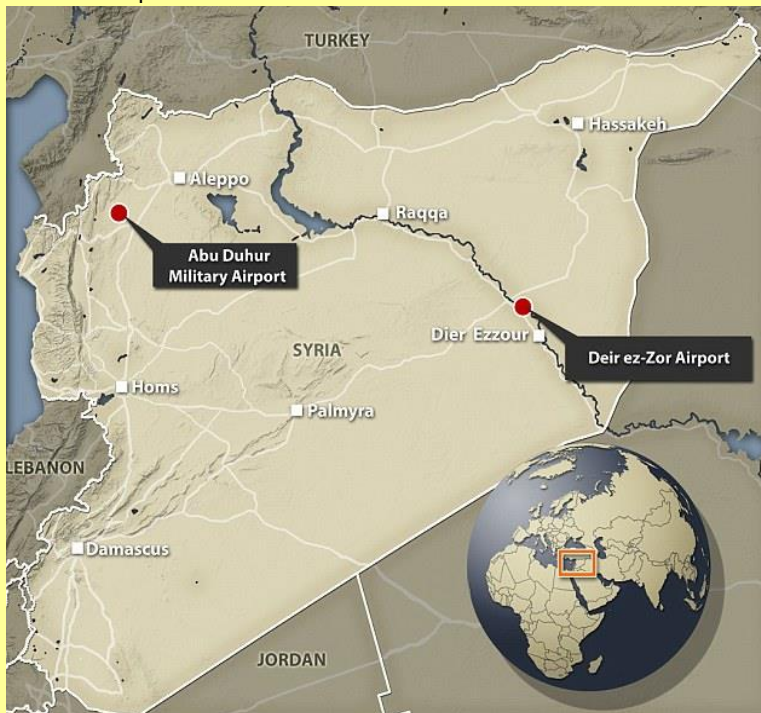
Kurdish deputies in the Turkish parliament have previously accused Turkey of supplying Islamic State and other jihadist groups inside Syria with chemical weapons to fight the Syrian government.

In an interview with RT, a spokesman for the Kurdish YPG militia said that Turkey had provided a clear transit route for the chemical weapons that were deployed against them near the city of Aleppo in early March.

Anti-government militants *"took advantage of the ceasefire"* to launch attacks against a Kurdish-controlled area near Aleppo in northern Syria, Redur Xelil told RT. *"Our sources inside the rebel groups have confirmed that toxic substances were used."*



In early March, Reuters cited local Iraqi governor Najmuddin Kareem as saying that Islamic State fighters had used “poisonous substances” during the [shelling](#) of the village of Taza, which is located in northern Iraq.



More than 40 people suffered from partial choking and skin irritation after mortar shells and Katyusha rockets filled with “poisonous substances” exploded in the mainly Shia Turkmen village.

Moreover, back in February, the Organization for the Prohibition of Chemical Weapons (OPCW) confirmed reports that IS had been using chemical weapons against Kurdish forces in northern Iraq throughout 2015.

The OPCW also concluded in October that mustard gas had been deployed in neighboring Syria in 2015. The summary of the report asserts “with the utmost confidence that at

least two people were exposed to sulfur mustard [on August 21]” in the town of Marea, located north of Aleppo. “It is very likely that the effects of sulfur mustard resulted in the death of a baby,” the report added.

Moreover, a more recent publication compiled by the Syrian American Medical Society (SAMS) states that 161 attacks involving poisonous or asphyxiating agents, such as sarin, chlorine, and mustard gas, have been committed since the beginning of the Syrian civil war in 2011, killing at least 1,491 people.

Under the 1949 Geneva Convention, such attacks constitute war crimes against humanity.

Yet, despite a 2013 resolution passed by the UN mandating the destruction of poisonous gas stockpiles, they have continued.

The Syrian government gave up its own supply of chemical weapons under international supervision after hundreds of civilians were killed by sarin nerve gas in a Damascus suburb in 2013. Western countries pointed the finger at President Bashar Assad for that atrocity, though his government has steadfastly denied the allegations.

France stages terror attack exercises ahead of Euro 2016

Source: <http://www.france24.com/en/20160405-france-stages-terror-attack-exercises-ahead-euro-2016-bordeaux-terrorism>

Mar 05 – Interior Minister Bernard Cazeneuve and Health Minister Marisol Touraine both assisted at the exercise at a fan zone in the western city of Bordeaux which mobilized 600 fire fighters, police, army, and emergency services.

It followed an earlier exercise simulating a chemical attack at the Stade Geoffroy-Guichard in Saint-Etienne which will host four matches.

“We want Euro 2016 to take place in the best conditions and that’s why we’re multiplying exercises to test the systems put in place to quickly intervene in a context where the threat is extremely high,” said Cazeneuve.



The scenario chosen in Bordeaux was one where three armed terrorists were firing into the crowd waiting to enter the fan zone.

One triggered an explosion in the middle of the crowd, while another took hostages in a building, causing the intervention of the specialized police intervention unit, the RAID.



"Today's exercise follows feedback after the November 13 (Paris) attacks," explained Touraine.

"The challenge is to know how we can support a large number of victims in a region where the hospital facilities are not of the same nature as in Paris where there is the biggest hospital in Europe.

"We have plans in place for different regions to work together."

After the Paris and Brussels attacks, authorities want to simulate all possible threats - radiological, biological and

chemical. Two exercises took place in Nimes mid-March.

The time chosen on Monday evening was to coincide with the retransmission of a match on a big screen at Bordeaux's Place des Quinconces which could be watched by 62,000 people.

Bordeaux will hosts four group-stage matches as well as a quarter-final in the tournament which starts on June 10.

At Saint-Etienne some 120 firefighters, more than 60 police officers, and 20 ambulance workers took part in that exercise, along with 450 other people.

"The goal is to test the coordination between the different services," said lieutenant colonel Bertrand Baray, of the Pays de la Loire county fire and rescue service.

"The NRBC (nuclear, radiological, biological and chemical) agents are positioned near the stadium in protective clothing with the aim of sorting people into three categories.



"They are those that are involved but do not have symptoms, those with symptoms but who can walk, and those who have symptoms and cannot walk."







EDITOR'S COMMENT: Reading the photos: (1) ChemTape should also be used to seal the boots/trousers' connection; (2) Good to see that "water curtains" were deployed instead of the usual inflatable tents that require time; (3) There seems to be no contaminated waste water collection pool between fire engines – this is OK for emergency situations but should also be addressed later on (aftermath ground decontamination); (4) When in waterproof gear it is not wise to bend on the ground – especially this one that looks harsh; ground might damage gear and compromise safety of first responders at scene; (5) There are no name or mission tags on first responders (front or back) – in a chaotic environment this might cause further problems of coordination and communication; (6) Carrying stretchers while under PPE is a laborious work and requires at least 2 responders – by adding wheels at the end of one part of the stretcher, work can be done both easier and faster (stairs might be a small problem though); (7) Having responders working on the ground while performing triage is uncomfortable and facilitates secondary exposure from the ground – using improvised stretcher stands can make work much easier; (8) I did not

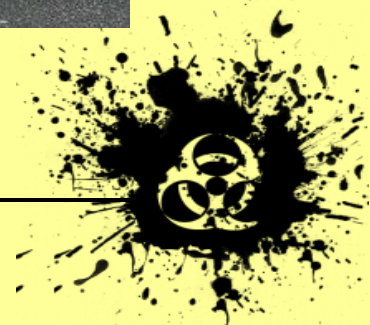


see any side first aid bag – administration of atropine/pralidoxime antidotes might be lifesaving during triage process; (9) I also did not see in the photos the three (3) auto-injectable antidotes first responders should always have with them – used gear type does not have pockets and they do not wear a belt as well; and (10) It was a pleasure to see that first responders did not use Level-A PPE – a mistake always used during similar drills (mainly to impress the press or denote that planner responsible have never been in such a suit in his/her life). In addition: Level-C PPEs could be used as well (more comfortable).



© AFP/Getty Images

► Correction on comments (new photo): First Aid kits were there; same with some back IDs



ISIS terror cells 'plotting chemical weapon attacks on UK' made from everyday products

Source: <http://www.mirror.co.uk/news/world-news/isis-terror-cells-plotting-chemical-7685705>

Apr 04 – **ISIS terror thugs are plotting to unleash chemical and biological weapons on Britain and Europe, a senior spy has claimed.**



Abdelhak Khiame, Morocco's head of counter-terrorism, said his agents had foiled an ISIS cell planning to attack four Moroccan cities with the deadly compounds.

Mr Khiame's Bureau Central d'Investigations Judiciaires intelligence team swooped on the terrorists just a day before their planned atrocity - and warned they may have been a lethal test before attacks on Europe.

He told the Sun: "It's very possible that Daesh (another name for ISIS) would use this process to target Britain and other EU countries.

"It already has brigades of children and we know they train them in their camps looking to use them in terrorist attacks in Europe.

"The substances used in the plot we dismantled in February in Morocco are available in shops all over Britain, all over Europe."

Last week French security forces held a chemical attack drill in Marseilles because of fears ISIS will target the Euro 2016 tournament.

Security concerns have mounted in the wake of a series of militant attacks on European cities, starting with Paris on November 13 and the bombings in Brussels.

Britain's security services are braced for a terror attack involving marauding gunmen on the streets. Police held a training exercise on the streets of London in June 2015 to prepare for such an attack and Scotland Yard has now announced an 'urgent review of tactics'. Security services have been braced for the threat of roaming gunmen and suicide bombers launching a strike in the UK since the Mumbai terror attacks in November 2008.

ISIS uses mustard gas against Syrian forces in battle for airport

Source: <http://www.homelandsecuritynewswire.com/dr20160405-isis-uses-mustard-gas-against-syrian-forces-in-battle-for-airport>

Apr 05 – **ISIS has used mustard gas against Bashar al-Assad's forces in battles at a key airport in eastern Syria.** The chemical weapons were used as part of the militants' effort on Monday to recapture the military airport at Deir ez-Zor.

The *International Business Times* reports that Syrian television reports did not offer information on the number of casualties sustained in the gas attack.

"The terrorists fired rockets carrying mustard gas," said a statement said on the state-owned *Ikhbariyah* television station.

IBT notes that Deir ez-Zor's airport has been the focus of fights among ISIS, rival rebel groups, and regime forces since the beginning of the civil war five years ago. The city sits on important routes linking ISIS-controlled areas in western and northern Syria with Iraq.

ISIS has used mustard gas before, mostly against Kurdish forces in Iraq and Syria, but also against Turkmen groups in Iraq. Last month, Turkmen rebels reported mustard gas shelling in northern Iraq, and the Organization for the Prohibition of Chemical Weapons (OPCW) confirmed that the chemical weapons used in the attack killed several civilians in the Syrian town of Marea in August.



UN investigators reported in February that the Syrian military used small amounts of sarin gas in dozens of attacks on rebel forces, even though Syria was supposed to turn over all of its chemical weapons stock to UN inspectors.

The Army's New Chemical Defense Testing Lab

Source:http://www.domesticpreparedness.com/Government/Government_Updates/The_Army%60s_New_Chemical_Defense_Testing_Lab/



Apr 01 – The Non-Traditional Agent Defense Test System is a collection of specialized test chambers designed to test chemical agent protection, detection and decontamination equipment, from small to large, under operational conditions most relevant to today's warfighter. It is the only facility in the world that allows an entire system—rather than individual components—to be fully immersed in chemical agent while under test.

The lab became fully operational at the U.S. Army Edgewood Chemical Biological Center (ECBC) in January 2016, and among the facility's first customers is the Next Generation Chemical Detector, a program of record executed by the Joint Project Manager for Nuclear, Biological and Chemical Contamination Avoidance. The program will field four new chemical detection capabilities to warfighters across the Army, Air Force, Navy and Marine Corps. It is the first-ever system designed to detect all phases of matter: solid, liquid, vapor and aerosol.

The Next Generation Chemical Detector is now in the "brassboard" testing phase, with

contractors bringing mature prototypes to the Non-Traditional Agent Defense Test System to be tested against a variety of chemicals and conditions. Testing will continue throughout 2016.

System Unveiled to DoD in May

Development and construction of the Non-Traditional Agent Defense Test System was a multi-year effort with support from across the U.S. Defense Department's Chemical and Biological Defense Program. The lab is operated by ECBC, and was stood up in partnership with the Joint Program Executive Office for Chemical and Biological Defense and the Defense Threat Reduction Agency.

"As director of the Edgewood Chemical Biological Center, I am delighted that this capability now resides here at the Center," said Joseph Corriveau, Ph.D., at a ribbon-cutting ceremony held on May 27, 2015. "This facility expands our capabilities to ensure that the safest and best equipment gets into the hands of the warfighter."



U.S. Representative C.A. “Dutch” Ruppberger of Maryland’s 2nd District, who

testing, with an environmental conditioning capability from -10°C to +50°C with or without



attended the ceremony, noted, “The last time I was (at ECBC), it was to welcome home the team responsible for destroying a large chemical weapon stockpile in Syria. In a civilized society, the world cannot stand by and watch. The threats are real. Systems like the Non-Traditional Agent Defense Test System will ensure our armed forces have what they need to do their missions every day.”

Since the ribbon-cutting ceremony, ECBC and its partners put the finishing touches on the facility to make it fully operational and ready to accept equipment for testing.

Specialized Chambers for Unique Tests

The facility’s test chambers have the inherent flexibility to address the rapidly changing threat environment that warfighters face on the battlefield. Lab components include the Primary Containment Module, an environmentally controlled chamber for testing large systems and equipment; the Test Chamber Module, a double glove box chamber to house test fixtures; and the Aerosol Test Facility, a chamber specifically designed to handle aerosol toxicological and detector

humidity.

Other features include a control room, surety laboratory, agent storage facility, and ingress and egress rooms.

A National Asset

In addition to supporting ECBC’s mission to protect the warfighter, the Non-Traditional Agent Defense Test System also allows the Center to continue to serve its partners that also have a vested interest in the defense against weapons of mass destruction, including the Department of Homeland Security, the intelligence community, and international allies. “As awareness and understanding of non-traditional agents has grown, so has the need to perform tests under these conditions, which includes developing the infrastructure necessary to support that testing,” said Michael Abaie, ECBC Director of Engineering. “This system is a national asset, and we welcome our partners from across the test and evaluation enterprise to come here and put it to work for our warfighters.”



Weapons of Mass Destruction: A Review of its Use in History to Perpetrate Chemical Offenses

By Alba Iannotti, Igino Schraffi, Carlo Bellecci, Andrea Malizia, Orlando Cenciarelli, Daniele Di Giovanni, L. Palombi and Pasquale Gaudio,

Defence S&T Technical Bulletin, Vol. 9, Num. 1, pp. 39-52, ISSN 1985-6571 (2016)

Source: http://www.mastercbrn.com/uploads/various/20160329542363731_iannotti_2016_vol_9_num_1.pdf

The use of weapons of mass destruction for military purposes is a problem that has its origins in the early history of humanity. Many substances were used as weapon but the chemical ones were the first to be used in history. The first use of chemical agents dates back to 7th century B.C. during the siege of Cirrha, a Greek city. In the literature of that time there are many examples of the use of chemicals, for example in Thucydides' papers, in which the Greek author describes how the Spartans had burned trees previously soaked with sulphur to produce toxic gases that would have reduced the Plataea city's protections. Unfortunately, their plan failed when the wind direction suddenly changed, poisoning their troops instead. Even the Middle Age s offer many testimonies of the use of chemicals as weapons. A real large-scale use of these substances took place in many other events, for example: during the American Civil war (1861-1865) when General Gilmore used explosive shells against the Confederates. In 1865, when Napoleon used hydrogen for military purposes and in 1900, during the Crimean war, when sulphuric gas was used against the Russian troops near Sevastopol. However, the highest levels of use of chemical agents were achieved during World Wars I and II (WWI and WWII). During these years of wars, the international community deemed necessary to regulate the use of this kind of substances and for this aim a couple of conferences were organized in 1899 and 1907 in The Hague to discuss the regulation of chemical agents' use during war. The most important conference took place in Geneva in 1925 where the Chemical Weapons Convention was born. This work is a review of the historical events involving dangerous chemical agents.

New frontiers of safety and security: Chemical, Biological, Radiological, Nuclear, explosive events

By A. Malizia, V. Cusmai, V. Rossi, T. Labriola, E. Farrugia, F. Campopiano, F. Salerno, V. Trombadore, L. Cadoni, G. Rezza, R. Fantoni, S. Sandri, M. Chiappini, A. Gucciardino, F. D'Amico, C. Russo, D. Rothbacher, M. Carestia, D. Di Giovanni, O. Cenciarelli, C. Perrimezzi, I. Palombi, C. Bellecci, P. Gaudio.

Speciale: ENEA Technologies for security. Enea EAI. DOI: 10.12910/EAI2014-99. (2014)

Source: <http://www.enea.it/it/pubblicazioni/EAI/anno-2014/speciale-enea-technologies-for-security/new-frontiers-of-safety-and-security-chemical-biological-radiological-nuclear-explosive-events>

The global crisis related to the reduction of energy fossil resources, the reduction of potable water resources and the war for the control of energy sources are part of the causes which can lead to an intentional CBRNe (Chemical, Biological, Radiological, Nuclear, and explosive) event. These kind of events could also be the consequence of an unintentional release of substances (i.e., an accident of a truck containing a Toxic Industrial Chemical), or of natural events like a tsunami or an earthquake. Thus the high percentage of risk connected to their occurrence is clear. The proper way to face these emergencies is to build a team of highly prepared Tech Advisors and First Responders to support Top Decision Makers, not only to deal with the agents released, but mainly to manage the consequences on the territory of occurrence, immediately and in the medium and long term. At the present moment, experts of the kind are really few and usually concentrated in the central administrative bodies. The authors in this work present the criticalities of these kinds of events and their principal societal implications.



Maritime Security: Applications and Perspectives to Combat Chemical, Radiological and Explosive Threats

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Source: http://www.mastercbrn.com/uploads/various/20141126468426116_Pirelli_paper.pdf

In a globalized world, the potential for crisis in the exchange of goods through sea routes continues to increase due to its low costs and technological progress. The worldwide terrorist threat has increasingly identified transports as a main target, showing several gaps in the field of security to which international conventions and organizations have tried to find solutions. The development of regulations that has followed the awareness of risks in the maritime sector has determined the creation of a complex organization attending to prevention procedures and emergency measures. The control of maritime security is based on risk analysis and deterrence measures. This *modus operandi*, which involves public and private actors with different skills, has allowed the achievement of important results. In this work, we analyze maritime security by discussing the method used for risk assessment of passenger and cargo ships in relation to chemical, radiological and explosive threats, and available technologies that can be used to avoid illicit acts on board ships.

Threat scenario	Possibility of threat ratio *	Vulnerability **	Severity of consequences ratio ***	Level of risk	Mitigation actions ****	Real risk
Individual suicide attacks using explosives	1	1	1	1	0	1
			2	2	0	2
			3	3	0	3
			1	2	1	1
			2	4	2	2
			3	6	3	3
Group suicide attacks using explosives	3	3	1	3	2	1
			2	6	3	3
			3	9	4	5
Chemical attacks	2	2	1	2	5	0
			2	4	5	0
			3	6	5	1
			1	4	6	0
			2	8	7	1
			3	12	8	4
Biological attacks	3	3	1	6	7	0
			2	12	8	4
			3	18	9	9
			1	3	10	0
			2	6	10	0
			3	9	10	0
Radiological attacks	3	2	1	6	11	0
			2	12	12	0
			3	18	13	5
Hijacking/ hostage taking	3	3	1	9	12	0
			2	18	13	5
			3	27	14	13

*1, low; 2, medium; 3, high

**1, low; 2, medium; 3, high

***1, limited; 2, moderate; 3, severe

****0-4, ordinary; 5-9, improved; 10-14, implemented





Iraqi militia seize ISIS chemical weapons store (Video)

(Video) Source: <https://www.rt.com/news/333632-iraq-isis-chemical-weapon/>

Feb 25 – Iraqi militia fighters have captured two locations with vast deposits of highly toxic agents used by Islamic State terrorists to arm mortar shells and rockets, potentially for use against civilian targets.



A sweep of the industrial area of the city of Ramadi in central Iraq, which a short while ago was controlled by Islamic State (IS, formerly ISIS/ISIL) militants, brought more evidence that the terror group is waging chemical warfare on Iraqi militia and civilians.

Officers of the volunteer corps discovered two warehouses with stockpiles of plastic canisters containing Vinyltrichlorosilane (designated as "Corrosive" UN 1305), a

caustic chemical capable of causing serious injury.

Inhalation of vinyltrichlorosilane causes irritation of mucous membranes and contact with the body causes severe burns of the eyes and skin. Ingestion can lead to serious burns to the mouth and stomach. The chemical reacts violently with water, steam or moist air, generating hydrochloric acid fumes that are highly flammable. If burned, Vinyltrichlorosilane can form toxic chlorine and phosgene gases.

"This chemical is used by Daesh. They load it into their mortar shells and rockets to attack civilians and militia. Even if not contacted directly, when sprayed it causes suffocation," one officer explained to Sputnik Arabic news agency, which obtained exclusive footage of the find.

The video shows that on the militia's arrival to the chemical depot some of the canisters are empty, obviously already used by jihadists.

A source in Iraq's security services said that one of the depots with dangerous chemicals has already been evacuated to a secure location by the 16th Division of the Iraqi Army. The source noted that access to the warehouse was rigged with explosives and had to be de-mined.

Islamic State has already put Vinyltrichlorosilane to use against Kurdish and Yazidi militia. On February 11, as a result of IS shelling in the suburbs of the city of Sinjar in Iraqi Kurdistan, 23 people reportedly received chemical burns from Vinyltrichlorosilane to the skin and upper respiratory tracts. The people affected were treated at a hospital in Dahuk.



ISIS stole sarin gas from Libya stores & has already used it, Gaddafi's cousin tells RT (Video)

(Video) Source: <https://www.rt.com/news/326497-qaddafi-cousin-isis-sarin/>



December 2015 – Islamic State militants have managed to steal chemical weapons from underground storage facilities in Libya that were not properly guarded and the gas has already been used, a cousin



of the late Libyan leader Muammar Gaddafi told RT Arabic in an exclusive interview.

"ISIS has managed to find some of the secret underground storage facilities, still holding chemical weapons, hidden in the desert. Unfortunately, they weren't properly guarded," said Ahmed Gaddafi Al-Dam, a cousin of Muammar Gaddafi, the Libyan leader who was killed in 2011.

Al-Dam, the stolen gas was then trafficked to the northern part of the country and sold.

"There are two known cases of this chemical agent being stolen. I know this from my sources in Tripoli. In the first case, seven drums of sarin were stolen, and in the second, I think it was five."

And the destructive chemicals have already been used, said Ahmed Gaddafi Al-Dam, who formerly was one of Gaddafi's most trusted security chiefs. He recalled that during the recent clashes near the Al-Quds Mosque in Tripoli, security forces discovered a vehicle loaded with sarin.

"Unfortunately, those who had driven this vehicle into the city didn't understand the dangers of this nerve agent, and how risky it was to bring it into an urban area, let alone ever use it. I don't want to spread panic, but that's the reality. And the world knows this very well," he said.

'Clear and present threat' of chemical attacks in Europe

Source: <http://www.israelnationalnews.com/News/News.aspx/210853#.VxCgE3owogU>

Apr 13 – Russia on Wednesday pushed for measures at the United Nations to monitor extremist groups fighting in Syria, warning of a "clear and present threat" that they could stage chemical attacks, possibly in Europe.

Russia and China presented a draft Security Council resolution that calls on all countries, in particular those neighboring Syria such as Turkey and Iraq, to report any move by armed groups to acquire or produce chemical weapons.

Ambassador Vitaly Churkin said the measure would address the threat of chemical terrorism.

"I have not heard anybody claim that they are concerned that the Syrian government may use chemical weapons in a subway in a European city – all those things are happening with the terrorists," Churkin told reporters.

"We know that they there is a strong concern, with reports that thousands of them have moved to Europe."

"Could some of them have brought with them components of chemical weapons? Could some of them have brought to a European city

or European country their knowledge of how to build chemical weapons?"

"Obviously, this is a clear and present threat."

The draft resolution was presented during a closed-door council meeting to discuss progress in a UN-mandated investigation to determine who is behind chemical attacks in Syria.

The joint investigative mechanism (JIM) was set up last year after evidence surfaced of chlorine gas attacks on three Syrian villages in 2014 that left 13 dead.

A strong Syrian ally, Russia reluctantly backed a resolution setting up the JIM after rejecting western claims that the Damascus regime was behind the chlorine gas attacks.

President Bashar al-Assad's regime and rebel groups have accused each other of using chemical weapons in the five-year war that has killed more than 270,000 people.

Churkin said the draft resolution would address a "loophole" in efforts to prevent chemical weapons use by asking for reports from member-states and



also requesting that the JIM monitor the armed groups.

"We do not do any work on the possibility of terrorists actually preparing to build chemical weapons," he said.

Western diplomats dismissed the measure as an attempt to dilute the mandate of the JIM, which is working to draw up a list of perpetrators of chemical attacks. The draft

resolution was also seen as targeting Turkey, which Russia has repeatedly accused of helping jihadists fighting Assad's forces.

A first report by the JIM in February zeroed in on five possible cases of serious chemical weapons use including an attack in Marea on August 21, 2015, that pointed to the likely use of mustard gas by Islamic State militants.

Greece – Troia (Troy) 2016 Chem (sarin) Drill at Athens' Attico Metro (Mar 2016)

By the Editor

Reading behind the pictures:



- One more time, first responders in Level-A PPE are carrying stretchers and casualties. This is a common element in ALL similar drills worldwide. WHY? So far and since WWI no new CWAs have been discovered; Level-A is mainly for confined areas with very low levels of oxygen; subways although underground do have sufficient levels of oxygen. The military is operating only on Level-C gear. What are they? Stupid? Or they do not care about the survivability of their personnel? How long did it take to carry the victims from the subway station to decon/first aid stations and how many victims they can extract given the limited operation time while in Level-A?
- It is obvious that using stretchers on wheels (front duo) is more comfortable than the traditional way (group in the back) and requires less responders (2 vs. 4).
- Perhaps it is not important but those in charge should decide if the trousers will be inside or outside the chemical boots.
- What is the reasoning of PPEs in different colors within the same unit?





- What is the reasoning using “water curtains” before doing the same thing at the decon line (white tent)? And what about contaminated waste spread all over while in the white tent there is a hose (right) gathering the contaminated waste to a waste bladder? Water curtains is a working solution for mass walking casualties also demonstrated during the drill.



- Without trying to be nasty, is the responder in Level-A properly dressed? There is no obvious picture of someone wearing SCBA gear under the totally encapsulated gear.



What is the bottom line of these comments on isolated moments of a given drill? The same as always: If you cannot do it right during drills then most probably you will not do it right during a real incident. I would like to believe that certain issues will be identified and corrected during the aftermath evaluation of the drill (although I can see repetition of some deficiencies from similar drill of the past conducted by the same response organization; this dictates me two things: (1) that planners are the same; and (2) that planners do not have personal hands-on experience on life inside PPEs – and this might be both bad and dangerous for those in the field.)

Worldwide Threat Assessment of the US Intelligence Community

Senate Armed Services Committee

James R. Clapper

Director of National Intelligence

February 9, 2016

Source: https://www.dni.gov/files/documents/SASC_Unclassified_2016_ATA_SFR_FINAL.pdf

TERRORISM

The United States and its allies are facing a challenging threat environment in 2016. Sunni violent extremism has been on an upward trajectory since the late 1970s and has more groups, members, and safe havens than at any other point in history. At the same time, Shia violent extremists will probably deepen sectarian tensions in response to real and perceived threats from Sunni violent extremists and to advance Iranian influence.

The Islamic State of Iraq and the Levant (ISIL) has become the preeminent terrorist threat because of its self-described caliphate in Syria and Iraq, its branches and emerging branches in other countries, and its increasing ability to direct and inspire attacks against a wide range of targets around the world. ISIL's narrative supports jihadist recruiting, attracts others to travel to Iraq and Syria, draws individuals and groups to declare allegiance to ISIL, and justifies attacks across the globe. The ISIL-directed November 2015 attacks in Paris and ISIL-Sinai's claim of responsibility for the late October downing of a Russian airliner in the Sinai underscore these dynamics. Al-Qa'ida's affiliates have proven resilient and are positioned to make gains in 2016, despite counterterrorism pressure that has largely degraded the network's leadership in Afghanistan and Pakistan. They will continue to pose a threat to local, regional, and even possibly global interests as demonstrated by the January 2015 attack on French satirical newspaper *Charlie Hebdo* by individuals linked to al-Qa'ida in the Arabian Peninsula (AQAP). Other Sunni terrorist groups retain the ability to attract recruits and resources.

The United States will almost certainly remain at least a rhetorically important enemy for most violent extremists in part due to past and ongoing US military, political, and economic engagement overseas. Sunni violent extremists will probably continually plot against US interests overseas. A smaller number will attempt to overcome the logistical challenges associated with conducting attacks on the US homeland. The July 2015 attack against military facilities in Chattanooga and December 2015 attack in San Bernardino demonstrate the threat that homegrown violent extremists (HVEs) also pose to the homeland. In 2014, the FBI arrested approximately one dozen US-based ISIL supporters. In 2015, that number increased to approximately five dozen arrests. These individuals were arrested for a variety of reasons, predominantly for attempting to provide material support to ISIL.

US-based HVEs will probably continue to pose the most significant Sunni terrorist threat to the US homeland in 2016. The perceived success of attacks by HVEs in Europe and North America, such as those in Chattanooga and San Bernardino, might motivate others to replicate opportunistic attacks with little or no warning, diminishing our ability to detect terrorist operational planning and readiness. ISIL involvement in homeland attack activity



will probably continue to involve those who draw inspiration from the group's highly sophisticated media without direct guidance from ISIL leadership and individuals in the United States or abroad who receive direct guidance and specific direction from ISIL members or leaders.

ISIL's global appeal continues to inspire individuals in countries outside Iraq and Syria to travel to join the group. More than 36,500 foreign fighters—including at least 6,600 from Western countries—have traveled to Syria from more than 100 countries since the conflict began in 2012. Foreign fighters who have trained in Iraq and Syria might potentially leverage skills and experience to plan and execute attacks in the West. Involvement of returned foreign fighters in terrorist plotting increases the effectiveness and lethality of terrorist attacks, according to academic studies. A prominent example is the November 2015 attacks in Paris in which the plotters included European foreign fighters returning from Syria.

ISIL's branches continue to build a strong global network that aims to advance the group's goals and often works to exacerbate existing sectarian tensions in their localities. Some of these branches will also plan to strike at Western targets, such as the downing of a Russian airliner in October by ISIL's self-proclaimed province in Egypt. In Libya, the group is entrenched in Surt and along the coastal areas, has varying degrees of presence across the country, and is well positioned to expand territory under its control in 2016. ISIL will seek to influence previously established groups, such as Boko Haram in Nigeria, to emphasize the group's ISIL identity and fulfill its religious obligations to the ISIL "caliphate."

Other terrorists and insurgent groups will continue to exploit weak governance, insecurity, and economic and political fragility in an effort to expand their areas of influence and provide safe havens for violent extremists, particularly in conflict zones. Sunni violent extremist groups are increasingly joining or initiating insurgencies to advance their local and transnational objectives. Many of these groups are increasingly capable of conducting effective insurgent campaigns, given their membership growth and accumulation of large financial and materiel caches. This trend increasingly blurs the lines between insurgent and terrorist groups as both aid local fighters, leverage safe havens, and pursue attacks against US and other Western interests.

No single paradigm explains how terrorists become involved in insurgencies. Some groups like ISIL in Syria and al-Qa'ida in the Islamic Maghreb (AQIM) in Mali have worked with local militants to incite insurgencies. Others, like Boko Haram, are the sole instigators and represent the primary threat to their respective homeland's security. Still others, including al-Shabaab, are the primary beneficiaries of an insurgency started by others. Finally, other groups, such as core al-Qa'ida, have taken advantage of the relative safe haven in areas controlled by insurgent groups to build capabilities and alliances without taking on a primary leadership role in the local conflict.

Although al-Qa'ida's presence in Afghanistan and Pakistan has been significantly degraded, it aspires to attack the US and its allies. In Yemen, the proven capability of AQAP to advance external plots during periods of instability suggests that leadership losses and challenges from the Iranian-backed Huthi insurgency will not deter its efforts to strike the West. Amid this conflict, AQAP has made territorial gains in Yemen including the seizure of military bases in the country's largest province. Al-Qa'ida nodes in Syria, Pakistan, Afghanistan, and Turkey are also dedicating resources to planning attacks. Al-Shabaab, al-Qa'ida's affiliate in East Africa, continues its violent insurgency in southern and central Somalia despite losses of territory and influence and conflict among senior leaders.

Iran—the foremost state sponsor of terrorism—continues to exert its influence in regional crises in the Middle East through the Islamic Revolutionary Guard Corps—Qods Force (IRGC-QF), its terrorist partner Lebanese Hizballah, and proxy groups. It also provides military and economic aid to its allies in the region. Iran and Hizballah remain a continuing terrorist threat to US interests and partners worldwide.

Terrorists will almost certainly continue to benefit in 2016 from a new generation of recruits proficient in information technology, social media, and online research. Some terrorists will look to use these technologies to increase the speed of their communications, the availability of their propaganda, and ability to collaborate with new partners. They will easily take advantage of widely available, free encryption technology, mobile-messaging applications, the dark web, and virtual environments to pursue their objectives.



Long-term economic, political, and social problems, as well as technological changes, will contribute to the terrorist threat worldwide. A record-setting 60 million internally displaced persons (IDPs) and refugees as of 2014—one half of whom are children, according to the United Nations—will stress the capacity of host nations already dealing with problems relating to assimilation and possibly make displaced populations targets for recruitment by violent extremists. Among Sunni violent extremist groups, ISIL is probably most proficient at harnessing social media to disseminate propaganda and solicit recruits among a broad audience. It is likely to continue these activities in 2016 by using videos, photos, and other propaganda glorifying life under ISIL rule and promoting the group's military successes. In addition, violent extremist supporters will probably continue to publicize their use of encrypted messaging applications on social media to let aspiring violent extremists know that secure avenues are available by which they can communicate.

The acute and enduring nature of demographic, economic, political, social, and technological factors contribute to the motivation of individuals and groups and their participation in violent extremist activities. These factors ensure that terrorism will remain one of several primary national security challenges for the United States in 2016.

WEAPONS OF MASS DESTRUCTION AND PROLIFERATION

Nation-state efforts to develop or acquire weapons of mass destruction (WMD), their delivery systems, or their underlying technologies constitute a major threat to the security of the United States, its deployed troops, and allies. Use of chemical weapons in Syria by both state and nonstate actors demonstrates that the threat of WMD is real. Biological and chemical materials and technologies, almost always dual use, move easily in the globalized economy, as do personnel with the scientific expertise to design and use them. The latest discoveries in the life sciences also diffuse rapidly around the globe.

North Korea Developing WMD-Applicable Capabilities

North Korea's nuclear weapons and missile programs will continue to pose a serious threat to US interests and to the security environment in East Asia in 2016. North Korea's export of ballistic missiles and associated materials to several countries, including Iran and Syria, and its assistance to Syria's construction of a nuclear reactor, destroyed in 2007, illustrate its willingness to proliferate dangerous technologies.

We judge that North Korea conducted a nuclear test on 6 January 2016 that it claimed was a successful test of a "hydrogen bomb." Although we are continuing to evaluate this event, the low yield of the test is not consistent with a successful test of a thermonuclear device. In 2013, following North Korea's third nuclear test, Pyongyang announced its intention to "refurbish and restart" its nuclear facilities, to include the uranium enrichment facility at Yongbyon and its graphite-moderated plutonium production reactor, which was shut down in 2007. We assess that North Korea has followed through on its announcement by expanding its Yongbyon enrichment facility and restarting the plutonium production reactor. We further assess that North Korea has been operating the reactor long enough so that it could begin to recover plutonium from the reactor's spent fuel within a matter of weeks to months.

North Korea has also expanded the size and sophistication of its ballistic missile forces—from close-range ballistic missiles to intercontinental ballistic missiles (ICBMs)—and continues to conduct test launches. In May 2015, North Korea claimed that it successfully tested a ballistic missile from a submarine. Pyongyang is also committed to developing a long-range, nuclear-armed missile that is capable of posing a direct threat to the United States; it has publicly displayed its KN08 road-mobile ICBM on multiple occasions. We assess that North Korea has already taken initial steps toward fielding this system, although the system has not been flight-tested.

Although North Korea issues official statements that include its justification for building nuclear weapons and threats to use them as a defensive or retaliatory measure, we do not know the details of Pyongyang's nuclear doctrine or employment concepts. We have long assessed that Pyongyang's nuclear capabilities are intended for deterrence, international prestige, and coercive diplomacy.



China Modernizing Nuclear Forces

The Chinese People's Liberation Army's (PLA's) has established a Rocket Force—replacing the longstanding Second Artillery Corps—and continues to modernize its nuclear missile force by adding more survivable road-mobile systems and enhancing its silo-based systems. This new generation of missiles is intended to ensure the viability of China's strategic deterrent by providing a second-strike capability. In addition, the PLA Navy continues to develop the JL-2 submarine-launched ballistic missile (SLBM) and might produce additional JIN-class nuclear-powered ballistic missile submarines. The JIN-class submarines—armed with JL-2 SLBMs—will give the PLA Navy its first long-range, sea-based nuclear capability.

Russian Cruise Missile Violates the INF Treaty

Russia has developed a ground-launched cruise missile that the United States has declared is in violation of the Intermediate-Range Nuclear Forces (INF) Treaty. Russia has denied it is violating the INF Treaty. In 2013, a senior Russian administration official stated publicly that the world had changed since the INF Treaty was signed 1987 and noted that Russia was “developing appropriate weapons systems” in light of the proliferation of intermediate- and shorter-range ballistic missile technologies around the world, and Russian officials have made statements in the past regarding the unfairness of a Treaty that prohibits Russia, but not some of its neighbors, from developing and processing ground-launched missiles with ranges between 500 to 5,500 kilometers.

Chemical Weapons in Syria and Iraq

We assess that Syria has not declared all the elements of its chemical weapons program to the Chemical Weapons Convention (CWC). Despite the creation of a specialized team and months of work by the Organization for the Prohibition of Chemical Weapons (OPCW) to address gaps and inconsistencies in Syria's declaration, numerous issues remain unresolved. Moreover, we continue to judge that the Syrian regime has used chemicals as a means of warfare since accession to the CWC in 2013. The OPCW Fact-Finding Mission has concluded that chlorine had been used on Syrian opposition forces in multiple incidents in 2014 and 2015. Helicopters—which only the Syrian regime possesses—were used in several of these attacks.

We assess that nonstate actors in the region are also using chemicals as a means of warfare. The OPCW investigation into an alleged ISIL attack in Syria in August led it to conclude that at least two people were exposed to sulfur mustard. We continue to track numerous allegations of ISIL's use of chemicals in attacks in Iraq and Syria, suggesting that attacks might be widespread.

Iran Adhering to Deal To Preserve Capabilities and Gain Sanctions Relief

Iran probably views the Joint Comprehensive Plan of Action (JCPOA) as a means to remove sanctions while preserving some of its nuclear capabilities, as well as the option to eventually expand its nuclear infrastructure. We continue to assess that Iran's overarching strategic goals of enhancing its security, prestige, and regional influence have led it to pursue capabilities to meet its nuclear energy and technology goals and give it the ability to build missile-deliverable nuclear weapons, if it chooses to do so. Its pursuit of these goals will dictate its level of adherence to the JCPOA over time. We do not know whether Iran will eventually decide to build nuclear weapons.

We also continue to assess that Iran does not face any insurmountable technical barriers to producing a nuclear weapon, making Iran's political will the central issue. Iran's implementation of the JCPOA, however, has extended the amount of time Iran would need to produce fissile material for a nuclear weapon from a few months to about a year. The JCPOA has also enhanced the transparency of Iran's nuclear activities, mainly through improved access by the International Atomic Energy Agency (IAEA) and investigative authorities under the Additional Protocol to its Comprehensive Safeguard Agreement.

As a result, the international community is well postured to quickly detect changes to Iran's declared nuclear facilities designed to shorten the time Iran would need to produce fissile material. Further, the JCPOA provides tools for the IAEA to investigate possible breaches



of prohibitions on specific R&D activities that could contribute to the development of a nuclear weapon. We judge that Tehran would choose ballistic missiles as its preferred method of delivering nuclear weapons, if it builds them. Iran's ballistic missiles are inherently capable of delivering WMD, and Tehran already has the largest inventory of ballistic missiles in the Middle East. Iran's progress on space launch vehicles—along with its desire to deter the United States and its allies—provides Tehran with the means and motivation to develop longer-range missiles, including ICBMs.

Genome Editing

Research in genome editing conducted by countries with different regulatory or ethical standards than those of Western countries probably increases the risk of the creation of potentially harmful biological agents or products. Given the broad distribution, low cost, and accelerated pace of development of this dual-use technology, its deliberate or unintentional misuse might lead to far-reaching economic and national security implications. Advances in genome editing in 2015 have compelled groups of high-profile US and European biologists to question unregulated editing of the human germline (cells that are relevant for reproduction), which might create inheritable genetic changes. Nevertheless, researchers will probably continue to encounter challenges to achieve the desired outcome of their genome modifications, in part because of the technical limitations that are inherent in available genome editing systems.

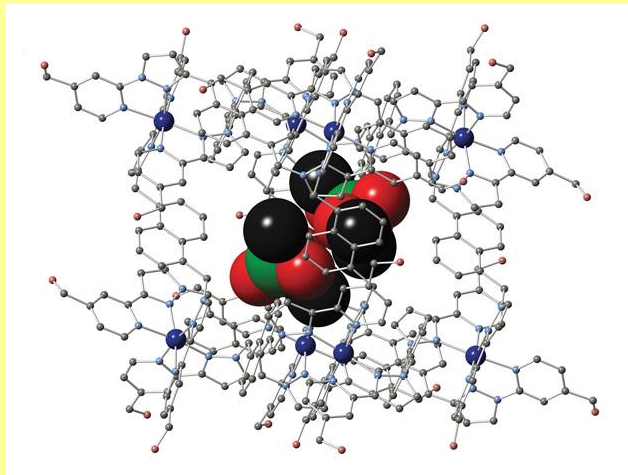
► [Read the full report at source's URL.](#)

Caging Chemical Weapons

Source: <http://www.scientificamerican.com/article/caging-chemical-weapons/>

Apr 12 – Organophosphorous chemical weapons, such as sarin and soman, interfere with signals between nerve cells, and have recently been used to deadly effect in places such as Syria. Researchers are therefore trying to develop techniques that detect these chemical weapons in the environment, and destroy them.

Mike Ward and his group at the University of Sheffield in the UK may have found a way, using self-assembled supramolecular cages—large, hollow molecular structures that can act as a host to smaller molecules. Such structures have been around for a while, but the ones made by Ward are



exciting because they can bind alkyl phosphonates within them. Alkyl phosphonates have the same basic size and shape as the chemical weapons in question, but lack the reactive leaving group that makes them so dangerous so researchers often use them as chemical weapon simulants in the lab.

The host cages have a cobalt or cadmium dication at each vertex and a bis(pyrazolyl-pyridine) ligand along each edge. In water, the hydrophobic effect drives interactions between the cage and alkyl phosphonates. 'The interior surface is lined with CH groups from the ligands, which is an

archetypal hydrophobic surface—oil and water don't mix for the same reason,' explains Ward. 'It thus acts as a haven for molecules that are not happy in water. For the guests, their alkyl chains provide the hydrophobic contribution to binding. We can see this because, as the size of the alkyl groups increases, binding gets stronger—even though the phosphonate bit stays the same in every case.' It is energetically favourable for this hydrophobic guest to enter the hydrophobic cavity because each guest displaces two bound water molecules,



allowing them to form hydrogen bonds with each other, and increasing the total entropy by being free to move around.

The cage is also luminescent, but dims when an alkyl phosphonate enters. 'This approach is very elegant as it combines sequestration with a fluorescent response—locking up the chemical warfare agent simulatant within a coordination cage and signaling its presence,' comments supramolecular chemist Philip Gale, from the University of Southampton, UK. 'Chemical weapons can be destroyed by chemicals such as powerful oxidants in bulk situations but highly selective analysis and detection systems are very much needed, particularly security-sensitive locations,' adds inorganic chemist Jonathan Steed from Durham University, UK.

The group now hopes to show that their cages can catalyze the decomposition of chemical weapons simulatants to harmless small molecules, which could prove a promising method of disposing of chemical weapons in the future.

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Five unusual toxic animals and their chemical weapons

Source: <http://www.medicalnewstoday.com/articles/308864.php>

Apr 13 – Planet Earth plays host to a myriad of creatures with the ability to exude, inject or release toxins. This article gives an insight into five of these fascinatingly deadly organisms and the chemical weapons with which evolution has endowed them.



"Nature, red in tooth and claw," - Alfred Lord Tennyson

Many species, such as the black widow spider or puffer fish, have achieved an impressive level of fame thanks to their deadly prowess. However, there are many more who are yet to receive their rightful recognition. This article aims to give a handful of the more unusual noxious organisms their fair share of the limelight.

At this stage, it seems pertinent to clear up a question that exasperates entomologists, herpetologists, toxicologists and

zoologists at large: what is the difference between venom and poison?

Both venomous and poisonous animals carry a chemical that is dangerous or deadly to another organism. The major difference is the way in which the toxin is shared.

A venomous animal has a dastardly delivery mechanism - fangs or a stinger, for instance - and the toxin is generally produced in the vicinity of this implement for ease of distribution.

On the other hand, poisonous animals contain a toxic substance but have no mechanism for delivering the poison; it simply exudes or contains its weapon, like the poison dart frog and his toxic coating or the puffer fish's poisonous internal organs.

Here, rather than focusing on the most toxic animals, we will cover five of the more surprising or unusual members of the venomous and poisonous family. In addition, we will learn how it is that their toxic capabilities can impact humans.

1) Poison on the wing: blue-capped ifrit

The blue-capped ifrit (*Ifrita kowaldi*) is one of the very few species of birds to have developed the use of chemical weapons; in fact, only three genera are known to carry poison, all of which live in New Guinea. As with the other poisonous New Guinean birds, the blue-capped ifrit does not manufacture its poison; it embezzles it from its food.





Toxic birds are very rare and are only be found in New Guinea. Image credit: John Gerrard Keulemans

The bird consumes beetles of the genus *Choresine*, which contain high levels of homobatrachotoxins, a type of batrachotoxin - potent neurotoxic steroidal alkaloids.

By snacking on these poisonous beetles, the bird manages to assimilate the batrachotoxins into its skin and feathers. This sequestering of weaponry is thought to ward off

predators and potential free-loading parasites.

For humans, simply handling the birds can produce numbness, tingling and sneezing.

Batrachotoxins are some of the most toxic natural substances known to man. Colombian arrow frogs are coated with the same chemical, and, like the ifrit, the frogs develop their toxic overcoat from the beetles they consume.

These toxins are lipid-soluble and work directly on the sodium ion channels of nerves, irreversibly bonding to them and jamming them open. This makes transduction of nerve signals from the spine to the muscles impossible, leading to paralysis.

Batrachotoxins also have significant effects on the heart muscles, causing abnormal rhythmic patterns and, eventually, cardiac arrest.

Currently, there is no antidote to batrachotoxin. Counterintuitively, the poison from the highly toxic pufferfish - tetrodotoxin - can help minimize its effects. Tetrodotoxin blocks the same channels that the batrachotoxins jam open, effectively reversing the damage.

2) Submarine killer: blue-ringed octopus

The blue-ringed octopuses consist of at least three species of the genus *Hapalochlaena* and live in the balmy waters of the Pacific and Indian Oceans. They are considered to be planet Earth's most venomous marine animals.

The octopus' beautiful coloration and serene manner is a rouse; they must be admired from afar. Unless



provoked, the octopus is more inclined to flee than fight, but trapping them in a corner is ill-advised.

The blue-ringed-octopus' color scheme belies its toxicity.

At a push, the blue-ringed octopus reaches just 20 cm in length, but they still harbor enough toxic chemicals to kill 26 adult humans.

To add insult to injury, there is no antivenom, and, because the bite is so small, many people do not realize that they have been envenomated until the symptoms begin. By then, the trouble is well underway.



If you are unfortunate enough to be bitten, you will receive a smorgasbord of chemicals that include tetrodotoxin, tryptamine, histamine, octopamine, acetylcholine, taurine and dopamine.

The most sinister of these components is tetrodotoxin, considered to be at least 1,000 times more deadly than cyanide. Tetrodotoxin is produced by bacteria in the blue-ringed octopus' salivary glands. When released into a mammalian blood stream, it blocks sodium channels, and, like getting the wrong key stuck in a door, the channels are left open, making nerve conduction impossible.

Once injected, tetrodotoxin leads to a complete paralysis of the muscles, including those necessary for breathing; in a rather sinister twist, the bitten individual will remain fully aware of their surroundings as the paralysis progresses.

Because these deadly effects can arrive just minutes after a bite, the victim's only hope is artificial respiration. If breathing can be maintained, the body will slowly metabolize the tetrodotoxin and, if they survive the first 24 hours, a full recovery can be expected.

3) Duck-billed terror: the platypus

The platypus (*Ornithorhynchus anatinus*), colloquially referred to as the duck-billed platypus, is one of nature's strangest creations. One of only five extant species of monotreme, the platypus is a resident of the most easterly fringes of Australia.

Despite being a mammal, the platypus lays eggs; it stores fat in its tail, hunts using electroreception, walks more like a reptile than a mammal, has fish-like eyes and sleeps for 14 hours a day.

The platypus, one of nature's most bizarre concoctions.



To add to this list of odd characteristics, the male platypus is one of very few mammals to produce venom; this venom is

secreted from spurs on the hind limbs and is only produced by males during mating season.

The platypus' movable spurs can unleash a range of at least 19 peptides and a host of other non-proteinous chemicals.

Of the peptides, most fall into three categories: defensin-like peptides (similar to toxins used by reptiles), C-type natriuretic peptides (involved in changes in blood pressure) and nerve growth factor.

Platypus venom can paralyze small animals (such as a rival male) and, although it is not quite potent enough to do the same to a human, an attack is surprisingly painful and incapacitating. The wound and surrounding area rapidly swells as blood flow spikes.

Unlike many other animal toxins, there is no necrotic (tissue death) component to a platypus envenomation; instead, the crowning glory of the platypus' attack is the production of sheer, unadulterated agony.

The pain normally lasts a few days or weeks, but it has been known to last months. To make matters worse, the pain does not respond well to morphine.

In 1991, an Australian ex-military man - Keith Payne - made the mistake of trying to free a trapped platypus and caught the sharp end of his spur. According to Payne, the pain was worse than being hit by shrapnel. One month on and the injury was still very much alive; 15 years later and the wound continued to cause discomfort when carrying out certain tasks.

The first description of a platypus envenomation to be published in scientific literature arrived courtesy of William Webb Spicer in 1876:



"[...] the pain was intense and almost paralyzing. But for the administration of small doses of brandy, he would have fainted on the spot; as it was, it was half an hour before he could stand without support, by that time the arm was swollen to the shoulder, and quite useless, and the pain in the hand very severe." Platypus venom is believed to act directly on pain receptors (nociceptors) coercing them into producing the most intensely painful experience. Because platypus attacks on humans are rare, no specific treatment has been developed to alleviate this discomfort.

Thankfully, the vast majority of humans will never visit the regions of Oceania inhabited by these striking, semi-aquatic wonders.

4) Beautiful but deadly: cone snails

Cone snails are a family of predatory, sea-dwelling mollusks comprising around 700 species, many of which wear attractive patterned shells. This enchanting outerwear tempts the occasional diver to pick them up, an instantly regrettable decision.

Sporting a needle-like modified radula tooth, some cone snail species pack a fearsome punch. Using the radula as a harpoon, they fire it into their prey and exude their poison; once paralysis has struck, the



mollusk hauls in its quarry. The snail's harpoon is so powerful, it is capable of piercing a wetsuit.

A snail with a deadly harpoon.

Each species of cone snail contains a venom consisting of hundreds, if not thousands, of different compounds.

Smaller species can only inflict minor damage to humans, similar in scale to a bee sting, but larger species are capable of

delivering a fatal blow.

The selection of neurotoxic peptides produced by cone snails are referred to as conotoxins, and there is a dazzling array. Even between individuals of the same species, the cocktail of chemicals can be highly varied.

This variety means that the human impact of an attack can also be varied; generally, however, the pattern of reaction starts with pain, swelling, numbness and vomiting.

It then progresses to paralysis, changes in vision, respiratory failure and potentially death (although only 15 confirmed deaths have occurred from cone snails to date).

The geography cone (*Conus geographus*) is known as the "cigarette snail" because, once stung, you have enough time to smoke a cigarette before you die.

Although the exact method of each drug's action is not understood, conotoxins are known to directly affect specific subtypes of ion channels. Because of the venom's swift action and high specificity to individual receptor types, it has sparked much interest from pharmaceutical researchers.

Harvard University's Dr. Eric Chivian, an assistant clinical professor of psychiatry, claims that these creatures have:

"The largest and most clinically important pharmacopeia of any genus in nature."

The drug ziconotide, a non-addictive pain reliever 1,000 times stronger than morphine, was first isolated from cone snails. Current research using cone snail chemicals is



investigating potential medications for Alzheimer's and Parkinson's disease, depression, epilepsy and even smoking cessation.

5) Lethal lizard: Komodo dragon

The Komodo dragons (*Varanus komodoensis*) are the largest living reptiles on earth; they reside on just five Indonesian islands (the island of Komodo being one). They cut a mean figure, reaching 3 m in length and weighing in at 70 kg.



Historically, the Komodo dragon was considered to be a non-venomous species; now, however, the question of the reptile's toxicity has sparked a lively discussion.

Is the Komodo dragon venomous? The debate is ongoing.

The bite of the Komodo dragon has long been known to cause rapid swelling, disruption of blood clotting and shooting pain in the vicinity of the

bite.

This physical reaction was considered to be due in part to shock, but also because of large amounts of bacteria being passed from the Komodo dragon's mouth into the animal's circulation. However, some scientists wondered if there might be more to it.

Also, the Komodo dragon does not have a particularly heavy skull or powerful bite, yet it can bring down substantial prey, 40 kg Sunda deer, for instance. Could the Komodo dragon have another weapon in its arsenal?

A Komodo dragon's prey has been noted to remain "unusually quiet" after being bitten, a reaction that hints at something more than a slow-growing sepsis from bacterial infection.

In 2009, a terminally ill Komodo dragon called Nora from Singapore Zoological Gardens was investigated for the presence of venom. The animal had a pair of glands removed from its lower jaw which, when dissected, were found to host a selection of toxic proteins.

The investigators inspected and analyzed the products found in the glands and concluded that the excretions might help reduce prey's ability to escape:

- **Phospholipase A2:** similar to compounds found in snake venom; induces anticoagulative effects and hypotension
- **CRISP (cysteine-rich secretory protein):** smooth muscle inhibitors found in snake venom; capable of reducing blood pressure
- **Kallikrein:** enzymes present in mammals that reduce blood pressure when injected
- **Natriuretic toxins:** cause an increase in vascular permeability and dilation, leading to low blood pressure
- **AVIT toxins:** thought to cause painful muscle contractions immobilizing the prey.

Not everyone is convinced by the Komodo dragon's toxicology report. To some, the findings are not evidence for the direct use of these proteins as a weapon; the debate is ongoing.

Kurt Schwenk, an evolutionary biologist at the University of Connecticut, states that the discovery of venom-like proteins does not necessarily mean that they are used as venom.

He believes the blood loss and shock produced by a Komodo dragon's bite is enough to kill large prey, he says:



"I guarantee that if you had a 10-foot lizard jump out of the bushes and rip your guts out, you'd be somewhat still and quiet for a bit, at least until you keeled over from shock and blood loss owing to the fact that your intestines were spread out on the ground in front of you."

Other dissenters from Washington State University, including Biologist Kenneth V. Kardong and toxicologists Scott A. Weinstein, state that the allegations that the Komodo dragon is venomous "has had the effect of underestimating the variety of complex roles played by oral secretions in the biology of reptiles, produced a very narrow view of oral secretions and resulted in misinterpretation of reptilian evolution."

Although the debate is sure to rage on until further evidence is unearthed on either side, it makes for an interesting conversation. The question of whether the Komodo dragon is capable of envenomation and disemboweling, or simply disemboweling, will have to go unanswered for now.

If we have learned just one thing from this brief wander through the annals of nature's poisoners, it is that chemical warfare is not a human invention.

New Yorker sentenced to 16 years for trying to buy ricin

Source: <http://www.homelandsecuritynewswire.com/dr20160420-new-yorker-sentenced-to-16-years-for-trying-to-buy-ricin>

Apr 20 - It was a scary scenario: Chinese national Cheng Le, living in New York City, attempted to order ricin through the so-called dark Web.

Ricin is a highly potent and potentially fatal toxin with no known antidote. And the dark Web includes a number of extensive, sophisticated, and widely used online criminal marketplaces which allow participants to buy and sell all kinds of illegal and often dangerous items, including drugs, firearms, and hazardous



materials, like ricin.

What did Le plan to do with the ricin?

Nothing good. According to U.S. Attorney for the Southern District of New York Preet Bharara, "In Le's own words, established at trial, he was looking for 'simple and easy death pills' and ways to commit '100 percent risk-free' murder."

The FBI says that while on a particular dark Web marketplace in early December 2014, Le

asked, "This might sound blunt but do you sell ricin?" Fortunately, the individual at the computer on the other end was not a trafficker in lethal poisons — instead, it was an undercover FBI employee.

For the next couple of weeks or so, Le and the undercover employee exchanged more than twenty encrypted messages. Some of Le's communications included:

- "If [the ricin's] good quality, I've already had buyers lining up."
- "Does ricin have an antidote? Last I check there isn't one, isn't it?"
- "The client would like to know...if it is wise to use ricin on someone who is hospitalized...Injection will leave needle holes on the body which could be found in regular forensic examinations. But hospitalized people already have needles in them so it wouldn't be suspicious..."
- "I'll be trying out new methods in the future. After all, it is death itself we're selling here, and the more risk-free, the more efficient we can make it, the better."
- "Also, besides that one bottle of pills with one poisonous pill in there, can you send some extra loose powder/liquid ricin? I'd like to test something."

Sometime during these exchanges, Le revealed to the undercover employee that he had a specific victim in mind: "Someone middle-aged. Weight around 200 pounds."



Ultimately, Le placed his order, paying with bitcoins, a virtual currency. Bitcoins themselves are not illegal and have known legitimate uses. However, they are also a common form of payment for illegal goods and services on the dark web because of the anonymity they provide.

On 18 December 2014, Le directed his contact to send a quantity of ricin to a rented postal box at a Manhattan shipping store (investigators later determined that Le had rented the postal box using the name of an individual whose identity he had stolen).

The FBI says that the Bureau prepared a mock shipment exactly as Le had requested — with one small difference: the “ricin pill” concealed in a pill bottle and the loose “ricin powder” were fake. And on 23 December, the sham shipment was delivered to the requested postal box. Le,

wearing latex gloves, retrieved the package, opened it, and took it to his apartment. Agents, armed with a search warrant, entered the apartment, collected the evidence, and arrested Le.

Le was tried by a federal jury and convicted in August 2015 of, among other things, attempting to possess a biological toxin for use as a weapon and aggravated identity theft in relation to a terrorism offense. Last month, he was sentenced to sixteen years in prison, a term that had been enhanced by the aggravated identity theft charge.

“And as a result of yet another successful joint law enforcement investigation — this one by the FBI, New York Police Department, and U.S. Postal Inspection Service — a criminal who posed a deadly threat to the public is behind bars,” The FBI says.





Brussels and the threat of bio-terrorism

By Jay Ambrose

Source: <http://www.desertsun.com/story/opinion/columnists/2016/03/23/ambrose-brussels-bio-terrorism-threat/82168682/>

Mar 23 – You look at the pictures and you see bloody people sitting on chairs or trying to make phone calls in a wrecked building. You read the stories and you find that terrorists have attacked again, this time with bombs, killing at least 35 people at an international airport and a subway station in Brussels.

The Islamic State is saying it did it and you are meanwhile thinking of Paris, of San Bernardino, of al-Qaida on 9/11, of what might come next and then, maybe, of **a warning in an October 2015 report by the Blue Ribbon Study Panel on Biodefense.**

In it, **the panel said biological attacks are a massive terrorist horror we haven't been hit with so far but that will almost surely come our way and that we are not prepared for. How bad could one be?** According to what **the National Security Council once said, the risk could be hundreds of thousands of lives and a cost of maybe \$1 trillion.**

Those numbers are reported in a New York Times account in which experts also stress how simple it is to put together powerful bioweapons and how easy it is to sneak them wherever you wanted them and to set them off. What hasn't been as simple or easy is getting an urgent, focused, synchronized effort enabling us to "rapidly recognize, respond and recover from a biological attack," said one of two 2010 reports cited by the Times.

The more recent Blue Ribbon study, led by former Sen. Joe Lieberman and Tom Ridge, the first director of the Department of Homeland Security, **makes clear those reports weren't much heeded, noting that the \$6 billion a year we spend on the issue isn't getting us where we need to go.**

Among its recommendations for prevention, detection and containment, the report said it

would be nice if all the federal agencies, states, localities, medical researchers and others weren't going in a host of different directions. It called for White House leadership from the vice president's office and such other approaches as having different federal agency groups work together far more tightly.

It talked of ways in which vaccines, antibiotics and other counter-measures could be developed and the medicines stockpiled in greater numbers. When we're hit, we have to immediately help the victims and do as much as possible to keep them from spreading whatever it is that's imperiling us.

In a Senate hearing on all of this and more, **Lieberman observed that the Islamic State had announced its intentions to use bioweapons against the United States someday,** and that brings us back to what happened in Brussels, the Belgian capital that harbors the European Union and NATO headquarters.

The killings there were once again evidence that the Islamic State follows through on its promises, and the immediate criticism of Belgium is that it was unprepared. On the question of bioterrorism, we must not be. It's not that we have done nothing about biodefense, but that we haven't begun marching forcefully enough in the way wise hands have repeatedly told us we should.

The government needs to get going, especially noting the words of Ridge, the co-chairman of this report, as quoted in a discussion of its content:

"Our world is threatened more so than ever today by terrorist groups like ISIS, who can create undetectable immediate threats. Our government is delusional to think we can get by without a strong biodefense policy."

Jay Ambrose is an op-ed columnist for Tribune News Service.

EDITOR'S COMMENT: Although generic, this short article RINGS A BELL and we have to take the threat seriously! Despite recent experience with Ebola outbreak, do you think that if a new case arrives in our hospitals EDs we will be able to recognize and manage it???



Amid Brussels Attacks, EMTs and Paramedics Face New Reality of Terrorism and an Evolving Set of Challenges

Source: <http://www.ibtimes.com/amid-brussels-attacks-emts-paramedics-face-new-reality-terrorism-evolving-set-2341419> On 03/22/16 AT 4:44 PM



Paramedics assist a wounded victim in Brussels, March 22, 2016. Photo: Dursun Aydemir/Anadolu Agency/Getty Images



Terrorist attacks have changed the way medics respond to emergencies. Above, paramedics and firefighters arrive at Maelbeek metro station in Brussels after an attack March 22, 2016. Photo: Philippe Huguen/AFP/Getty Images



Sirens blared as an ambulance sped down the street. A team of first responders [hoisted](#) what resembled a body from one stretcher to another. A woman held a cell phone to her ear with a bloodied hand.

The [string of terrorist attacks](#) Tuesday morning in Brussels that killed at least 31 people and injured more than 200 others was the latest large-scale crisis to test first responders. Training for mass disasters has long been part of the emergency medical curriculum, but paramedics and emergency medical technicians say responding to terrorist attacks poses unique challenges that can evolve with each new event.

“I was taught a long time ago that as we train and put our response plan together, we’re reacting to previous types of events,” said Greg Santa Maria, who has worked in emergency medicine since 1988 and was running the paramedic program at St. Vincent’s Hospital in New York City on Sept. 11, 2001. “Terrorist groups are consistently coming up with new ways to do things. We have to think outside the box on a regular basis,” added Santa Maria, who is now the enterprise manager of public safety at Sanford Health in Sioux Falls, South Dakota.

One tactic seen frequently in recent terrorist attacks, including in Brussels on Tuesday, is that of multiple attacks in different locations. Coordinated attacks in Paris in November were launched across six locations over the course of roughly half an hour, for instance. Some have [suggested](#) that those attacks were modeled on attacks in Mumbai in 2008 that stretched over some dozen locations. That model has changed the way law enforcement and medical first responders alike handle the situation.

After one attack, “we have to be aware that there’s a high probability that there’ll be another event,” Santa Maria said.



First responders like EMTs and paramedics cannot always quickly reach people who are injured. Above, passengers leave the metro after a blast in Brussels, March 22, 2016. Photo: Reuters/Evan Lamos/EurActiv

As a result, emergency medical technicians and paramedics have to be more conscientious about their own safety, because they don’t help anyone by becoming another casualty. But they’re also under pressure to act quickly — to take care of people, to save lives — especially in attacks in crowded areas targeting masses of people.



Dia Gainor, the executive director of the National Association of State Emergency Medical Services, who has worked in the field for nearly 35 years, said the risk to first responders has dramatically changed emergency medical practices and training, at least in the United States. In fact, it has given rise, particularly over the last decade, to specialty fields, like tactical emergency medical services, which focuses on how to provide medical care during an active threat.

“The clinical care is not different. It’s the logistics of how to handle the scene that changes dramatically,” Gainor said. “It’s not just Grandma at her house.” Instead of rushing to the scene, finding victims and stopping bleeding or splinting limbs, EMTs and paramedics now have to coordinate with police and law enforcement teams. They may have to don protective gear, almost as if they are in combat, Gainor added.

Terrorist attacks don’t change the logistics merely for trained medical providers, of course. Civilians, bystanders, survivors — they become unwitting caregivers, because they too can save lives if they act quickly, especially if an attack occurs somewhere police and emergency medics cannot reach right away, like an underground metro station, several emergency medicine experts pointed out.



A private security guard helps a wounded woman outside the Maelbeek metro station in Brussels after a blast at the station, March 22, 2016. Photo: Michael Villa/AFP/Getty Images

“The real first responders are the people at the event,” said Georges Benjamin, the executive director of the nonprofit American Public Health Association. Even an act as seemingly basic as stopping a bleeding wound can save a life, he pointed out.

This fact has not been lost on the medical community and authorities at large. In October, the U.S. Department of Homeland Security rolled out its “Stop the Bleed” campaign. “No matter how rapid the arrival of professional emergency responders, bystanders will always be first on the scene,” says the campaign’s [website](#), which lays out three steps — compress, place a tourniquet and compress again — for stopping bleeding. “Research has shown that bystanders, with little or no medical training, can become heroic lifesavers,” the White House [said](#) in announcing the initiative. Cities around the world are on heightened alert after the Brussels attack, but there’s no telling when or where another attack could be, or what it could like. For EMTs, paramedics



and others, this means dealing with events as well as they can, given their training and experience. “It’s a continuous learning process,” Benjamin said.

Can These Next-Gen Antibiotics Defend Against Bioterrorism?

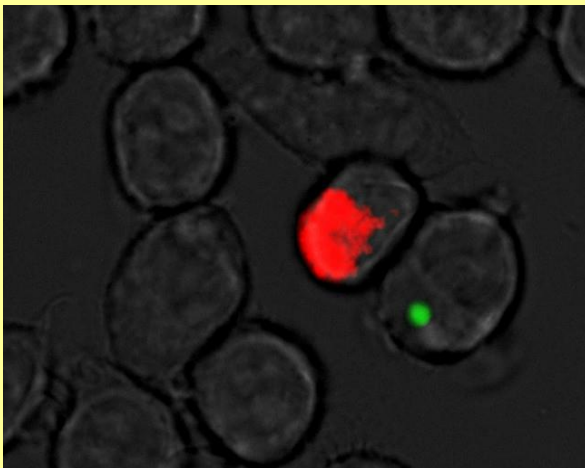
By Tyler Goralski

Source: <http://www.theepochtimes.com/n3/1998948-can-these-next-gen-antibiotics-defend-against-bioterrorism/>



Mar 21 – **Early tests of radically redesigned antibiotics suggest the drugs could bolster defenses against biowarfare and bioterrorism.**

In a study of animal cells and macrophages, researchers used two inhibitors—KKL-10 and KKL-40—to stop the proliferation of *Francisella tularensis*, bacteria that the U.S. Centers for Disease Control classifies as a tier 1 select agent because the strain is highly infective and easily spread, says Kenneth Keiler, professor of biochemistry and molecular biology at Penn State.



The new antibiotic compounds stopped *Francisella Tularensis*, a virulent strain bacteria used in biowarfare, from spreading in animal cells. (Girish Kirimanjeswara/Penn State)

The compounds target ribosomes in the translation phase of the bacteria’s genetic process, he adds. For bacteria to grow and proliferate, protein-generating ribosomes, like engines rolling down a track, must travel down

the messenger RNA (mRNA) to translate additional proteins. However, when the ribosomes become stuck, the bacteria dispatches **ribosome rescue factors—tmRNA, ArfA and ArfB**—to free the ribosome. Keiler says that KKL-10 and KKL-40 were able to halt this rescue operation in the bacteria without damaging host cells.



Nasty Biological Weapon

“At the beginning of the study, we identified compounds that block rescue of ribosomes that are stuck on mRNA, and these have antibiotic activity against a number of pathogens that we can test in the lab,” says Keiler. “In this study, first, we wanted to test the compounds against a pathogen that is important for biodefense and we also wanted to make sure that these compounds would work inside eukaryotic cells.”

Franscisélla tularensis can cause fatalities in up to 60 percent of the cases if left untreated, says Girish Kirimanjeswara, assistant professor of veterinary and biomedical sciences at Penn State, who worked with Keiler. It was also stockpiled as a biowarfare agent during the Cold War.

“In today’s world of terrorism, it is essential that we are well-prepared to defend ourselves and our military personnel against biowarfare agents,” says Kirimanjeswara. “In that regard, finding new targets and antibiotics against these agents is critical and our research shows that these compounds may be very.”

Bacteria Can’t Resist Them

After decades of using antibiotics to kill pathogens, more and more diseases have become resistant to conventional drugs and treatments, according to the researchers, who report their findings in *Antimicrobial Agents and Chemotherapy*. This has increased the urgency to find new drugs and new ways of stopping pathogens.

“There are many pathogens that are resistant to all existing antibiotics—if you are infected with one of these totally resistant strains and show up in the clinic there’s nothing the doctors can do for you,” says Keiler. “If your immune system can fight off the infection, you’ll survive and if it can’t, you die. It’s back to pre-1940s-era medicine. If we don’t develop new drugs and the resistant genes are going to continue to spread, more and more diseases will become untreatable.”

He suggests that because the researchers are using a new compound and targeting a new pathway, *Franscisélla tularensis*—and possibly other pathogens—may struggle to adapt resistance to the treatment.

“One of the good things about our compounds is this is a new chemical, so it’s unrelated to any of the existing drugs, which means maybe there may not be enzymes out there to modify those drugs and inactivate them,” says Keiler. “Although we won’t know that until we get into the clinic.”

Kirimanjeswara says that ***Franscisélla tularensis* is difficult to stop because it can survive both outside and inside the cell, as well as in different compartments of host cells.**

“This strategy allows bacteria to survive and escape from host immune responses, for example, within the host cells, and there are not many antibiotics that can target a bacterium in all these compartments,” says Kirimanjeswara. “In that regard, these compounds were effective outside the cells, in the various stages of endocytic vesicles, and in the cytoplasm, making it a very attractive way to treat bacterial diseases.”

The next steps for the research will be to experiment on delivery designs and to test the compounds in animals. The National Institutes of Health supported this work.

Tyler Goralski, a graduate student studying biochemistry and molecular biology at Penn State, streaks out a bacteria sample at the Pell Laboratory for Advanced Biological Research. (Patrick Mansell/Penn State).



Germany: Migration Crisis Becomes Public Health Crisis

By Soeren Kern

November 8, 2015

Source: <http://www.gatestoneinstitute.org/6838/germany-migration-health-crisis>

- German hospitals are increasing security to protect doctors and nurses from violent attacks by migrants who are unhappy with the medical treatment they are receiving.



- Critics are warning that German taxpayers will end up paying billions of euros to provide healthcare for a never-ending wave of asylum seekers. This is in addition to the billions of euros already being spent to provide newcomers with food, clothing and shelter.
- In addition to the massive economic and social costs, as well as the burden of increased crime, including a rape epidemic, Germans are now facing the risk of being exposed to exotic diseases — and tuberculosis.
- Roughly 5% of asylum seekers are carrying resistant germs. In real numbers, this works out to around 75,000 newcomers with highly infectious diseases. — Dr. Jan-Thorsten Gräsner, director of the Institute for Rescue and Emergency Medicine.
- Twenty types of vaccines are now in short supply, and 16 others are no longer available at all. Because of production bottlenecks, some vaccines will not become available until 2017.
- Muslim women refuse to be treated by male doctors, and many Muslim men refuse to be treated by females. — Max Kaplan, director of the Bavarian Medical Board.
- German media outlets are downplaying the extent of the healthcare problem, apparently to avoid spreading fear or provoking anti-immigrant sentiments.

The influx of more than one million asylum seekers from Africa, Asia and the Middle East is placing unprecedented strain on Germany's healthcare system.

Hospitals, clinics and emergency rooms across Germany are being filled to capacity with migrants suffering maladies of all kinds, and medical personnel, including thousands of volunteers, are increasingly complaining of burnout.

Diseases are also reappearing that have not been seen in Germany for years. German public health officials are now on the lookout for Crimean Congo hemorrhagic fever, diphtheria, Ebola, hepatitis, HIV/AIDS, malaria, measles, meningitis, mumps, polio, scabies, tetanus, tuberculosis, typhus and whooping cough. As refugee shelters fill to overflowing, doctors are also on high alert for mass outbreaks of influenza and Norovirus.

Compounding the challenge, tens of thousands of migrants arriving in Germany — particularly migrant children — have not been immunized, and German doctors are finding that needed vaccines are not readily available due to a lack of supply. **Some German parents are panicking that there are not enough vaccines to immunize their own children.**

Many migrants are also suffering from a host of traumas and mental illnesses.

According to the Chamber of German Psychotherapists (*Bundespsychotherapeutenkammer*), **at least half of all migrants arriving in Germany have psychological problems, including**

post-traumatic stress disorder and depression, and roughly 40% have contemplated suicide.

German hospitals are also being forced to hire a virtual army of interpreters so that doctors can communicate with asylum seekers, who speak dozens of languages, dialects and variants.

At the same time, **German hospitals are increasing security to protect doctors and nurses from violent attacks by migrants** who are unhappy with the medical treatment they are receiving.

Critics are warning that German taxpayers will end up paying billions of euros to provide healthcare for a never-ending wave of asylum seekers. This is in addition to the billions of euros already being spent to provide newcomers with food, clothing and shelter.

Many say the German government failed fully to consider the unforeseen consequences of opening the door to so many migrants. In addition to the massive economic and [social costs](#), as well as the burden of [increased crime](#), including a [rape epidemic](#), Germans are now facing the risk of being exposed to exotic diseases.

German media outlets are downplaying the extent of the healthcare problem, apparently to avoid spreading fear or provoking anti-immigrant sentiments. But a growing number of German healthcare professionals are sounding the alarm.



In an interview with *Die Welt*, **Dr. Michael Melter**, the chief physician at the University Hospital Regensburg, said that **migrants are arriving at his hospital with illnesses that are hardly ever seen in Germany anymore.** "Some of the ailments I have not seen for 20 or 25 years," he said, "and many of my younger colleagues have actually never seen them."

Marc Schreiner, director of international relations for the German Hospital Federation (*Deutschen Krankenhausgesellschaft*), has

According to Hasenbein, these numbers appear insignificant when compared to the three million hospital visits that normally occur in Bavaria every year. The problem arises in that the migration crisis is straining the Bavarian healthcare system unevenly, with hospitals in migrant "hotspots" such as Deggendorf, Ingolstadt and Passau bearing the brunt of medical care.

Markus Beier, director of the Bavarian Association of Family Physicians (*Bayerischer Hausärzteverband*), says that **doctors in areas with large concentrations of asylum seekers are being called upon all hours of the night and day, making it impossible for them to provide anyone with superior levels of care.**

A migrant from Africa is shown in a Spiegel TV news segment from this month, being treated in a special unit for the involuntary quarantine of tuberculosis patients, at Parsberg District Hospital #1, in Bavaria.



echoed Melter's concerns:

"In the clinics, it is becoming increasingly common to see patients with diseases that were considered to have been eradicated in Germany, such as scabies. These diseases must be reliably diagnosed, which is a challenge."

Schreiner said that in cases of highly contagious diseases, including tuberculosis, patients must be quarantined, an expensive procedure, the costs of which are paid for by German taxpayers.

According to Schreiner, about 15% of the newly arriving migrants require immediate medical treatment. With 1.5 million asylum seekers expected to arrive in Germany in 2015, this means that 225,000 migrants will have an urgent need for medical attention.

Siegfried Hasenbein, director of the Bavarian Hospital Association (*Bayerische Krankenhausgesellschaft*), estimates that in 2015, between 25,000 and 30,000 migrants will be treated in Bavarian hospitals alone. In addition, this year between 75,000 and 90,000 migrants will receive ambulatory or outpatient care.

Max Kaplan, director of the Bavarian Medical Board (*Bayerische Landesärztekammer*), says that the challenges associated with medical treatment for migrants are exacerbated by language and cultural barriers, which are "tiresome, time consuming and sometimes impossible to overcome." Adding insult to injury, he says, **many Muslim women refuse to be treated by male doctors, and many Muslim men refuse to be treated by females.**

In an effort to prevent diseases from spreading, Kaplan has called on German public health officials to order medical exams for all asylum seekers at the initial point of entry into Germany, before they are sent to different parts of the country. "This is in the best interest of the refugees, and also of the native population," he said.

In a November 2 interview with Spiegel TV, **Dr. Ralf Mütterlein**, director of the Pulmonary Clinic (*Klinik für Lungen- und Bronchialheilkunde*) in Parsberg, estimated that **between 8,000 and 10,000 asylum seekers in Germany have tuberculosis,**



but only a small fraction these are currently in quarantine.

Migrants who are taken to Mütterlein's clinic are held in quarantine for up to 18 months at a time to prevent the disease from spreading to the population at large. The

Meanwhile, a report by *Die Welt* describes efforts by German health officials to contain the spread of so-called resistant germs:

"Physicians are currently on high alert, because with the arrival of hundreds of thousands of refugees, infectious diseases could enter the country. This is not hysteria. It is simply a challenge our healthcare system has not faced for many decades.

"There is a danger that a refugee is 'colonized' — as doctors call it — with dangerous germs. Every person carries bacterial germs in and on the skin. For healthy people they are harmless. They become a problem when they spread among critically ill and immunocompromised patients in a clinic.

"The problem: In the refugees' countries of origin, resistant germs may spread more often than in Germany. So a refugee is immediately tested upon admission to a German clinic. Only when it is certain that there is no danger, it the patient moved to a shared room."

Dr. Jan-Thorsten Gräsner, director of the Institute for Rescue and Emergency Medicine (*Institut für Rettungs- und Notfallmedizin*), estimates that roughly 5% of asylum seekers are carrying resistant germs. In real numbers, this works out to around 75,000 newcomers with highly infectious diseases.

The Berlin-based Robert Koch Institute, a key governmental agency for the safeguarding of public health in Germany, has advised healthcare professionals, as well as those who are working as volunteers in refugee shelters, to update their immunizations.

But the Federal Institute for Vaccines and Biomedicines (*Paul-Ehrlich-Institut*), an agency of the Federal Ministry of Health, has warned that 20 types of vaccines are now in short supply, and 16 others are no longer available at all. Because of production bottlenecks, some vaccines will not become available until 2017.

Stefan Derix, director of the Chamber of Pharmacists North Rhine (*Apothekerkammer Nordrhein*), said the shortage of vaccines is due to the massive influx of asylum seekers.

costs to German taxpayers are astronomical: Between 10,000 and 12,000 euros per migrant per month. Over 18 months, the total cost often exceeds 200,000 euros per migrant.

He said the Ministry of Health normally orders vaccine supplies one year in advance, and that no one in the government had anticipated that Germany would be taking in so many migrants this year.

Dr. Wolfram Hartmann, president of the Cologne-based Professional Association of Pediatricians (*Berufsverband der Kinder- und Jugendärzte*), has warned that many of the vaccines needed to immunize both native German children and migrant children for diphtheria, polio, tetanus and whooping cough are not available, neither in Germany nor in any other European country. He also said that basic vaccines against measles, mumps, rubella and varicella are in short supply.

In a statement, Hartmann wrote:

"We cannot provide native German children and refugees alike with the basic vaccines. The vaccine shortage, which is the responsibility of the pharmaceutical companies, must urgently be made a top priority of the Health Minister! Children have a right to vaccinations, especially for chronically ill children who need timely vaccinations against flu, especially if they are housed in communal accommodations.

"The federal government must now act urgently and enforce the right of children to vaccination. The vaccine supply is just as much of a national responsibility as is the supply of physicians."

Kordula Schulz-Asche, a politician with the Greens Party, warned against holding migrants responsible for the vaccine shortage. "The current tense vaccine situation must not be misused to stir up public opinion against refugees," she said.

In **North Rhine-Westphalia**, hospitals are requiring their personnel to attend courses on how to treat patients with exotic illnesses hardly ever seen in Germany. Hospital workers in Bielefeld and Siegburg are said to be groaning under the strain of having to examine up to 80 migrants a day



for tuberculosis. "The workload has increased tremendously," a worker told *Westdeutscher Rundfunk*, a public broadcaster. Other hospitals in the state lack sufficient personnel and equipment, including the x-ray machines needed to examine patients with tuberculosis.

In **Lower Saxony**, public health officials, fearful of a mass outbreak of influenza, are struggling with the logistics of vaccinating tens of thousands of asylum seekers housed in refugee shelters across the state. With more than 1,000 new migrants arriving in Lower Saxony every day, initial medical exams of newcomers are backlogged by weeks, a period during which undetected diseases can spread.

In **Berlin**, police were forced to apologize for recommending that asylum seekers suffering from scabies, a highly contagious skin disease, be required to wear armbands to distinguish them from migrants who are healthy. The plan was for them to wear armbands with the capital letter 'K' for *Krätze* (German for scabies); their immediate family were to have worn armbands with the capital letter 'A' for *Angehörigen* (German for next of kin).

Meanwhile, reports of health-related scares, especially those involving tuberculosis, have become a daily occurrence in Germany.

In **Krefeld**, a city in North Rhine-Westphalia, a 27-year-old migrant was diagnosed with **tuberculosis**. He was being held in quarantine at a local pulmonary clinic. In **Lünen**, also in North Rhine-Westphalia, four migrants were diagnosed with **tuberculosis**.

In **Nattheim**, a town in Baden-Württemberg, asylum seekers at a refugee shelter underwent mass immunization after a child at the shelter fell ill with **chickenpox**. In **Ellwangen**, also in Baden-Württemberg, an asylum seeker diagnosed with **tuberculosis** escaped from a hospital. He remains at large.

In **Gransee**, a town in the eastern state of Brandenburg, a migrant was diagnosed with **tuberculosis**.

In **Würzburg**, more than 400 asylum seekers were mass immunized for chicken pox, diphtheria, measles, mumps, polio and tetanus.

In **Heidenheim**, a town in Baden-Württemberg, public health officials are preparing for potential outbreaks of influenza and Norovirus at local refugee shelters this winter.

In Cologne, police cordoned off a refugee shelter housing more than 1,000 migrants in the Chorweiler district after a male refugee from Africa showed symptoms of Ebola.

The man, who was coughing up blood for more than three days before anyone called a doctor, was rushed to a local hospital, where he was diagnosed with a gastrointestinal illness. Earlier, the same refugee shelter was the scene of an **E. coli** scare potentially affecting 800 migrants.

In Bochum, a 16-year-old migrant from Guinea showing symptoms of Ebola was placed in quarantine. In Saxony, public health officials are now testing all incoming asylum seekers for Ebola.

In **Düsseldorf**, a 30-year-old migrant from Algeria was diagnosed with **tuberculosis** and was being held in quarantine at a local hospital. Municipal health officials say that in 2014, there were 50 confirmed cases of tuberculosis in the city. In 2015, that number was surpassed in August, before migrants began arriving en masse in September and October.

In **Tegernsee**, a town in Bavaria, a 23-year-old migrant from Eritrea who was diagnosed with **tuberculosis** escaped from a refugee shelter. Local officials failed to inform the public about the incident for nearly one month, until they were confronted by a local newspaper, the *Münchner Merkur*. Wolfgang Rzehak, a local politician with the Greens Party, justified the media blackout: "We have to find a middle road between informing the public and not becoming a panic machine."

In **Frankfurt**, a 33-year-old migrant from Bulgaria who was diagnosed with **tuberculosis** escaped from a hospital and remains at large. Again, local officials kept quiet about the incident, until someone leaked information about it to the German newspaper, *Bild*.

In **Berlin**, a schoolteacher in the Steglitz-Zehlendorf district was diagnosed with **tuberculosis**; doctors say he was probably infected by one of his students. Also in **Berlin**, security guards at a refugee shelter in the Lichterfelde-Süd district locked nearly a dozen migrants in a bathroom after they were suspected of having **tuberculosis**. They were later transferred to a local hospital.



In **Hamburg**, public health officials quarantined a refugee shelter in the Jenfeld district after an outbreak of **scabies**. **Also in Hamburg, a 17-year-old migrant from Sierra Leone was rushed to a local hospital and quarantined on suspicion that he had Ebola — just three days after arriving in Germany. Separately, at a refugee shelter in the Bahrenfeld district of Hamburg, firefighters wearing head-to-toe Ebola protection suits escorted migrants suspected of having Ebola to a local hospital.**

In **Bremen**, after an asylum seeker was diagnosed with **tuberculosis** and doctors warned of the risk of contagion, all 200 migrants housed at refugee shelter on Steinsetzer Straße underwent chest x-rays to test for the disease.

In **Munich**, health officials are expecting more than 350 new cases of **tuberculosis** in 2015.

The increase is being attributed to the large number of asylum seekers arriving in the city.

In **Stuttgart**, an average of 145 asylum seekers housed at the city's convention center seek medical attention every day. Common maladies include measles, chickenpox, flu infections, dysentery and scabies caused by mites.

In **Rheingau-Taunus**, a district in the state of Hesse, public health officials say they need more money and medical personnel to deal with the influx of migrants at 60 local refugee shelters. The health department expects to treat more than 1,500 newcomers this year, including a large number of children who lack proper immunization. The department has reported 60 cases of scabies and tuberculosis. According to Monika Merkert, a local health inspector: "The newly arriving asylum seekers bring diseases that occur only rarely in Germany."

Soeren Kern is a Senior Fellow at the New York-based Gatestone Institute. He is also Senior Fellow for European Politics at the Madrid-based Grupo de Estudios Estratégicos / Strategic Studies Group. His first book, [Global Fire](#), will be out in early 2016.

EDITOR'S COMMENT: This 2015 article is a "must read" article by all health officials in countries facing the illegal immigrants/refugees tsunami. In Greece hepatitis-A, leptospirosis and tuberculosis are the most prominent problems (so far) infecting both incoming flows and rescue personnel. Although numbers are small for the time being, ongoing problem might result in more "exotic" cases and more funding required to deal with them. Add current economic turmoil in the country and soon you will have an explosive mixture of protesting and hostile behavior from local citizens unable to have best medical practices for their own – these are taxpayers who will see that their "guests" will have a better management than them. And this is a big difference compared to Germany where Germans will continue to enjoy high standards and best practices – well at least for the years to follow. Or not?

UCI scientists receive \$8 million to help develop Q fever vaccine

Source: <https://news.uci.edu/health/uci-scientists-receive-8-million-to-help-develop-q-fever-vaccine/>

Mar 28 – A University of California, Irvine scientific team led by infectious diseases researchers Philip Felgner and Aaron Esser-Kahn has received \$8 million from the U.S. Department of Defense's Defense Threat Reduction Agency to help develop a new vaccine for Q fever.

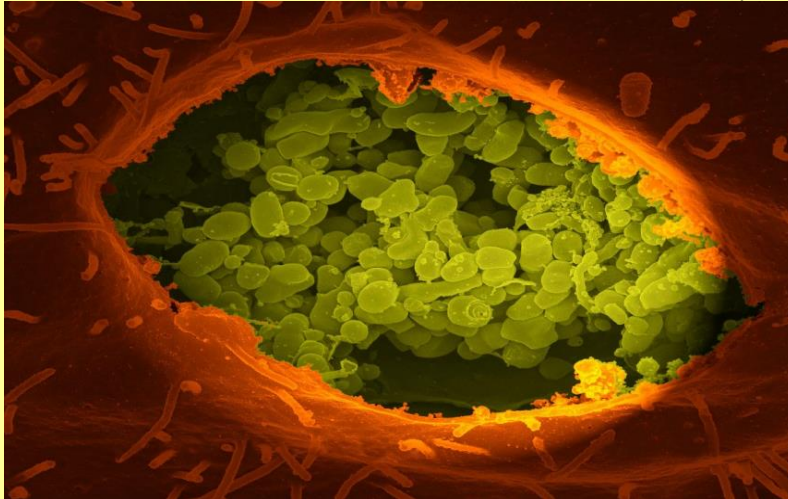
Caused by the *Coxiella burnetii* bacterium, Q fever is a highly infectious agent common

among livestock. It has a history of being aerosolized for use in biological warfare and is considered a potential bioterrorism weapon.

Q fever is also a public health threat; a 2007-10 outbreak in the Netherlands affected thousands of people. Symptoms include high fever, nausea, severe headache and abdominal pain. It is rarely fatal.



“The current vaccine for Q fever is effective but has severe side effects that limit its widespread use,” said Felgner, an adjunct professor of medicine at UCI. “It’s a high priority that this vaccine be administered to members of the armed forces. Consequently, the military is interested in developing an alternative protective vaccine that’s safer and does not cause adverse reactions.”



This digitally colorized image by a scanning electron microscope shows a cell vacuole in which *Coxiella burnetii*, the bacteria that cause Q fever, are proliferating. National Institute of Allergy & Infectious Diseases

Felgner will use an approach he pioneered at UCI to create whole proteome microarrays to discover immune response-activating antigen

proteins that may be effective as a vaccine. Additionally, he’ll collaborate with Esser-Kahn, assistant professor of chemistry, whose group will develop synthetic agents that can boost and control the immune response to these proteins.

Felgner said this dual method may be applicable in creating more vaccines important to the military and general public health, adding that this is an opportunity for the Department of Defense to test these methods for their potential use against other infectious diseases.

After identifying the target proteins, Felgner will work with the U.S. Army Medical Research Institute of Infectious Diseases at Fort Detrick in Maryland on next-stage animal studies of a candidate vaccine.

The project is a successful outgrowth of the Pacific Southwest Regional Center of Excellence, one of only 11 National Institutes of Health-funded research sites dedicated to countering threats from bioterrorism agents and emerging infectious diseases. UCI received \$85 million for this effort, which was led by Dr. Alan Barbour, professor of microbiology & molecular genetics. The federal program ended in 2015.

Protecting soldiers from emerging infectious diseases

Source: <http://www.homelandsecuritynewswire.com/dr20160329-protecting-soldiers-from-emerging-infectious-diseases>

Mar 29 – Scientists from the Naval Health Research Center (NHRC) and the Defense Threat Reduction Agency (DTRA) held a two-day meeting earlier this month to discuss progress and goals for a joint biosurveillance project.

The U.S. Navy says that NHRC has collaborated with DTRA and the Joint Science and Technology Office on the Field Forward Diagnostics program since 2013 to develop novel point of need (PON) diagnostics to identify pathogens that cause acute febrile illnesses and threaten global and public health.

“The goal of the program is to enhance readiness by enabling our warfighters to use handheld diagnostic devices in the field to detect pathogens that can cause incapacitating or deadly diseases,” said Capt. Rita Simmons, NHRC commanding officer. “Once a pathogen has been identified, immediate guidance could be provided to troops and their leaders to help them deal appropriately with the health threat. This project has the potential to significantly impact medical and mission readiness.”



The joint NHRC and DTRA team will evaluate the handheld devices for ease of use and test a system for broadcasting data from the devices to remotely located subject-matter experts for real-time decision making on events occurring in far-forward areas. The project would bring the expertise of medical and public health professionals to troops in the field.

According to Dr. Christopher Myers, department head for biosurveillance at NHRC, emerging infectious diseases that our military could encounter around the globe, particularly those found in tropical settings such as dengue, *Burkholderia melioidosis*, and malaria, are often difficult to distinguish by their clinical characteristics alone.

“Confirmation from a laboratory is needed for a definitive diagnosis, but if you’re in the field, forward deployed, a lab can be hard to come by,” said Myers.

As part of the collaborative effort, NHRC will monitor all sites involved in the study to ensure that protocols are being followed and data properly collected. NHRC will also provide logistical support by shipping supplies and instruments, and coordinating maintenance and repairs as needed, to the different study sites around the globe.

Mammoth Milestones for Synthetic Biology

Source: <https://www.dvidshub.net/news/193904/mammoth-milestones-synthetic-biology#.Vvzu3HrKqHs>

Mar 30 – Gene editing allows scientists to combine woolly mammoth and elephant DNA, engineer pig organs for human transplants and create malaria-resistant mosquitoes that can pass their resistance to offspring. While gene editing could help eradicate some of the world’s greatest global health concerns, it also has the potential to be a weapon of mass destruction.

The U.S. Director of National Intelligence, James Clapper, recently named gene editing as a priority weapon of mass destruction threat; the only biotechnology included in the worldwide threat assessment report, due to recent advancements within synthetic biology. As such, the Defense Threat Reduction Agency’s Joint Science and Technology Office is preparing next generation warfighters to be leaders in this emerging field.

Through continued partnerships with the intelligence community and U.S. Military Service Academies, JSTO is focusing on responsible development of new countermeasures enabled by synthetic biology. In 2014 the Assistant Secretary of Defense for Research and Engineering emphasized the importance of DoD investments in synthetic biology for specialty materials, sensing and chemical and biological defense. Service members lacked a deep understanding of synthetic biology and the ASD (R&E) recommended instituting bioengineering programs at each service academy.

To support this initiative, JSTO launched the Syn Bio Academies Challenge, a pilot program at the U.S. Military Academy at West Point and the U.S. Naval Academy at Annapolis, where cadets and midshipmen compete for an annual prize. This competition, managed by Dr. Brian Pate of DTRA, is administered in conjunction with the 2016 International Genetically Engineering Machine (IGEM) Competition. This premier global synthetic biology student conference focuses on education, competition and advancement of synthetic biology open collaboration.

Under the Service Academy Research Initiative, DTRA-sponsored projects have incorporated an increased use and investigation of synthetic biology approaches, with the goal of increasing preparedness of future warfighters to anticipate and perform appropriately in their military environments.

JSTO also fosters national expertise in synthetic biology through its broader research investments focused on countermeasures to chemical and biological weapons, driven by DoD requirements as well as DTRA-identified knowledge gaps.

For example, under DTRA’s chemical countermeasures program, a project managed by Dr. Pate developed a targeted nanodelivery platform. The platform consists of a liposomal shell, a single chain of antibody fragments as targeting moieties,



and a payload that includes DNA plasmids coding for proteins active in scavenging nerve agents. In preliminary trials, this synthetic biology approach was capable of upregulating the endogenous expression of nerve agent scavenging protein within the brain.

Other DTRA-managed projects with a significant synthetic biology component include efforts focused on manipulating simple organisms or ex-vivo genetic circuits. These circuits impart the ability to recognize, signal and defeat chemical or biological threats with built-in “kill switches.” The “kill switches” deactivate these genetically-modified organisms when they are no longer useful. In pursuing responsible applications of synthetic biology, DTRA is both mitigating current and future threats as well as enhancing relevant national scientific capacity.

Despite Russia’s signatory status to the Biological and Toxin Weapons Convention,

which bans development of biological weapons, Russian Prime Minister Vladimir Putin stated in 2012 that, “in the more distant future, weapons systems based on new principals (beam, geophysical, wave, genetic, and other technology) will be developed. All this will, in addition to nuclear weapons, provide entirely new instruments for achieving political and strategic goals. Such hi-tech weapons systems will be comparable in effect to nuclear weapons but will be more “acceptable” in terms of political and military ideology.”

Such statements underscore the critical nature of DTRA’s work in fostering U.S. military and civilian scientific capacity in the field of synthetic biology, as well as leading the pursuit of responsible applications of this important technology to countering weapons of mass destruction.

Automated Ebola blood test performs well in field evaluation

Source: <http://www.medicalnewstoday.com/releases/308428.php>



Mar 29 – An automated “sample-to-answer” system could provide Ebola virus disease (EVD) diagnosis more quickly and easily than the current standard test, according to research published in *PLOS Medicine*. In a field evaluation study, Nira Pollock of Boston Children’s Hospital and colleagues from Public Health England and Partners In Health found that the **Cepheid GeneXpert Ebola assay** provided results in near agreement with the standard laboratory test for both whole blood (WB) and cheek swab (buccal swab, BS) samples.



The standard laboratory test used for EVD diagnosis in this field evaluation requires sample inactivation, nucleic acid extraction and reverse transcription polymerase chain reaction (RT-PCR) using the "Trombley assay"; the GeneXpert Ebola assay is an automated RT-PCR system that integrates all the



steps, once sample has been inactivated and loaded into a cartridge. Dr. Pollock and colleagues compared results from the two assays in the Public Health England EVD diagnostic laboratory in Port Loko, Sierra Leone, using residual diagnostic specimens remaining after clinical testing. The researchers tested 218 WB samples collected through venipuncture from patients with suspected or confirmed EVD, as well as 71 BS samples collected as part of a national postmortem screening program. After excluding a few samples that gave Xpert results that were reported as "invalid" or "error," 22 out of 22 Trombley-positive WB samples were Xpert-positive (sensitivity of 100%), and 181 out of 189 Trombley-negative WB samples were Xpert-negative (specificity of 95.8%). In 64 BS samples with valid results for both Trombley and Xpert, the sensitivity and specificity of the Xpert assay were both 100%. For blood samples with enough volume for two tests, the researchers also compared sampling blood using a pipette versus a swab and found that 78 of 79 paired results were concordant, suggesting that collection of the same volume of fingerstick blood using a swab (which is

potentially easier to do in the field) may also provide accurate results when using the GeneXpert assay. These findings suggest that the use of the Xpert Ebola assay could facilitate expanded access to Ebola virus testing. However, the authors note that formal testing of fingerstick samples is needed before these samples are used for diagnosis with Xpert, and that evaluation of a larger set of fresh BS samples would also be optimal. The system should also be evaluated in more remote facilities as the need for an uninterrupted power supply, potential refrigeration of reagents, and platform validation/maintenance may prevent its wide deployment. The authors say, "[O]ur data indicate that the Xpert Ebola assay has excellent performance in a field laboratory setting using both WB and BS specimens and thus provides the opportunity for highly accurate, rapid sample-to-answer diagnosis of EVD".

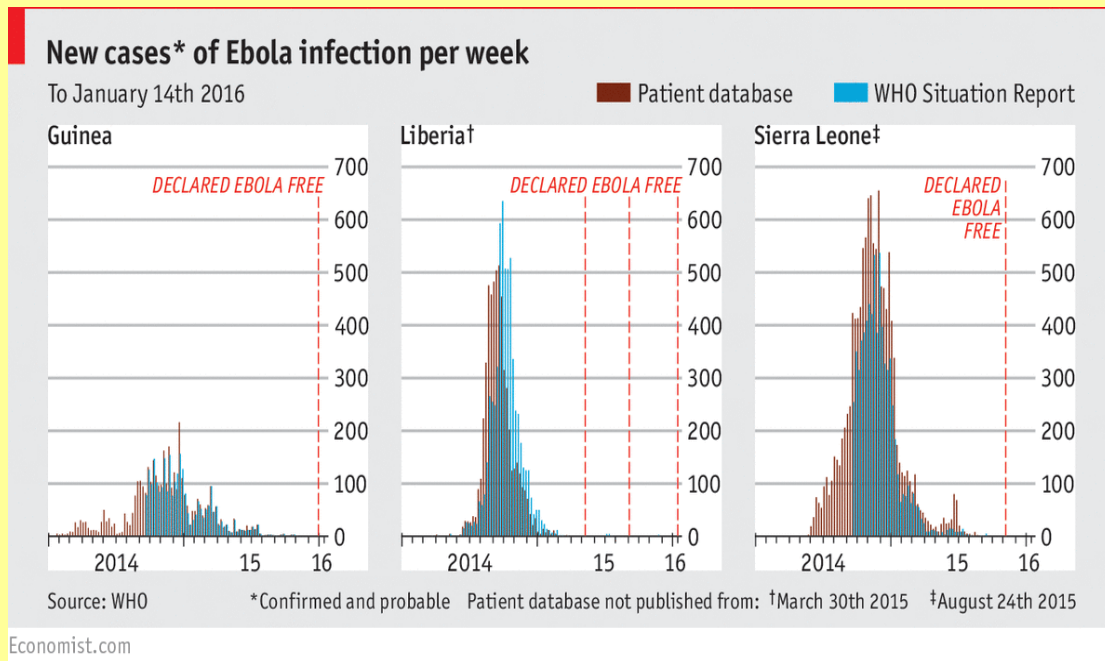
WHO: Ebola no longer a "Public Health Emergency of International Concern"

Source: <http://www.homelandsecuritynewswire.com/dr20160330-ebola-no-longer-a-public-health-emergency-of-international-concern-who>

Mar 29 – On Tuesday, 29 March 2016, the 9th meeting of the Emergency Committee convened by the WHO Director-General under the International Health Regulations (2005) (IHR) regarding the Ebola virus disease (EVD) outbreak in West Africa.

WHO says that the Committee was requested to provide the Director-General with views and perspectives as to whether the event continues to constitute a Public Health Emergency of International Concern (PHEIC) and whether the current Temporary Recommendations should be extended, rescinded, or revised.





Representatives of Guinea, Liberia, and Sierra Leone presented the epidemiological situation, ongoing work to prevent Ebola re-emergence, and capacity to detect and respond rapidly to any new clusters of cases in each country.

The Committee noted that since its last meeting all three countries have met the criteria for confirming interruption of their original chains of Ebola virus transmission. Specifically, all three countries have now completed the forty-two day observation period and additional ninety day enhanced surveillance period since their last case that was linked to the original chain of transmission twice tested negative. Guinea achieved this milestone on 27 March 2016.

The Committee observed that, as expected, new clusters of Ebola cases continue to occur due to reintroductions of virus as it is cleared from the survivor population, though at decreasing frequency. Twelve such clusters have been detected to date, the most recent of which was reported on 17 March 2016 in Guinea and is ongoing. The Committee said it was impressed that to date all of these clusters have been detected and responded to rapidly, limiting transmission to at most two generations of cases in the eleven clusters which have now been stopped.

The Committee concluded that Ebola transmission in West Africa no longer constitutes an extraordinary event, that the risk

of international spread is now low, and that countries currently have the capacity to respond rapidly to new virus emergences. Accordingly, in the Committee's view, the Ebola situation in West Africa no longer constitutes a Public Health Emergency of International Concern and the Temporary Recommendations adopted in response should now be terminated. The Committee emphasized that there should be no restrictions on travel and trade with Guinea, Liberia, and Sierra Leone, and that any such measures should be lifted immediately.

As in other areas of sub-Saharan Africa where Ebola virus is present in the ecosystem, and recognizing that new clusters due to re-emergence may occur in the coming months, the Committee reinforced that these countries must maintain the capacity and readiness to prevent, detect, and respond to any ongoing or new clusters in future. National and international efforts must be intensified to ensure that male survivors can have their semen tested for virus persistence and know their status. Work must continue on the use of Ebola vaccination for intimate and close contacts of those survivors who have persistent virus excretion. Particularly important will be to ensure that communities can rapidly and fully engage in any future response, cases are quickly isolated and



managed, local population movement in the affected areas is managed, and appropriate contact lists are shared with border authorities. The Committee further emphasized the crucial need for continued international donor and technical support to prevent, detect, and respond rapidly to any new Ebola outbreak in West Africa. International support is required in particular to maintain and, where needed, expand diagnostic laboratory and surveillance capacity, sustain vaccination capacity for outbreak response, and continue relevant research and development activities (for example, on therapeutic options to clear persistent virus excretion). The Committee gave special attention to the need to ensure that sufficient and appropriate clinical care, testing capacity and welfare services are

available to all survivors of this extraordinary health crisis.

Based on the advice of the Emergency Committee, and her own assessment of the situation, the Director-General terminated the Public Health Emergency of International Concern (PHEIC) regarding the Ebola virus disease outbreak in West Africa, in accordance with the International Health Regulations (2005). WHO says that the Director-General terminated the Temporary Recommendations that she had issued in relation to this event, supported the public health advice provided above by the Committee, and reinforced the importance of States Parties immediately lifting any restrictions on travel and trade with these countries.

Efficient alternative for Ebola screening program for travelers

Source: <http://www.homelandsecuritynewswire.com/dr20160330-efficient-alternative-for-ebola-screening-program-for-travelers>

Mar 30 – **As of 31 January 2016, a total of 28,639 cases and 11,316 deaths have been attributed to Ebola, figures that are assumed to significantly underestimate the actual scope of the 2014 Ebola Hemorrhagic Fever outbreak in West Africa.** In the United States, there were also two imported cases and two locally acquired cases reported in September-October 2014.

“This outbreak stimulated high-level discussions about how to prevent the global transmission and spread of Ebola,” explained Sheldon H. Jacobson, a professor of computer science at the University of Illinois at Urbana-Champaign. “One strategy recommended by the World Health Organization required exit screening at airports for passengers who depart from countries with Ebola. Passengers with a high-risk exposure to or symptoms of Ebola are denied boarding under this approach.

“With exit screening from such countries, out of approximately 80,000 departing travelers from August to November 2014, none were reported as symptomatic with Ebola. However, since the physical condition of a passenger can deteriorate during a long international flight, entry screening at destination countries was also instituted as an auxiliary precaution to

prevent the entry of passengers with Ebola into their country.”

Uol reports that in a recent study, published in *Preventive Medicine*, Jacobson and his colleagues provide an alternative policy for Ebola entry screening at airports in the United States.

“Security measures implemented after 9/11 taught us a lot about what not to do,” Jacobson added. “We learned that finding the one person who intends to do harm out of several million passengers is akin to finding a needle in a haystack.

“This alternative policy in regards to Ebola transmission incorporates a social contact tracing risk level, in addition to the current health risk level used by the CDC. It requires additional passenger input data, taking into account not only a passenger’s exposure to Ebola, but also the potential to conduct social contact tracing if they are not initially monitored or their movements are not initially restricted yet later become ill with Ebola.”

The performances of both the CDC policy and the alternative policy were compared and analyzed using a scenario-cost-based sensitivity analysis and an expected-cost-



based optimization model analysis.

“Indeed, using a secondary risk level such as the potential footprint for social contact tracing level may be a useful consideration when the current CDC policy is evaluated,” said Jacobson, who has conducted research on aviation security for more than twenty years. “Although the implementation of the secondary risk level requires additional data collection costs and time, the potential societal and public health benefits may justify such expenditures and efforts.”

According to the authors, the United States initiated entry screening in August 2014 and enhanced its entry screening program after the first imported Ebola case was diagnosed. The majority of passengers entering the United States from the affected West African countries

(94 percent) arrived at one of five major international airports (New York – JFK, Washington-Dulles, Newark, Chicago-O’Hare, and Atlanta-Hartsfield; note that beginning in late October 2014, all such passengers were required to flying into these five airports). Through November 2014, approximately 12,000 such passengers arrived in the United States, but no confirmed cases were reported among these passengers based on entry screening.

The results presented in the study provide information and guidance for public health decision-makers to enhance the current CDC policy, by using additional information that may impact and influence monitoring and movement restriction decisions.

— Read more in Sheldon H. Jacobson et al., “A Double-risk Monitoring and Movement Restriction Policy for Ebola Entry Screening at Airports in the United States.” *Preventive Medicine* (2016 (DOI: 10.1016/j.ypmed.2016.03.018)).

FDA Clears Roche's Investigational Zika Blood Screening Test

Source:http://www.domesticpreparedness.com/Government/Government_Updates/FDA_Clears_Roche%60s_Investigational_Zika_Blood_Screening_Test/

Apr 05 – **The U.S. Food and Drug Administration today announced the availability of an investigational test to screen blood donations for Zika virus. The screening test may be used under an investigational new drug application (IND) for screening donated blood in areas with active mosquito-borne transmission of Zika virus.**

“The availability of an investigational test to screen donated blood for Zika virus is an important step forward in maintaining the safety of the nation’s blood supply, especially for those U.S. territories already experiencing active transmission,” said Peter Marks, M.D., Ph.D., director of the FDA’s Center for Biologics Evaluation and Research. “In the future, should Zika virus transmission occur in other areas, blood collection establishments will be able to continue to collect blood and use the investigational screening test, minimizing disruption to the blood supply.”

On Feb. 16, the FDA issued [guidance](#) to blood establishments to reduce the risk of transfusion-transmitted Zika virus. In the

guidance, the FDA recommends that areas with active transmission of Zika virus obtain Whole Blood and blood components from areas without active transmission of Zika virus. As a result of this recommendation, local blood collection in Puerto Rico was suspended, and on March 7, the Department of Health and Human Services announced that it arranged for shipments of blood products from the continental U.S. to Puerto Rico.

The FDA guidance further states that establishments in areas with active Zika transmission may collect locally if a licensed or investigational test for screening donated blood is available. Once screening of blood donations for Zika virus using the investigational test begins, blood establishments in Puerto Rico may resume collecting donations of Whole Blood and blood components. However, the [FDA’s recommendations for Zika blood donor deferrals](#) remain in place.

The FDA, the Office of the Assistant Secretary for Preparedness and Response/Biomedical Advanced



Research and Development Authority, and the Centers for Disease Control and Prevention are working to assist product manufacturers with development of Zika virus blood donation screening tests to help protect the nation's supply of blood and blood components during this outbreak.

"The close collaboration between the FDA and the product manufacturer was essential to expediting availability of this investigational test," said Luciana Borio, M.D., the FDA's

acting chief scientist. "This type of cooperation, which is typical of the FDA and its U.S. government partners during all public health emergencies, requires a tremendous agency effort and underscores the importance of having adequate resources available to support essential Zika virus response activities."

The test is manufactured by Roche Molecular Systems, Inc., based in Branchburg, New Jersey.

NIH doctors describe severe case of Ebola virus disease

Source: <http://www.medicalnewstoday.com/releases/308706.php>

Apr 05 – For more than a month in 2015, a multidisciplinary team including infectious disease and



critical care physicians and nurses, respiratory therapists and other specialists at the **National Institutes of Health (NIH)** treated a critically ill patient who had contracted Ebola virus disease in Sierra Leone. A new report by the medical caregivers details the clinical course of the **34-year-old American healthcare worker** who was admitted to the NIH Special Clinical Studies Unit on day 7 of his illness. **The patient survived his illness with intensive supportive care, despite multi-organ failure.**

Upon admission to the NIH Clinical Center, the patient was enrolled in a clinical trial and

was randomly assigned to receive optimized supportive care only. The trial's other arm included treatment with experimental therapies. In the first few days after admission, the patient's condition worsened dramatically and he experienced sequential organ failure, despite intensive supportive care that included maintenance of optimal fluid and electrolyte balances. His prognosis was poor.

In addition to declines in kidney and liver function, the patient experienced severe neuromuscular weakness that led to respiratory failure, and he required mechanical ventilation for 10 days. Complications also included meningoencephalitis, a frequently fatal condition involving inflammation of the brain and meningeal tissue, the protective outer layers of the brain and spinal column. On day 33 of the patient's illness, when he no longer was shedding virus, doctors performed magnetic resonance imaging (MRI) scans and detected multiple sites of tissue damage (lesions) in both the brain and spinal column, consistent with the multiple nervous system abnormalities experienced by the patient during his illness. Meningoencephalitis has been previously described as a complication of Ebola virus infection, but, the NIH doctors note, the new report is the first to include MRI findings and a detailed physical examination of a patient who received supportive care only.

Ultimately, the patient survived his illness. **When examined 7 months after his hospital admission, almost all of his neurological abnormalities had disappeared, and MRIs showed that most of the previously seen lesions had resolved.** This report highlights that sequential organ failure may occur in patients with severe Ebola virus disease despite meticulous attention to fluid and electrolyte balances, and that near complete recovery is possible with intensive-level supportive care alone. NIH Institutes contributing to the report were the NIH Clinical Center; the National Eye Institute; the National Heart, Lung and Blood Institute; the



National Institute of Allergy and Infectious Diseases; and the National Institute of Neurological Disorders and Stroke.

Testing the accuracy ratio of the Spatio-Temporal Epidemiological Modeler (STEM) through Ebola hemorrhagic fever outbreaks

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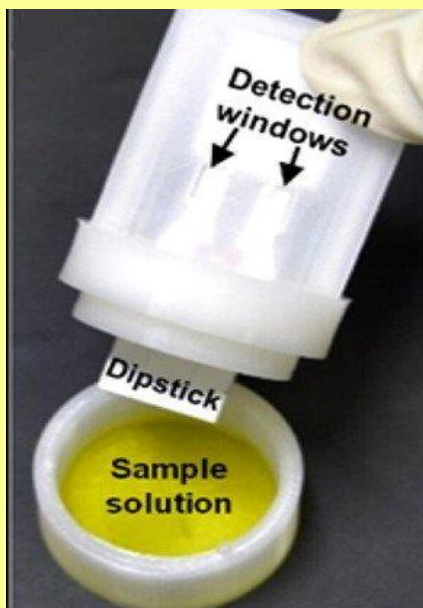
Epidemiology and Infection / Volume 144 / Issue 07 / May 2016, pp 1463-1472

Source: <http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=10260040>

Mathematical modelling is an important tool for understanding the dynamics of the spread of infectious diseases, which could be the result of a natural outbreak or of the intentional release of pathogenic biological agents. Decision makers and policymakers responsible for strategies to contain disease, prevent epidemics and fight possible bioterrorism attacks, need accurate computational tools, based on mathematical modelling, for preventing or even managing these complex situations. In this article, we tested the validity, and demonstrate the reliability, of an open-source software, the Spatio-Temporal Epidemiological Modeler (STEM), designed to help scientists and public health officials to evaluate and create models of emerging infectious diseases, analyzing three real cases of Ebola hemorrhagic fever (EHF) outbreaks: Uganda (2000), Gabon (2001) and Guinea (2014). We discuss the cases analyzed through the simulation results obtained with STEM in order to demonstrate the capability of this software in helping decision makers plan interventions in case of biological emergencies.

Paper-based test to help prevent food poisoning

Source: <http://www.homelandsecuritynewswire.com/dr20160407-paperbased-test-to-help-prevent-food-poisoning>



Apr 07 – **Food poisoning is a stomach-churning, miserable condition that sends thousands of Americans to hospital emergency rooms every year.** Now scientists report in ACS' journal *Analytical Chemistry* a simple, paper-based test that could help detect pathogens hitchhiking on food before they reach store shelves, restaurants and, most importantly, our stomachs.

The ACS reports that according to one estimate by the U.S. Department of Agriculture, the foodborne bacteria *Salmonella* alone led to nearly **20,000 hospitalizations and almost 400 deaths in 2013.** Economists estimate that the treatment of all these patients and the related **productivity losses cost more than \$3 billion annually.** And those numbers account for just one of the fifteen pathogens responsible for most of the food poisoning cases. Current testing for pathogens in food requires complicated machinery and trained personnel. But these tests don't provide the simple results



needed in large-scale food manufacturing. So Je-Kyun Park and colleagues set out to find a more practical way to detect foodborne pathogens.

The researchers developed a paper-based test that can handle the multistep reactions necessary for this kind of analysis by controlling the pore size of the paper. When dipped into solutions containing the *E. coli* strain O157:H7, *Salmonella typhimurium* or both, lines appeared on the dipstick indicating a positive result **within fifteen minutes**. Because the method requires dipping the device into a solution once and produces an easy-to-read result, it could be performed by workers without special training, the researchers say.

— Read more in Juhwan Park et al., “Pressed Paper-Based Dipstick for Detection of Foodborne Pathogens with Multistep Reactions,” *Analytical Chemistry* 88, no. 7 (15 March 2016): 3781–88.

Limited awareness or concern about Zika virus in U.S.

Source: <http://www.homelandsecuritynewswire.com/dr20160408-limited-awareness-or-concern-about-zika-virus-in-u-s>

Apr 08 – A recent survey by the Associated Press-NORC Center for Public Affairs Research finds that three-quarters of Americans who have heard at least a little about the Zika virus are aware that the virus is linked to birth defects in babies born to infected mothers. However, the survey found that most Americans are unclear about the availability of tests to diagnose Zika and whether or not preventative vaccines and effective medicines exist to treat it.



NORC [reports](#) that in February 2016, The World Health Organization (WHO) and the Centers for Disease Control and Prevention (CDC) both took steps to alert the public about the danger of the Zika virus. As of 30 March, the CDC has reported 312 cases of the Zika virus in the United States and heightened its efforts in response to Zika and the cases of microcephaly and other neurological disorders associated with the virus.

“The Zika virus has the potential to become a critical problem in the United States. This survey shows that there is more work to be done to raise awareness among the public,” said Trevor Tompson, director of the AP-NORC Center. “When it comes to responding to this public health threat, the results do show that the public is supportive of policy approaches designed to prevent the spread of Zika in the United States.”

Key findings include:

- Four in ten Americans have heard only a little or nothing at all about the Zika virus.
- Ninety percent of those who have heard of Zika know that it can be spread through the bite of a mosquito carrying the virus; however, only 57 percent are aware that Zika can be spread through sexual intercourse with an infected person.
- Despite the ongoing Zika outbreak in Brazil, only a quarter of Americans believe that American athletes should withdraw from the 2016 Summer Olympics in Rio de Janeiro.

“As the Zika virus unfolds, it will be critically important to communicate effective prevention strategies to Americans,” said Caitlin Oppenheimer, senior vice president and director of public health at NORC at the University of Chicago. “This survey and other measures will help build understanding of Zika and identify areas requiring additional communication efforts.”

The nationwide poll of 1,004 adults used AmeriSpeak, the probability-based panel of NORC at the University of Chicago. Interviews were conducted between 17 and 21 March 2016, online and using landlines and cell phones.





Researchers Discover New Ebola-Fighting Antibodies in Blood of Outbreak Survivor

Source: <http://allafrica.com/stories/201602231600.html>

Feb 16 – **A research team that included scientists from The Scripps Research Institute (TSRI) has identified a new group of powerful antibodies to fight Ebola virus.**

The antibodies, isolated from the blood of a survivor of the 2014 Ebola outbreak and the largest panel reported to date, could guide the development of a vaccine or therapeutic against Ebola. The new study also revealed a previously unknown site of vulnerability in the structure of the deadly virus.

"Our Science paper describes the first in-depth view into the human antibody response to Ebola virus," said team leader Laura Walker, senior scientist at Adimab, LLC, and an alumna of TSRI's PhD program. **"Within weeks of receiving a blood sample from a survivor of the 2014 Ebola outbreak, we were able to isolate and characterize over 300 monoclonal antibodies that reacted with the Ebola virus surface glycoprotein."**

Co-authors of the paper included TSRI lab heads Professor Erica Ollmann Saphire (also co-director of the Global Virus Network Center of Excellence at TSRI); Associate Professor Andrew Ward; and Professor Dennis Burton (also scientific director of the International AIDS Vaccine Initiative's (IAVI) Neutralizing Antibody Center and the National Institutes of Health (NIH)-sponsored Center for HIV/AIDS Vaccine Immunology and Immunogen Discovery (CHAVI-ID), both at TSRI). The study [was published](#) February 18, 2016, in the journal *Science*.

Searching for Powerful Antibodies

Studies at TSRI and other institutions have shown that Ebola virus has several weak points in its structure where antibodies can target and neutralize the virus. However, the immune system typically needs a long period of trial and error to produce the right antibodies against these sites, so researchers have been working with only a small library of anti-Ebola options.

Despite this limited library, researchers have had some success in designing antibody "cocktails" that target several weak points at

once. One treatment in development, Mapp Biopharmaceutical Inc.'s **ZMapp™, is a cocktail of three mouse antibodies modified to resemble human antibodies.** This treatment was successful in primate trials and used as an experimental human treatment in the 2014 outbreak.

With ZMapp showing promise, researchers are searching for additional antibodies to fight Ebola.

"These types of antibodies could be developed into different types of antibody cocktails or therapeutics, in addition to advancing vaccine design," said Ward.

Bringing New Technologies Together

The new study took advantage of a recently launched single B cell isolation platform from Adimab, which researchers used to quickly find more than 300 antibodies that reacted with the Ebola virus surface glycoprotein—the viral structure that fuses with host cells.

Researchers at TSRI and the U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID) then performed an in-depth analysis of the therapeutic potential of these antibodies. Crucial to this effort was the TSRI development of antigens—molecules that can "fish" for antibodies in blood serum.

"That's where our expertise came into play," said the study's first author Zachary Bornholdt, an assistant professor in the Ollmann Saphire lab at the time of the study and current associate director of antibody discovery at Mapp Biopharmaceutical.

Remarkably, **77 percent of the antibodies in the new study showed the potential to neutralize Ebola virus, and several antibodies demonstrated significant protection against the virus in mouse models.**

"We identified three highly protective antibodies that each targeted a different site—or epitope—on the Ebola virus glycoprotein," Bornholdt said.

Because these are human antibodies, not modified mouse antibodies, researchers potentially



could quickly use them to design a treatment. Furthermore, with these new antibodies available, researchers might be able to design secondary treatments in case the Ebola virus mutates to escape other treatments.

Next, the researchers used an imaging technique, called electron microscopy, to investigate exactly where the antibodies were binding with Ebola virus. The imaging, led by the Ward lab at TSRI, revealed a previously unknown Achilles heel on the virus: a spot at the base of the Ebola virus surface glycoprotein.

While Ebola virus mutates rapidly, this site is part of the virus's larger machinery and tends to stay the same. This means targeting this spot could neutralize many strains of Ebola.

To encourage further studies, the researchers have made the genetic sequences of these

antibodies available to the research community.

Stopping Emerging Diseases

The researchers believe the techniques in this study could be used to find treatments for other emerging diseases, such as Zika virus.

Bornholdt thinks of the new study as a test case. In just over a year, the combination of Adimab and TSRI methods led to the discovery of promising antibodies—and future experiments should move even more quickly now that researchers have experience with these tools.

“With other outbreaks, we could take blood samples from the first wave of survivors and potentially produce a therapeutic rapidly,” said Bornholdt. “That’s the long-term goal.”

ECBC's Biothreat Detection Self-Test Kit for Soldiers

Source: <http://globalbiodefense.com/2016/02/26/ecbc-develops-biological-self-test-kit-for-soldiers/>

Feb 26 – The Edgewood Chemical Biological Center's (ECBC) newly developed biological self-test kit can quickly tell soldiers on the ground whether they've been exposed to a biological threat agent, and automatically send it in to the warfighter and his commander.



Known as SmartCAR, the device uses a colorimetric assay to identify the presence of a pathogen of concern such as ricin, anthrax or plague. The warfighter or a field medic can take a sample, place it in a small vial containing a reagent that will bind the pathogen of concern, then place a drop of the solution on the strip.

The strip is placed inside the handheld SmartCAR which then reads whether there is one line on the strip, meaning no exposure, or two lines on the strip – bad news.

The SmartCAR then transmits the results over Nett Warrior, an integrated situational awareness system that displays tactical data on a smartphone. Information passes through Nett Warrior and up the chain of command.

If the test is positive, the warfighter and field medic know to immediately begin treatment, and the information is automatically entered into the warfighter's medical record. The commander immediately knows about this individual warfighter, and if more are exposed, knows how many and where they are. This provides the commander with vital situational awareness to cordon off the area and notify the chain of command.

“Although much of the technology in SmartCAR is commercial off-the-shelf, it is a real innovation because it is a handheld field-ready device that not only determines exposure, but provides its own data management and distribution,” said Patricia Buckley, Ph.D. an ECBC research scientist on the SmartCAR development team.





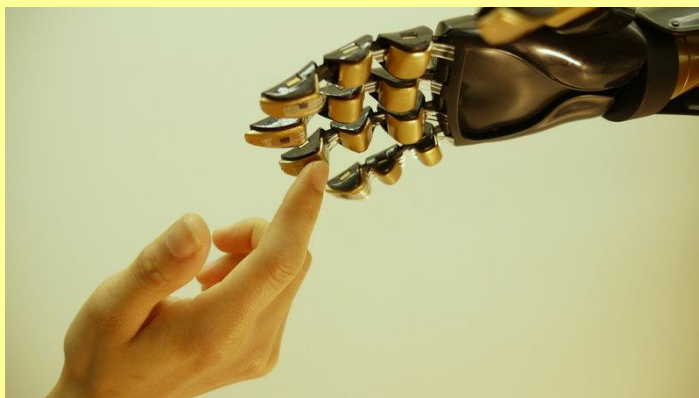
SmartCAR is only limited by the strip assays available. It can also capture data from environmental sampling for field reconnaissance. An advance chemical biological team can take swab samples of suspicious surfaces and analyze them. By adding a device known as an impinger, an instrument for collecting samples of suspended particles by forcing them into a liquid stream, the team can also analyze air samples. This provides vital information to commanders who must decide whether or not to send units into suspect areas.

SmartCAR has important civilian applications, too. It can be brought to austere and forbidding environments to test drinking wells for water quality. A test strip that identifies the presence of Ebola could be used by medical personnel sent to control an outbreak. Its data management and distribution capabilities make it ideal for humanitarian relief mission personnel to establish restricted areas and determine resource needs.

Just Like Human Skin, This Plastic Sheet Can Sense and Heal

By Joe Palca

Source: <http://www.npr.org/sections/alltechconsidered/2016/04/11/473801506/just-like-human-skin-this-plastic-sheet-can-sense-and-heal>



the things real skin can do.

Apr 11 – Artificial limbs have come a long way since the days of peg legs and hooks for hands. But one thing most of these prosthetics lack is a sense of touch.

Zhenan Bao intends to change that. Bao is a chemical engineer at Stanford University. Her long-term goal is to make an artificial skin out of plastic that can do most — if not all — of

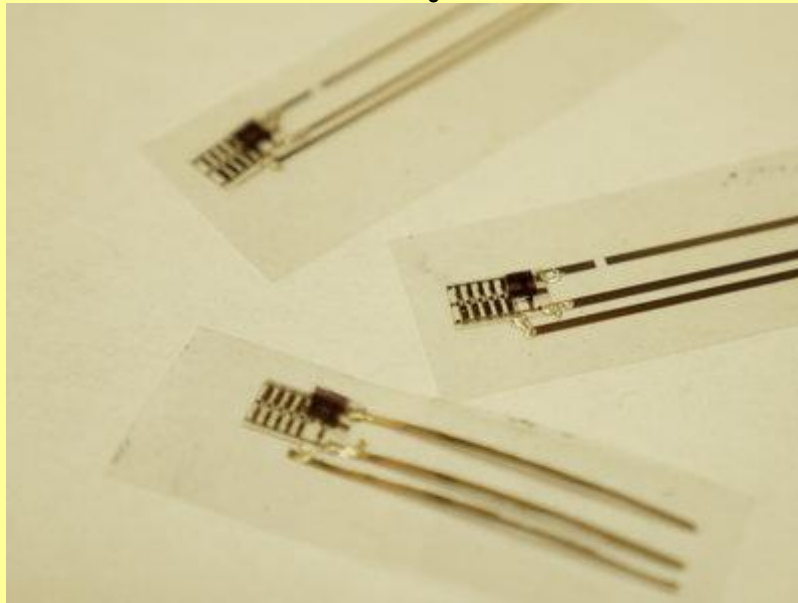


Skin is pretty remarkable stuff. It keeps dangerous bacteria and germs out and our innards in. It's flexible, it can sense when we touch things and it can heal itself when cut.

Bao has to make a pretty remarkable material if she's going to mimic all that — and she's getting there.

She recently took me on a tour of her lab in Shriram Center for Bioengineering and Chemical Engineering.

"This is where we make some of the devices," says Bao as we enter one of her lab spaces. We're standing next to a large sealed chamber with a clear window. There are long black



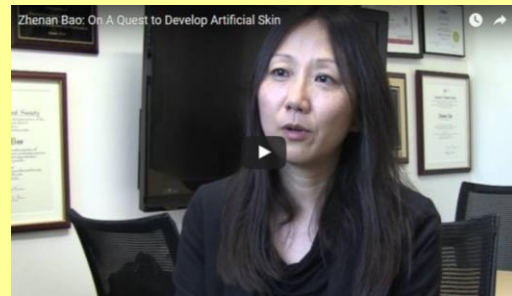
gloves sticking straight out from the bottom of the box as if there were someone inside trying to reach out. But it's actually just the air pressure in the box. You use these gloves to reach into the box.

This "nitrogen box" is where new devices are tested before they're exposed to the air.

Bao builds her devices from a plastic she has specially designed that mimics the electrical properties of silicon, the element semiconductor chips are made from.

She takes a small, clear square of plastic from a container on her desk. It's about the thickness of a piece of skin and it contains a nano-scale pressure sensor.

It looks to me like an ordinary piece of plastic. You can't really see it, but there's a pressure sensor sandwiched inside layers of plastic. It changes its electrical properties depending on how hard you press on it.



But it's not enough to just make a plastic with a built-in pressure sensor. You need to build an electrical circuit into the plastic that can relay what the pressure sensor is sensing. Bao shows me how they've done that.

"So you can see there are some really fine lines," she says. "These are electrodes that can turn the touch signal into electrical pulses."

A pressure sensor is sandwiched inside layers of plastic. It senses the pressure unleashed on the plastic and changes its electrical properties

Ultimately, the idea is to feed those electrical impulses to nerve bundles that can transmit them to the brain.

Skin will heal if you scratch it. To mimic that property, Bao and her colleagues made a plastic that repairs itself when it's torn.

"Depends on how we design the molecules," she says. "Some can repair very quickly, within a minute, some take hours or days to recover."

Making a flexible, stretchable plastic was also a problem at first. "But now we also have a new version that can stretch to eight times its original length," Bao says.

Another problem Bao and her colleagues are working to crack is how to power their artificial skin.

One idea is to use light. Postdoctoral scholar Xiaodan Gu shows me a polymer that can turn light into electricity. This also doesn't look too different from an ordinary plastic wrap.

He holds a piece of the plastic out so I can see it. "Those shiny



things are electrodes, and on the top side you can see these tinted color ... they absorb light and transfer the light into the electricity," he says.

Gu hopes to be able to use a version of his polymer to manufacture cheaper solar panels. Bao says there'll be other spinoffs as her lab works to build plastics with a variety of electrical properties. She has already started a

company that plans to sell a version of her plastic for touch screens.

"Our really long term goal is to use this to help patient(s) who lost their limb(s) to recover their sense of touch," Bao says.

Bao says there is still a lot of work before she'll have a version of her skin to test on patients. But with all the progress she's making, it seems that day might not be far off.

Joe Palca is a science correspondent for NPR. Since joining NPR in 1992, Palca has covered a range of science topics — everything from biomedical research to astronomy. He is currently focused on the eponymous series, "Joe's Big Idea." Stories in the series explore the minds and motivations of scientists and inventors. Palca has won numerous awards, including the National Academies Communications Award, the Science-in-Society Award of the National Association of Science Writers, the American Chemical Society James T. Grady-James H. Stack Award for Interpreting Chemistry for the Public, the American Association for the Advancement of Science Journalism Prize, and the Victor Cohn Prize for Excellence in Medical Writing. With Flora Lichtman, Palca is the co-author of Annoying: The Science of What Bugs Us (Wiley, 2011). He comes to journalism from a science background, having received a Ph.D. in psychology from the University of California at Santa Cruz where he worked on human sleep physiology.

Zika virus “scarier than we initially thought”: U.S. health officials

Source: <http://www.homelandsecuritynewswire.com/dr20160412-zika-virus-scarier-than-we-initially-thought-u-s-health-officials>

Apr 12 – Dr. Anne Schuchat from the Centre for Disease Control and Prevention (CDC) said the Zika virus is more of a threat than previously thought.

Speaking at a White House press conference, she said **there was potential for the virus to spread to more U.S. states than experts first believed**. Dr. Schuchat told reporters: “Most of what we’ve learned is not reassuring. Everything we look at with this virus seems to be a bit scarier than we initially thought.”



USA Today reports that according to the latest CDC report, there have been 346 confirmed cases of Zika confirmed in the continental United States, all involved carriers who had recently visited a Zika-affected country, or individuals with whom the carrier came into contact.

Of these cases, thirty-two were pregnant women and seven were sexually transmitted. Specialists say Zika is spread to people primarily through the bite of an infected *Aedes* species mosquito. This species of mosquito is present in thirty U.S. states. There is currently

no known cure or vaccine for Zika.

President Obama has asked Congress for \$1.9 billion to deal specifically with the crisis before the weather warms up.



Until Congress approves the request, the federal government is using money left in the Ebola virus fund, which totaled \$589 million.

Dr. Anthony Fauci from the National Institute of Allergy and Infectious Disease said: "This is a very unusual virus that we can't pretend to know everything about.

"I'm not an alarmist... but the more we learn about the neurological aspects, the more we look around and say this is very serious.

Uninfected or asymptomatic? Diagnostic tests key to forecasting major epidemics

Source: <http://www.medicalnewstoday.com/releases/308725.php>

Apr 06 – **Major epidemics such as the recent Ebola outbreak or the emerging Zika epidemic may be difficult to forecast because of our inability to determine whether individuals are uninfected or infected but not showing symptoms,** according to a new study from the University of Cambridge. The finding emphasizes the need to develop and deploy reliable diagnostic tests to detect infected individuals whether or not they are showing symptoms, say the researchers.

Emerging epidemics pose a significant threat to human health worldwide. A principal challenge in infectious disease epidemiology is accurately forecasting the threats posed by diseases early in emerging outbreaks. Accurate real-time forecasts of whether or not initial reports of cases of disease will be followed by a major outbreak - an epidemic in which large numbers of people become infected - are necessary to determine which control measures should be deployed.

For all infectious diseases, there is a delay between infection and the appearance of symptoms, known as the 'incubation period', during which infected individuals are classed as 'presymptomatic'. The incubation period, say researchers from the Department of Plant Sciences at Cambridge, can drive significant uncertainty in forecasting during the earliest stages of epidemics.

In research funded by the Biotechnology and Biological Sciences Research Council, the team used **mathematical modelling to evaluate the effect of presymptomatic infection on predictions of major epidemics, choosing the Ebola virus as a case study.** Their results, published in the online journal *PLOS Computational Biology*, show for the first

time that precise estimates of the current number of infected individuals - and consequently the chance of a major outbreak in the future - cannot be inferred from data based on symptomatic cases alone. This is the case even if factors such as the average infection rate and the death or recovery rates of individuals in the population can be estimated accurately.

"If we are able to use diagnostic tests to determine whether individuals who do not show symptoms are susceptible or are instead infected but not showing symptoms, we'll be in a better position to estimate the chance of a major outbreak," says Dr Nik Cunniffe, who led the study. **"Since the reliability of diagnostic tests affects the extent to which forecasting is possible, it's important not just to develop new diagnostic tests, but also to ensure those we have are continually refined and promptly deployed."**

Although the researchers chose Ebola as a representative case study of a disease for which reports of initial cases are not always followed by a large epidemic, they say their results are applicable to other outbreaks, including not just those that affect humans.

"These findings - that accurate forecasting relies on informing models with data on presymptomatic infections - hold true for anything from the current Zika outbreak through to animal diseases such as bluetongue and even plant pathogens such as *Xylella fastidiosa*, that is currently causing such devastation to olive groves in southern Italy," adds first author Robin Thompson, a former PhD student at the Department of Plant Sciences, and now a postdoctoral



researcher at the University of Oxford. The researchers acknowledge that their models are based on an idealized setting, in which symptomatic cases and deaths were recorded perfectly and in which the values of disease transmission parameters were known exactly. However, they say that additional

uncertainty will only make forecasting even more challenging. Presymptomatic infection alone makes prediction imprecise, reinforcing the need to better estimate levels of hidden infection in populations using diagnostic testing.

The Nation Faces Multiple Challenges in Building and Maintaining Biodefense and Biosurveillance

GAO-16-547T: Published: Apr 14, 2016. Publicly Released: Apr 14, 2016.

Source: <http://www.gao.gov/assets/680/676548.pdf>

The biodefense enterprise is fragmented and does not have strategic oversight to promote efficiency and accountability. Specifically, the biodefense enterprise lacks institutionalized leadership enterprise-wide to provide strategic oversight and coordination. In 2011, GAO reported, there are more than two dozen presidentially appointed individuals with biodefense responsibilities and numerous federal agencies with mission responsibilities for supporting biodefense activities, but no individual or entity with responsibility for overseeing the entire biodefense enterprise. In 2011, GAO reported that the Homeland Security Council (HSC) should consider establishing a focal point for federal biodefense coordination. In December 2014, National Security Council (NSC) staff, which supports the HSC, told GAO that two of its directorates work together as the focal point for federal biodefense efforts. This is an important step in promoting a comprehensive and coordinated approach to biodefense, but strategic leadership issues persist. In October 2015, a report by the Blue Ribbon Study Panel on Biodefense stated strategic leadership issues persist and called for a focal point to provide strategic leadership, noting that elevating authority above the agency-level can help overcome the challenges faced by the biodefense enterprise. The Study Panel found that White House councils and offices generally only become involved when a specific biodefense issue affects a prominent ongoing responsibility—a method which is not

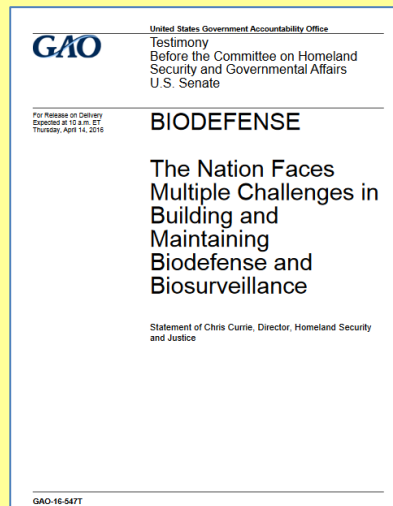
consistent with our call for a strategic approach.

In 2011, GAO also reported that while some high-level biodefense strategies have been developed, there is no broad, integrated national strategy that encompasses all stakeholders with biodefense responsibilities that can be used to guide the systematic

identification of risk; assess resources needed to address those risks; and prioritize and allocate investment across the entire biodefense enterprise. GAO reported that the overarching biodefense enterprise would benefit from strategic oversight mechanisms, including a national strategy, to help

ensure efficient, effective, and accountable results, and suggested the HSC take action. However, as of February 2016, such a strategy had not been developed.

Biosurveillance, an aspect of biodefense, also faces key challenges at all levels of government that transcend what any one agency can address on its own, and our more recent and ongoing work continues to highlight these challenges. In 2010, GAO recommended the HSC establish a focal point to lead the development of a national biosurveillance strategy that



clarifies roles and responsibilities, provides goals and performance measures, and identifies resource and investment needs, among other elements. However, the recommendations have not been fully implemented. Since 2009 GAO's has also identified challenges with specific biosurveillance capabilities. Specifically, GAO has identified biosurveillance capability challenges with, among other topics, (1) state and local public health capabilities, (2) animal health surveillance capabilities, and (3) two Department of Homeland Security biosurveillance efforts—the National Biosurveillance Integration Center (NBIC) and the BioWatch Program (which aims to provide early indication of an aerosolized biological weapon attack). However, not all recommendations have been implemented.

Why GAO Did This Study

The nation's biodefense enterprise is the whole combination of systems at every level of government and the private sector that can contribute to protecting the nation and its citizens from potentially catastrophic effects of a biological event. It is composed of a complex collection of resources, programs, and initiatives, designed for different purposes and

dedicated to mitigating various risks, both natural and intentional.

In an era of rapid transit and global trade, the public health and agricultural industries, as well as natural ecosystems including native plants and wildlife, face increased threats of naturally occurring outbreaks of infectious disease and accidental exposure to biological threats. Also, threats of bioterrorism, such as anthrax attacks, highlight the continued need for biosurveillance systems that provide early detection and warning about biological threats to humans.

This statement summarizes GAO's work on challenges to building and maintaining the nation's biodefense and biosurveillance. This statement is based on GAO work issued from December 2009 through March 2016 on various biodefense and biosurveillance efforts. GAO also reviewed the 2015 report of the Blue Ribbon Study Panel on Biodefense for updates, but has not independently assessed the entirety of the conclusions, recommendations or methods. To conduct the prior work, GAO reviewed relevant laws, presidential directives, policies, strategic plans, and other reports; surveyed states; and interviewed federal, state, and industry officials, among others.

