

June 2016

# CBRNE NEWSLETTER TERRORISM

*E-Journal for CBRNE & CT First Responders*



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**CBRNE-Terrorism Newsletter – 2016©**

June 2016

Website: [www.cbrne-terrorism-newsletter.com](http://www.cbrne-terrorism-newsletter.com)**Editor-in-Chief****BG (ret) Ioannis Galatas MD, MA, MC  
PhD cand**Consultant in Allergy & Clinical Immunology  
Medical/Hospital CBRNE Planner  
Senior Asymmetric Threats Analyst  
CBRN Scientific Coordinator @ RIEAS  
Athens, Greece☛ Contact e-mail: [igalatas@yahoo.com](mailto:igalatas@yahoo.com)**Assistant Editor****Panagiotis Stavrakakis MEng, PhD, MBA, MSc**Hellenic Navy Capt (ret)  
Athens, Greece**Co-Editors/Text Supervisors**

1. Steve Photiou, MD, MSc (Italy)
2. Dr. Sarafis Pavlos, Captain RN(ret'd), PhD, MSc (Greece)
3. Kiourktsoglou George, BSc, Dipl, MSc, MBA, PhD (cand) (UK)

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**EDITOR****Mendor Editions S.A.**3 Selinountos Street  
14231 Nea Ionia  
Athens, Greece  
Tel: +30 210 2723094/-5  
Fax: +30 210 2723698Contact e-mail: [Valia Kalantzi info@mendor.gr](mailto:Valia.Kalantzi@info@mendor.gr)

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## Editorial

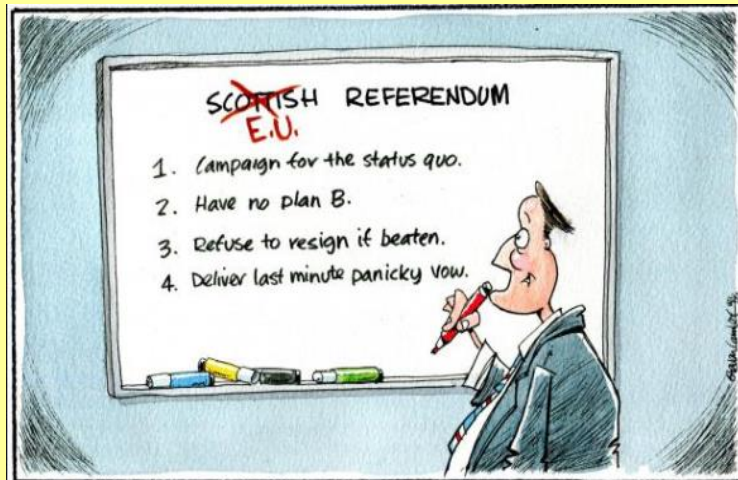
Brig Gen (ret'd) Ioannis Galatas, MD, MA, MC

*Editor-in-Chief*  
CBRNE-Terrorism Newsletter

### *Dear Colleagues,*

Another bloody month this time on the other side of the ocean – US. This time a single terrorist attacked a gay nightclub and enjoyed killing and injuring people in Orland. This incident ignited a lot of debates – gun control; Republicans vs. Democrats; was it an act of terrorism; why the US President is reluctant to spell the word Islamic terrorism; why Islamists hate homosexuals – and many more (as usual). The point is that Islamic State put another success in its calendar that is becoming impressive. On the other hand we had an equally significant terrorist attack in China's Yunnan Province where four terrorists killed with knives 29 and injured 130 commuters in a train station before they shot dead by security forces. This incident did not get the wide mass media coverage perhaps because it happened very far away from our bubble-word! Let us hope that next attack in European or American soil will not copy their methodology.

Then we have the Brexit referendum to be conducted on June 23, 2016. Again lots of debate about the implications and consequences that Brexit will have on security (national and international grounds). It seems that the assassination of MP Jo Cox in the UK (June 16, 2016) might shift voters to decide in favor of Remain. This is the second related incident that happens in critical chokepoints related to EU own existence (the first one



was in Sept 11, 2003 when Anna Lidh was murdered in Sweden). Independence wind still blows in Catalonia (Spain), Scotland (UK) but also in Texas (USA) and perhaps soon we will experience new candidates (i.e. France or Italy). European Union at its heights! **My guess?** Remain will win but the small difference with Brexit will cause near future problems.

**UPDATE** June 23: Wrong guess! Brexit wins with more than 51%.



**CBRNE-TERRORISM NEWSLETTER – June 2016**

In Greece the much expected loan of €10.5 bil was given but is expected to disappear between international banking funds and state depts to business community. Again no sign of progress or planning for progress.

[Back cover from a tavern menu in the Island of Naxos – Greece](#)

National depression rapidly changes from subclinical to clinical and left governance proved more insufficient and corrupted than previous ones. Illegal immigration and refugees' tsunamis now shifted towards Italy due to closed borders with FYROM – but at least we manage to evacuate the Oidomeni camp (opposite borders with FYROM) and open the transborder railway connecting Greece with Europe. Many (mostly Muslim) camps and hotspots are regularly announced and only God knows where this situation will lead in the near future. Thousands of bored refugees and immigrants with nothing to do, just sitting there and complaining about everything when not protesting or closing national roads. I just wonder if we ask them to work what would be their reply – most probably that they wish to travel to Europe and get the benefits provided there without having to work (just make babies). The impact of this problem is becoming visible on the heavy industry of Greece – tourism. And it will become worse next year if something drastic does not happen in our country.

In Brazil – less than 2 months from the opening ceremony for Rio2016 – the situation remains the same despite heightening of security level due to direct (video) threats from the Islamic State. Political instability, public unrest, high crime rates and Zika virus debate compose a not so peaceful environment required for the biggest sports event on Earth. Visiting Brazil for the Games? No Thanks! My sofa and wide screen TV will serve me best!

UEFA Euro 2016 is terrorism-free for the time being – hope to stay live this to the end. But street fights are worse than ever before and for me is a good excuse to put an end to this festivity and alike. There is no reason to mobilize thousands of security personnel and means just to watch 22 players hit a ball! Money is welcomed; but lives and easy living is more valuable than temporary profits.



This month the Editor participated in two field drills – one as member of the EU IMPRESS Project's consortium (Palermo, Italy) and the other as CBRNe consultant for the EU EDEN Project for Catholic University of Sacred Heart/Gemelli Policlinico (Rome, Italy). A common conclusion from both live drills is (regarding CBRNe operations) that "if you cannot (or are not willing to) do it right during drills then most probably you will not do it right during the real thing!" We all speak highly about new emerging and asymmetric threats – especially CRE – but we do not do much to be well prepared in order to survive and save others. It is in our hands to change things and dispell the inherent belief that "it will not happen to us!" – because it does!

**Take care First Responders!**

*The Editor-in-Chief*



## Athletes given 450,000 condoms at Rio 2016 Olympics, three times more than in London

Source: <http://www.dailymail.co.uk/sport/sportsnews/article-3601770/Athletes-given-450-000-condoms-Rio-2016-Olympics.html>

May 20 – **About 450,000 condoms will be distributed during the Rio de Janeiro Olympics, three times more than for the London Games four years ago**, the International Olympic Committee said on Friday.

Part of the reason was because **100,000 female condoms will be available for the first time**, along with 350,000 condoms for men. About 175,000 packets of lubricant are also being supplied.



**The IOC says the condoms would encourage 10,500 athletes and staff to practice safe sex.**

It's not clear if the increase is related to Brazil's outbreak of the Zika virus. The Associated Press asked the question of the IOC in an email on Friday but did not receive an immediate response.

The Zika virus is carried by mosquitoes, but can also be transmitted sexually. The virus is linked to microcephaly, a condition in which babies are born with undersized brains and skulls.

The condoms will be distributed free from a clinic in the Athletes' Village, or from vending machines. The village opens on July 24 with the Olympics opening on August 5.

Brazilian newspaper Folha de S.Paulo said between 100,000 to 150,000 condoms had been supplied at Olympics since 2000 in Sydney.

The Sao Paulo paper, citing the IOC and local organizers, said the increase was not related to the Zika virus.

## Syrian man with 3 wives and 20 kids to get 214,000 in child benefits

Source: <http://speisa.com/modules/articles/index.php/item.2801/syrian-man-with-3-wives-and-20-kids-to-get-214-000-in-child-benefits.html>

# AMAZING!

May 25 – Syrian refugee, Daham Al Hasan (47), who has fled to Denmark, has 3 wives and 20 children, and he expects the State to pay for them as he cannot work, according to himself.

And it will cost Denmark a lot. Only in child support it is expected that he will get DKK 214,000 (\$32,120) annually.

So far he has received approval to get one of his wives and 17 of his children to Denmark, after he arrived alone. 3 of his children are too old to get approved for (automatic) family reunification.

Daham Al Hasan says that he can not work or learn Danish at the moment because of psychological problems due to missing his children...

## Muslim students in Switzerland must shake female teachers' hands

Source: <http://www.homelandsecuritynewswire.com/dr20160526-muslim-students-in-switzerland-must-shake-female-teachers-hands>

May 26 – Muslim students in Switzerland's Basel Country can no longer refuse to shake a female teacher's hand on religious grounds, according to the canton's office of education, culture, and sport. If they refuse, they would face a fine of up to \$5,000.



The educational authorities made the ruling after two teenage Muslim brothers at a school in the small town of Therwil refused, in early April, to follow the Swiss school customs of shaking the hand of their teacher before and after class.

USA Today reports that the canton's education authority said on Wednesday that an enquiry by the authority legal counsel has confirmed that schools in Basel could make pupils shake teachers' hands, and that this practice does not violate Switzerland's freedom of religion laws.

The Therwil school board initially exempted the two Muslim brothers from shaking hands with female teachers, but this exemption would now be lifted.

The cantonal educational body said students who continue to refuse to shake hands with female teachers would be first warned and then fined, in addition to facing "appropriate" disciplinary measures.

The canton's legal counsel acknowledged in his report that requiring students to shake hands with their teachers may be construed as an intrusion into religious freedom, but since the shaking of hands did not involve the central tenets of Islam, this intrusion was proportionate.

The canton's authority added that the public interest outweighed "considerably" the private interests of the pupils.

This public interest included equal treatment of men and women, the integration of foreigners into Swiss society, and a well-organized school system. In addition, shaking hands was an important social gesture for one's future career, the educational authority said in its statement.

Switzerland has two leading Islamic organizations, and the more moderate of them, the Federation of Islamic Organizations in Switzerland (IOS), said in April that a handshake between a man

and woman was "permissible theologically."

The organization added that politeness is important in Islamic tradition and that a handshake between teachers and students is "not problematic."

The IOS said, though, that it regretted that authorities had sought a legal ruling to settle the issue.

"It could have been resolved more gently by involving the Federation of Muslims in Basel, which could have acted as a mediator," a spokesman, Pascal Gemperli, said.

He said the prospect of a 5,000-Swiss-franc fine was harsh and warned that it could further polarize the debate.

The other Swiss Islamic body, the Islamic Central Council of Switzerland (ICCS), which often takes more fundamentalist positions, accused Basel canton's educational agency of "grossly overstepping their competency," saying such measures would not help integration but rather contribute to a feeling of alienation among Muslims. The ICCS said in a statement that mandating physical contact between individuals amounted to "totalitarianism."

The council said it would take legal action against any effort to



apply the sanctions, and ignore any fines. *USA Today* notes that the initial decision of the school board, to exempt the 14- and 16-year-old Muslim brothers from the requirement to shake the hands of female teachers, led to a public outcry, and Justice Minister Simonetta Sommaruga publicly criticized the decision, arguing that the handshakes are part of Swiss culture.

The younger of the two told a newspaper interviewer that he had discovered the rule in an Internet sermon.

The school district's April decision, in an effort not to violate Switzerland's strict sex discrimination laws, initially granted the two brothers an exemption from shaking the hands of both female and male teachers.

In response to the public interest in the story, the Swiss immigration authorities had suspended the application for Swiss citizenship of the family of the two teenagers. A spokesperson for the local security authorities said that the office for migration in canton

Basel Country noted that it was not unusual for an application to be suspended while additional information was gathered.

On Wednesday, authorities said one member of the family, whose identity was not revealed, had received a warning over "incitement to violence," which could lead to a denial of naturalization.

**There are about 350,000 Muslims in Switzerland, a country of eight million people.**

This is not the first time Muslim families clash with school authorities. Last year, several Muslim parents in different schools demanded that their daughters be exempt from swimming lessons, but the educational bodies rejected their request, and some families were fined when they kept their daughters away from swimming classes.

Muslim families, however, have won court fights against schools that sought to ban the full-face veil.

## 125 scientists rebuke WHO: Do your job and get the Olympics out of Brazil

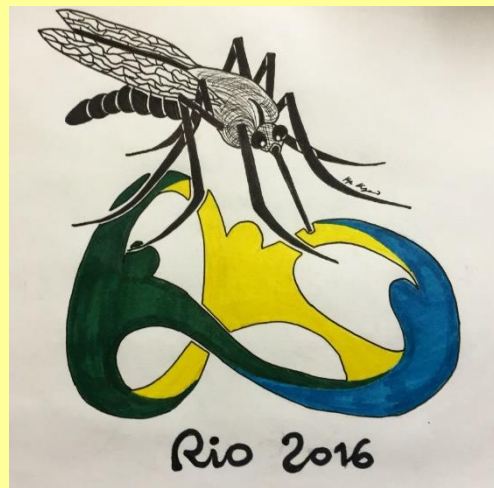
Source: <http://hotair.com/archives/2016/05/27/125-scientists-rebuke-who-do-your-job-and-get-the-olympics-out-of-brazil/>

May 27 – Should the 2016 Olympics get moved out of Brazil, which finds itself in the midst of an epidemic of the Zika virus and under serious criticism over the polluted waters in which some events will be held? A Toronto professor wrote earlier this month in the [Harvard Public Health Review](#) that keeping the Olympics in Brazil would [create an epidemiological disaster](#), accelerating the spread of Zika across the globe faster than resources could catch up to it.

"[W]hile Brazil's Zika inevitably will spread globally — given enough time, viruses always do — it helps nobody to speed that up," wrote Dr. Amir Attaran. "Scientists can disagree on how much the mass migration of 500,000 foreigners will accelerate the virus's global spread and make the pandemic worse— but none can possibly argue that it will slow it down or make things better.

In response, [the World Health Organization declared](#) that there was no need to move the Olympics, and that a "targeted approach" in Rio de Janeiro would be sufficient:

Despite concerns about the spread of the Zika virus through the Olympic Games, the World Health Organization (WHO) did not advise that the games be moved from Rio de Janeiro, which has had high rates of Zika infection.

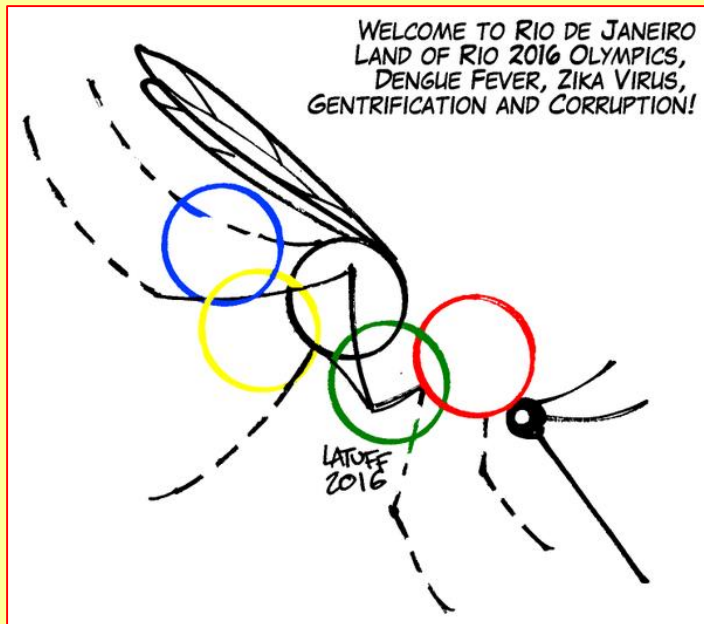




WHO Director Margaret Chan spoke to reporters today, ahead of the World Health Assembly next week.

“You don’t want to bring a standstill to the world’s movement of people,” Chan said today in the press briefing.

Not even through a zone with a viral outbreak that creates such significant medical problems? Attaran



got backup today from 125 doctors and scientists, who [sent a letter to Dr. Chan](#) that demanded more action from WHO than just cheerleading for the Olympics. And it’s not just Zika that has them worried:

A group of 125 prominent scientists, doctors and medical ethicists released a letter calling for this summer’s Olympic Games to be postponed or moved from Rio de Janeiro due to the ongoing Zika virus outbreak in Brazil. ...

New information about the Zika virus was cited by the group in the letter as an additional reason to postpone or move the games. The disease has been found to cause

the birth defect microcephaly in pregnant women and has also been linked to an immunological reaction called Guillain-Barré syndrome.

“That while Zika’s risk to any single individual is low, the risk to a population is undeniably high. Currently, Brazil’s government reports 120,000 probable Zika cases, and 1,300 confirmed cases of microcephaly (with another 3,300 under investigation), which is above the historical level of microcephaly,” the group said.

The group of experts also pointed out that current mosquito-killing programs in Rio were ineffective and that when they looked at dengue fever, which is spread by the same mosquitoes that spread Zika virus, the infections were up markedly in 2016 compared to the previous two years.

The signatories specifically rebuked Chan for the earlier WHO response, and suggested that her conclusions were political rather than scientific. It might be time for “a change in leadership” to refocus on science, the letter declared:

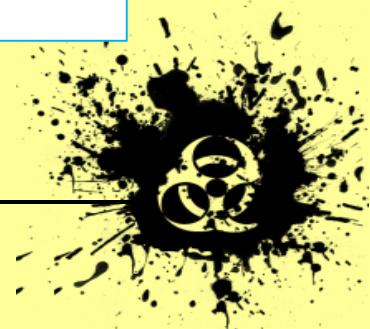
The group also claimed the WHO had a conflict of interest due to a decades-long partnership with the International Olympic Committee and said previous statements by WHO officials have been “troubling.”

“To prejudge that ‘there’s not going to be a lot of problems,’ before reviewing this evidence [on Zika virus effects] is extremely inappropriate of WHO, and suggests that a change in leadership may be required to restore WHO’s credibility,” the group wrote.

Well, the International Olympic Committee is one of the club of global do-good organizations to which WHO and the UN also belong. The IOC has lots of money invested in Rio, and perhaps even more prestige. The water quality for Olympic events is horrendous, and was that way when the IOC awarded the games to Rio. They’ve been warned about it repeatedly, and are shrugging off the serious health risks to the athletes that will compete there. If that’s the case, then why would they second-guess their

*“We are concerned that WHO is rejecting these alternatives because of a conflict of interest.”*

award over Zika’s threat to the attendees? WHO probably feels the need to give the IOC some political cover, even at the expense of epidemiological common sense.



In fact, one of the co-authors of the letter told ABC that he suspects that very dynamic in play:

“What we’re really focused on is can we have transparent, open, frank, televised, out-in-the-open discussion with experts” unconnected to the Olympics, Caplan said. “We think WHO is close to the IOC. ... They work together a lot.”

Perhaps not enough, or perhaps *too* much. At any rate, it’s no longer just Attaran declaring the obvious — that sending 500,000 people into and then out of the Zika zone will create an explosion of the spread of the virus. WHO, the IOC, and the participating nations have now been warned by more than one

*“We make this call despite the widespread fatalism that the Rio 2016 Games are inevitable or ‘too big to fail’. History teaches this is wrong: the 1916, 1940, and 1944 Olympic Games were not just postponed, but cancelled, and other sporting events were moved because of disease, as Major League Baseball did for Zika, and the Africa Cup of Nations did for Ebola.”*

hundred scientists that it’s a very bad idea to conduct the Olympics in an epidemic zone. So far, those warnings are falling on deaf ears.

What has the USOC done about it? They’re issuing long-sleeve shirts, long pants ... and condoms:

What about the CDC? [No worries](#), they declared yesterday:

The widespread Zika virus outbreak in Brazil does not pose enough of a threat to warrant canceling or putting off the Olympic Games set to be held in Rio de Janeiro in August, a leading U.S. health official said on Thursday .

“There is no public health reason to cancel or delay the Olympics,” Dr. Tom Frieden, director of the U.S. Centers for Disease Control and Prevention, said during a luncheon at The National Press Club in Washington.

Ironically, Frieden made this claim at the same time that he argued that Congress’ plan to spend \$1.1 billion to fight Zika as inadequate. “That window is closing,” Frieden declared about the prospects of preparing for the mosquito season in the southern US. Won’t travel back and forth from Rio for the Olympics provide a much larger window? One hundred and twenty-five scientists say yes.

Some of the signatories: **Professor Søren Holm, University of Manchester; Professor Edwin van Teijlingen, Bournemouth University; Professor Glenn Cohen, Harvard Law School; Professor Nir Eyal, Harvard University; Professor Aaron Seth Kesselheim, Harvard Medical School; Professor Christine Mitchell, Harvard Medical School; Professor Stephen Latham, Yale University; Professor Pasquale Patrizio, Yale School of Medicine; Dr Gary I Wadler, former chairman, World Anti-Doping Agency prohibited list committee; Dr Thuy Le, Oxford University, Ho Chi Minh City, Vietnam; Professor Solly Benatar, University of Cape Town; Professor Débora Diniz, University of Brasilia.**

## Chicago Police Try to Predict Who May Shoot or Be Shot

Source: [http://www.nytimes.com/2016/05/24/us/armed-with-data-chicago-police-try-to-predict-who-may-shoot-or-be-shot.html?\\_r=0](http://www.nytimes.com/2016/05/24/us/armed-with-data-chicago-police-try-to-predict-who-may-shoot-or-be-shot.html?_r=0)



May 23 – In this city’s urgent push to rein in gun and gang violence, the Police Department is keeping a list. Derived from a computer algorithm that assigns scores based on arrests, shootings, affiliations with gang members and other variables, the list aims to predict who is most likely to be shot soon or to shoot someone.

Shaquon Thomas was on it. His first arrest came at age 13, and others quickly followed, his face maturing in a progression of mug shots. By 18, Mr. Thomas, who was known as the rapper Young Pappy, had been wounded in a shooting, the police said. Then,



last May, Mr. Thomas, 19, was fatally shot in what the police said was a running gang feud. His score was more than 500, putting him near the top of the Chicago Police Department's list.

"We know we have a lot of violence in Chicago, but we also know there's a small segment that's driving this stuff," Eddie Johnson, the police superintendent, said in a recent interview.

The authorities hope that knowing who is most likely to be involved in violence can bring them a step



closer to curtailing it. They are warning those highest on the list that they are under intense scrutiny, while offering social services to those who want a path away from the bloodshed.

About three years into the program and on a fourth revision of the computer algorithm that generates the list, critics are raising pointed questions about potential breaches to civil liberties in the creation of such a ranking. And the list's efficacy remains in doubt, as killings and shootings have continued to rise this year.

**In a city of 2.7 million people, about 1,400 are responsible for much of the violence,** Mr. Johnson said, and all of them are on what the department calls its Strategic Subject List.

So far this year, more than 70 percent of the people who have been shot in Chicago were on the list, according to the police, as were more than 80 percent of those arrested in connection with shootings.

**In a broad drug and gang raid** carried out last week amid a disturbing uptick this year in shootings and murders, the Police Department said 117 of the 140 people arrested were on the list.

**And in one recent report on homicides and shootings over a two-day stretch, nearly everyone involved was on the list.**



"We are targeting the correct individuals," Mr. Johnson said. "We just need our judicial partners and our state legislators to hold these people accountable."

Guns that were confiscated last week during a drug and gang raid in Chicago. Credit Joshua Lott for The New York Times

Many government agencies and private entities are using data to try to predict outcomes, and local law enforcement organizations are

increasingly [testing such algorithms to fight crime](#). The computer model in Chicago, though, is uniquely framed around this city's particular problems: a large number of splintered gangs; an ever younger set of gang members, according to the police; and a rash of gun violence that is connected to acts of retaliation between gangs.

Supporters of Chicago's list say that it allows the police to focus on a small fraction of people creating chaos in the city rather than unfairly and ineffectively blanketing whole



neighborhoods. But critics wonder whether there is value in predicting who is likely to shoot or be shot with seemingly little ability to prevent it, and they question the fairness and legality of creating a list of people deemed likely to commit crimes at some future time.

“We’re concerned about this,” said Karen Sheley, the director of the Police Practices Project of the American Civil Liberties Union of Illinois. “There’s a database of citizens built on unknown factors, and there’s no way for people to challenge being on the list. How do you get on the list in the first place? We think it’s dangerous to single out somebody based on secret police information.”

The city is trying both to calm residents’ worries about mounting violence and to rebuild community relations with the police after years of distrust, which boiled over with the release of a video six months ago showing a black teenager named Laquan McDonald being shot 16 times by a white police officer.

The Chicago police, which began creating the Strategic Subject List a few years ago, said they viewed it as in keeping with findings by [Andrew Papachristos](#), a sociologist at Yale, who said that the city’s homicides were concentrated within a relatively small number of social networks that represent a fraction of the population in high-crime neighborhoods.

**[Miles Wernick](#), a professor at the Illinois Institute of Technology, created the algorithm. It draws, the police say, on variables tied to a person’s past behavior, particularly arrests and convictions, to predict who is most likely to become a “party to violence.”**

The police cited proprietary technology as the reason they would not make public the 10 variables used to create the list, but they said that some examples were questions like: Have you been shot before? Is your “trend line” for crimes increasing or decreasing? Do you have an arrest for weapons?

Dr. Wernick said the model intentionally avoided using variables that could discriminate in some way, like race, gender, ethnicity and geography.

Jonathan H. Lewin, the deputy chief of the Chicago Police Department’s technology and records group, said: “This is not designed to replace the human process. This is just designed to inform it.”

The police have been using the list, in part, to choose individuals for visits, known as custom notifications. Over the past three years, police officers, social workers and community leaders have gone to the homes of more than 1,300 people with high numbers on the list. Mr. Johnson, the police superintendent, said that officials were increasing those visits this year, adding at least 1,000 people.

During these visits — with those on the list and with their families, girlfriends and mothers — the police bluntly warn that the person is on the department’s radar. Social workers who visit offer ways out of gangs, including drug treatment programs, housing and job training.

“We let you know that we know what’s going on,” said Christopher Mallette, the executive director of the [Chicago Violence Reduction Strategy](#), a leader in the effort. “You know why we’re here. We don’t want you to get killed.”

Uncertain, for now, is the effectiveness. The [RAND Corporation](#) is evaluating the city’s list, but results are yet to be published. Mr. Mallette said that 21 percent of the people they had succeeded in talking to had sought assistance, and that fewer than 9 percent had been shot since a home visit.

A juvenile who has a high score on the list and who was visited last week was shot in the leg and injured on Sunday, the police said. They said he did not answer the door last week when the group went to his home.

**Arthur J. Lurigio, a professor of psychology and criminology at Loyola University Chicago, said there was little evidence to date that the approach was slowing crime.** “This is a first step,” he said, “but now, figuring what to do with that list — that’s another thing.”

A police computer dashboard of the Strategic Subject List gives a glimpse of the arc of each person on it. Shaquon Thomas’s entry went on and on: 23 arrests, the police said, mostly for misdemeanors, then the shootings.

“When people think we’re profiling or targeting, it’s not true,” said Mr. Johnson, who was an officer here for decades before being appointed this year to succeed the superintendent in the aftermath of the Laquan McDonald video. “It has nothing to do with your race, your background. It’s just all about the contacts you have with law enforcement.”

The police said Shaquon Thomas was scheduled to receive a visit — one of the custom notifications — but he died before it could take place.



## Something Stunning Is Taking Place Off The Coast Of Singapore

By Tyler Durden

Source: <http://www.zerohedge.com/news/2016-05-20/something-stunning-taking-place-coast-singapore>

"I've been coming to Singapore once a year for the last 15 years, and flying in I have never seen the waters so full of idle tankers,"  
- Senior European oil trader a day after arriving in the city-state.

May 22 – Back in November, when the world-record crude inventory glut was still in its early innings, we showed what we then thought was a [disturbing image](#) of dozens of oil tankers on anchor near the US oil hub of Galveston, TX, unwilling to unload their cargo at what the owners of the oil thought was too low prices.

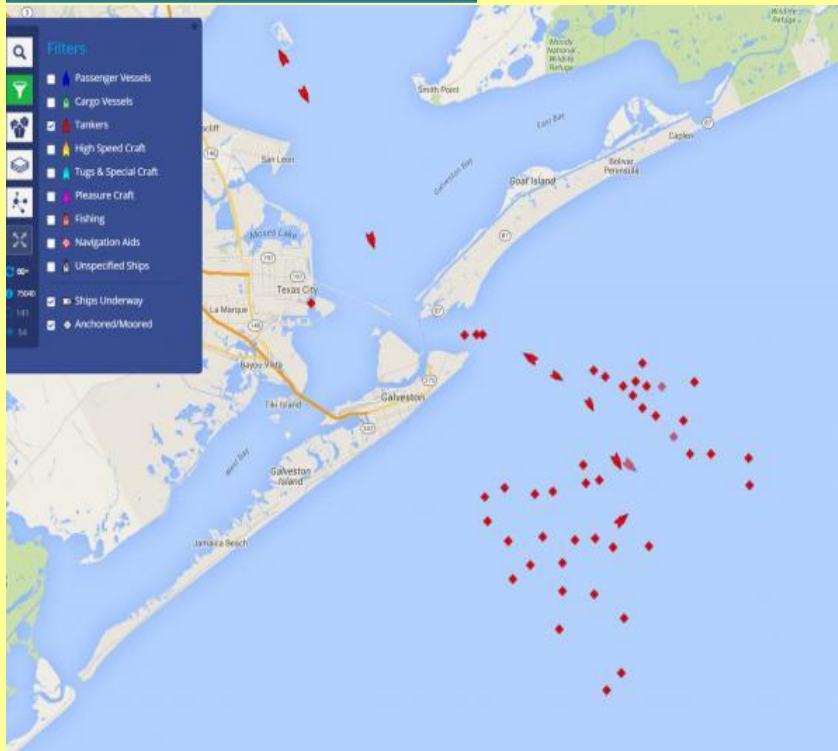


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Little did we know that just a few months later this seemingly unprecedented sight of clustered VLCCs would be a daily occurrence as oil producers, concerned by [Cushing hitting its operating capacity](#), would take advantage of oil curve contango to store their oil offshore indefinitely.

However, while the "parking lot" off Galveston has since normalized, something shocking has emerged and continued to grow half way around the world, just off the coast of Singapore.

The red dots show ships either at anchor or barely

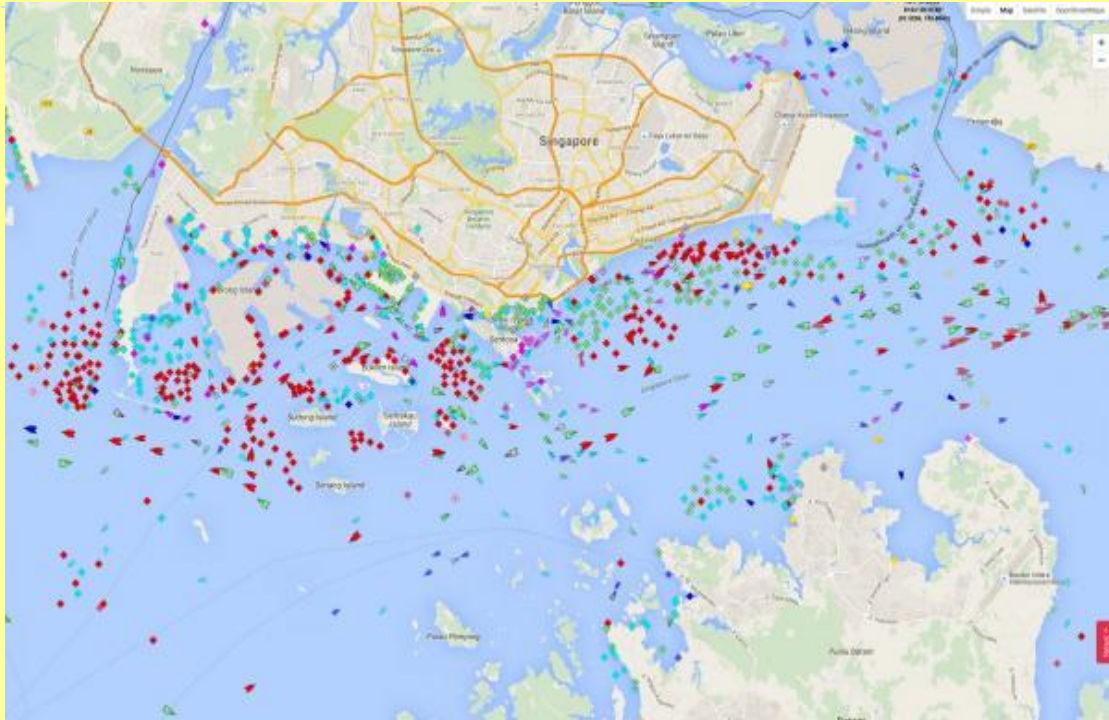


moving, either oil tankers or cargo, which have made the Straits of Malacca, one of the world's most important shipping lanes *which carries about a quarter of all seaborne oil primarily from the Persian Gulf headed to China, into a "bumper to bumper" parking lots of ships with tens of millions of barrels in combustible cargo.*

it is also the topic of the latest [Reuters expose](#) on the historic physical crude oil glut which continues

to build behind the scenes, and which so far has proven totally immune to dissipation as a result of the sharp increase in oil prices over the past three months.





Indeed, as Reuters notes, prices for oil futures have jumped by almost a quarter since April, lifted by severe supply disruptions caused by triggers such as Canadian wildfires, acts of sabotage in Nigeria, and civil war in Libya. And yet flying into Singapore, the oil trading hub for the world's biggest consumer region, Asia, reveals another picture: **that a global glut that pulled down prices by over 70 percent between 2014 and early 2016 is nowhere near over**, and that financial traders betting on higher crude oil futures may be in for a surprise from the physical market.

**"I've been coming to Singapore once a year for the last 15 years, and flying in I have never seen the waters so full of idle tankers,"** said a senior European oil trader a day after arriving in the city-state.

As Asia's main physical oil trading hub, the number of parked tankers sitting off Singapore's coast or in nearby Malaysian waters is seen by many as a gauge of the industry's health. Judging by this, **oil markets are still sickly**: a fleet of 40 supertankers is currently anchored in the region's coastal waters for use as floating storage facilities.

The glut is not only constant but is rising with every passing week: **the tankers are filled with 47.7 million barrels of oil, mostly crude, up 10 percent from the previous week**, according to newly collected freight data in Thomson Reuters Eikon.

What is curious is that the glut is persisting despite seemingly relentless demand by China. Earlier today Bloomberg calculated that 74 VLCCs are bound for China, the highest in 3 weeks, and up from 69 a week earlier. Still the inert glut off Singapore is enough oil to satisfy five working days of Chinese demand, suggesting recent supply disruptions - which have mostly occurred in the Americas, Africa and Europe - *have done little to tighten supply in Asia as Middle East producers keep output near record volumes in a bid to win market share.*

**"The volumes of oil stored at sea in South East Asia - predominantly Singapore and Malaysia - appear to have increased significantly,"** said Erik Broekhuizen, Global Manager of tanker research and consultancy at New York-based shipping brokerage Poten & Partners. **"The current volumes are the highest for at least the last five years."**

What is taking place in the oil market appears to be merely the latest disconnect between the paper and physical markets, something quite familiar to precious metals traders in recent years. As Reuters notes, many participants in the physical market dispute recent notes from financial players like Goldman Sachs that forecast a further rise in crude futures. "There has been quite a bit of bullishness from hedge funds in recent months,



betting on higher oil prices, and even the analysts at Goldman Sachs have recently turned more bullish on oil prices," said Ralph Leszczynski, head of research at ship broker Banchero Costa.

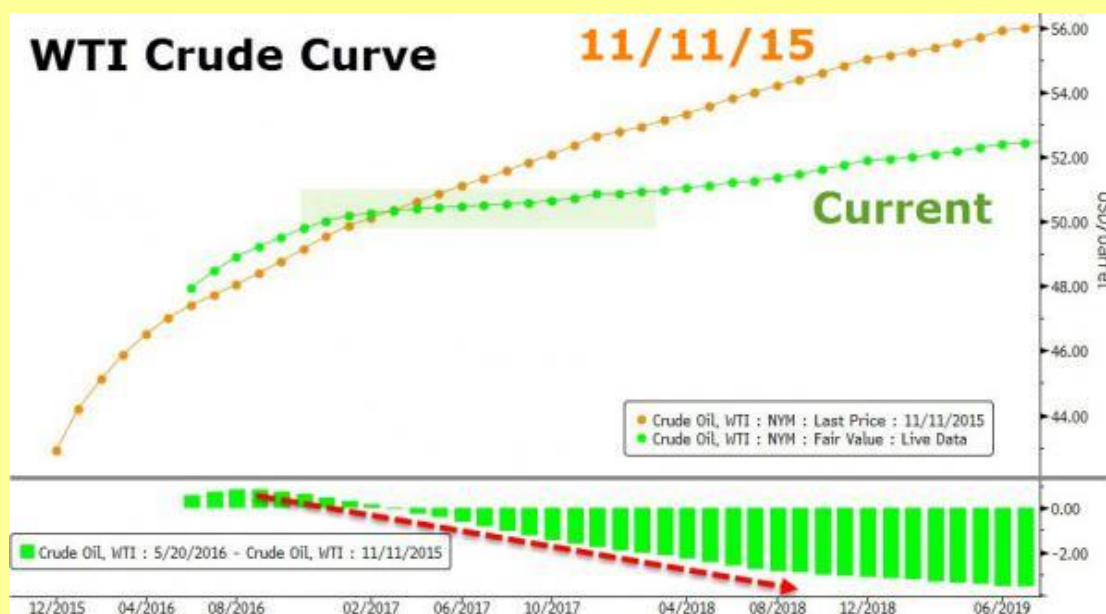
"Prices are unlikely to rise too much as the specter of glut is still there," he said. However, Leszczynski may be discounting just how powerful algo-driven momentum can be if, or especially when, it is completely disconnected from fundamentals.

\* \* \*

While the sight of tankers at anchor is nothing new, this time something has changed.

Unlike before, when the contango of the oil curve made storing oil offshore profitable, this is no longer the case as contango-funded offshore profits have all but disappeared.

As a reminder, storing oil on ships can be profitable when prices for future delivery of crude are higher than in spot market, a term structure known as contango, as long as future prices are high enough to offset tanker charter costs. However, with the one-year contango for Brent futures collapsing from \$7.60 per barrel in January to just \$4, far below the \$10 that traders say is currently required to make floating storage financially attractive, suddenly parking oil offshore leads to storage losses. The same goes for WTI.



At a charter cost of more than \$40,000 a day for a Very Large Crude Carrier (VLCC) that can store 2 million barrels, the contango is nowhere near steep enough to make it profitable to store oil on tankers for sale at a later date.

This has led to a dramatic development in the oil market: debt-funded storage. Reuters writes that the need to store oil is so strong that **traders are calling up banks to finance storage charters despite there being no profit in keeping fuel in tankers at current rates.**

"We are receiving unusually high amounts of queries to finance storage charters," said a senior oil trade financier with a major bank in Asia. "These queries come from traders fully aware that they will not make a profit from storing the oil. This isn't a trade play, it's the oil market looking for places to store unsold fuel," he added.

So why are the traders doing this?

Simple: they hope that oil prices will rise fast and soon enough where the capital appreciation in crude will more than make up for the incurrence of new debt which will be repaid with proceeds from "selling higher." The risk, of course, is that oil does not rise and should prices tumble, traders will not only have a capital loss on their hands, but be forced to deal with the excess leverage they had hoped would promptly disappear.

To be sure, while we have [warned in the past](#) about the danger of offshore storage becoming unprofitable and being brought back onto the land market, in the process



launching a liquidation dumping scramble, it has never been this bad. A trade financier at a European bank said there had been a **"spike in interest from oil traders to finance their storage needs"** since the start of the year as onshore facilities were almost full.

Still, with record amounts of oil stored offshore and with the profit on such storage now shifting into a loss, many are scratching their heads how much longer this imbalanced, and bank funded, situation can persist.

**"Floating storage is unattractive economically, given the current term structure in crude futures,"** BMI Research said this week. Despite this, BMI said that **"the volume of crude in floating storage has risen sharply in recent months,"** adding that the phenomenon was global, **with floating storage up 19.5 percent between the first quarters of 2015 and 2016.**

**"There is clearly still far too much physical crude going around for the glut to be over,"** said the European oil trader after flying in to Singapore.

The trader's conclusion: **"And the paper market seems blissfully unaware of it."**

He is right... for now. Because all that will take for even the algos to give up their relentless upward momentum, is for some of these tens of millions of barrels to finally come onshore, which now that contango is no longer profitable, is just a matter of time.

In the meantime, just keep track of the unprecedented parking lot of ships off the coast of Singapore: the larger it gets, the more violent the price drop will be once banks say *"no more"* to funding money losing charters.

**EDITOR'S COMMENT:** It is not only a financial issue. Can you imagine the terrorist potential of having so many tankers full of oil gathered in a small area very close to the city of Singapore?

## Migrants Committing Disproportionately High Crime In Germany

By Raheem Kassam and Chris Tomlinson

Source: <http://www.meforum.org/6031/migrants-high-crime-germany>

May 23 – A massive migrant crime wave is surging across Germany, according to figures buried in a new [report](#) released by the country's interior ministry. The data reveals that without

While much of this criminality concerned illegal border crossings, German authorities instead talked up a "record surge" in crimes by "right wing radicals."



migrants considered, crime rates in Germany would have remained roughly static since 2014. But, in fact, the country recorded an extra 402,741 crimes committed by migrants.

Concerning statistics from the 135-page report reveal that 70 percent of pickpocketing, one of the crime types on the rise, was committed by non-Germans. Of this figure, 34 percent was committed by recent asylum seekers, with the rest committed by "non-Germans."

Foreign nationals are thought to account for around 11 or 12 percent of the total population of Germany, but were over-represented in every area of crime. Illegal immigrants and asylum seekers account for around 2.5 percent of Germany's population,

but were also massively overrepresented.

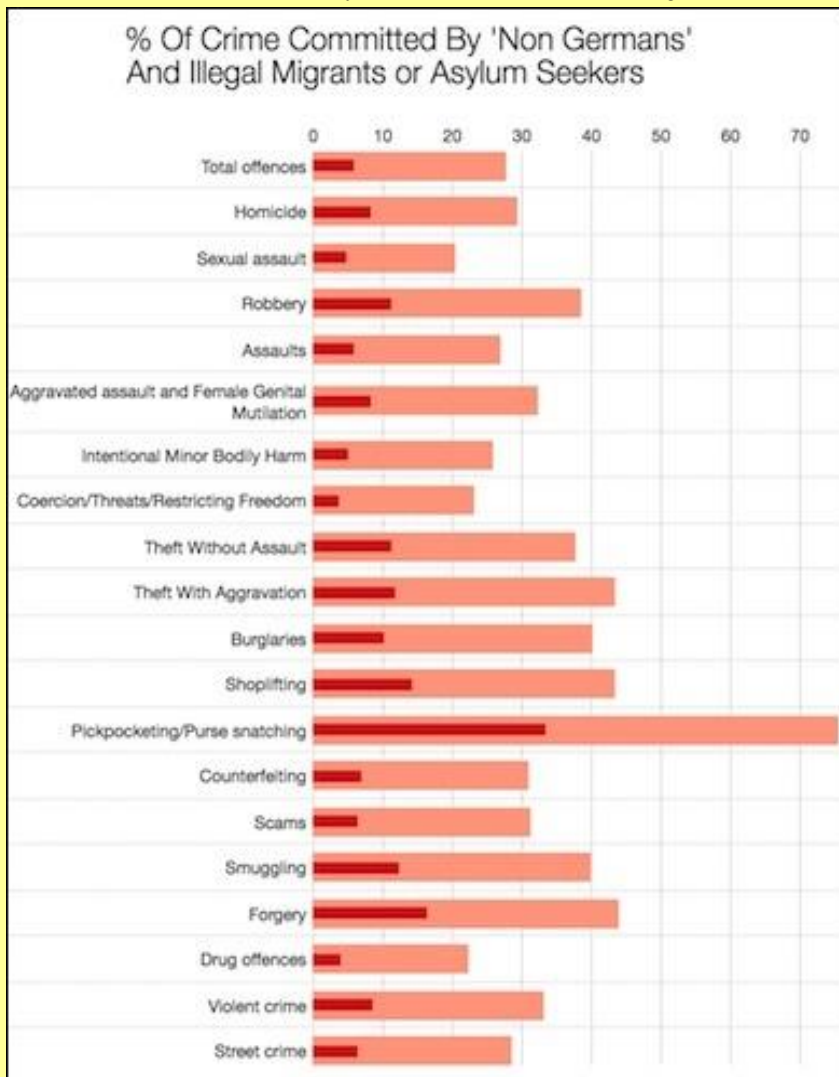
Amongst total offences, non-Germans accounted for 27.6





percent, while illegal immigrants and asylum seekers accounted for 5.7 percent. For homicides the figures are 29.3/8.2 percent, and for sexual assaults the figures are 20.5/4.8 percent.

In all of these cases, as well as those indicated in the chart below, the proportion of crimes committed by non-Germans and illegal



migrants outstripped their representation in German society. Non-Germans accounted for 38 percent of all robberies, 38 percent of thefts, and 43 percent of thefts that involved a level of aggravation such as assault or force. They accounted for 40.2 percent of burglaries, 43.5 percent of shoplifting, and a whopping 75.7 percent of pickpocketing or purse snatching. And of migrant crimes specifically, Syrians top the list of migrant crimes that are not related to border controls, with a total of 10,348 individual

offences in 2015. They also led assault cases among migrants, with 3,186 offences in 2015.

Thefts were most committed by Albanians, with 6,689 offences; Algerians come close with 5,611. Algerians almost tie with Serbians when it comes to fraud. Balkan nationals were accountable for 2,834 cases, barely above North Africans' 2,774.

Algerians top the lists for smuggling goods (2,449) and drug-selling offences (976).

Even when border control breaches are exempted from the data, the situation is still stark. Male crime is stagnant amongst Germans, but when migrants are added, male crime goes up 12 percent, with female crime rising just 6 percent. This reflects the fact that most migrants into Europe in 2015 were young men.

In the chart above, non-Germans are in light red while asylum seekers and illegal migrants are in deep red.

Crime rates amongst "non-Germans" outside the Residence Act are up 13 percent, whereas crimes committed by Germans are down 5 percent.

And the report shows that offences against the Residence Act, the Asylum Procedures Act, and the Freedom of Movement Act are up by 157.5 percent, with shopliftings up by 7.1 percent, pickpocketing up by 7.0 percent, burglary up by 9.9 percent, and drug offences up by 2.1 percent.

Presenting the report to journalists, however, German Interior Minister Thomas de Maizière insisted in focusing on "politically-motivated crimes by the far-right," which he said had risen 35 percent in 2015 to nearly 23,000.

"The sharp increase in politically motivated crime points to a dangerous development in society," de Maiziere told reporters at a news conference. "We are witnessing a growing and increasingly pronounced readiness to use violence, both by right- and left-wing extremists."

But while attacks on refugee centres rose to 1,031, compared to 199 in the prior year, most of



the offences appear to be what could be called "thought crime," or what police describe as "evidence that they aimed to eliminate certain constitutional principles." Of a total of 38,981 political crimes committed in 2015, some 29,681 (76.1 percent) were classed under this category.

Of real incidents, 1,031 were attacks on asylum centres, but just 177 of these were thought to be "violent," with most of the rest believed to be "propaganda" offences or vandalism.

And according to the statistics, identified left wingers have had more confrontations with police (3,507 incidents), according to the statistics, than right wingers have (1,203 incidents). Left-wing activists have confronted more right wingers (4,276 incidents) than vice

versa (1,406 incidents). These incidents include public protests like those of the PEGIDA movement.

Nonetheless, the reporting from Western news agencies has focused on a "right wing" wave of violence.

Earlier this month, when Republican Party presumptive nominee Donald Trump alleged "[L]ook at Germany, it's crime-riddled right now," organisations like Politifact were quick to crow about how immigrants accounted for fewer crimes than native Germans.

But today's statistics reveal that as a percentage of the population, non-Germans and illegal immigrants account for a massively disproportionate amount of crime in Germany.

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

*Chris Tomlinson is a journalist at Breitbart.*

## Italy's 'floating hotspot' idea to sink in legal waters

Source: <https://euobserver.com/migration/133659>



June 02 – **A plan to process migrants in boats in the Mediterranean Sea in so-called floating hotspots will face big legal hurdles.**

First proposed by Italy's interior minister Angelino Alfano in early May, it was not opposed by the European Commission.

Both the Brussels executive and EU border agency Frontex are waiting for Rome to send an in-depth analysis on the legal and operational challenges it poses before possibly making a proposal.

Giulio di Blasi, the EU commission official who cooked up the original idea of land-based hotspots, has refused to comment.



But case law at the European Court of Human Rights in Strasbourg will most likely sink the idea of sea-based hotspots.

Operational details for the floating hotspots are scant.

Italy's year-long Mare Nostrum rescue operation in 2013-2014 had included on-board ID checks.

But the latest plan from Rome is set to include initial health, security and identity checks on anyone plucked from the sea before they are brought to shore for further processing.

Alfano had also said the boats would be equipped with fingerprinting machines and police officers. People would be separated into those likely to get asylum and others would be sent home, he said.

The big boats were likely to be moored near the Italian coastline, although the same legal rules would apply in international waters. Italy's laws apply onboard Italian boats. The same goes for all EU states.

But case law at the Strasbourg court on detention and quality of conditions on the boats will complicate matters.

### Detention and bad conditions

First there is detention.

People cannot be deprived of their freedom of movement under article 5 of the European Convention of Human rights, even if for only two or three days.

In 2002, the commander of a **French frigate** was ordered to intercept a merchant ship near Cape Verde. The boat, which was registered in Cambodia, was hauling cocaine. Once caught, its crew was confined to their quarters under military guard while tugged back to France. Eight years later, the Grand Chamber at the Strasbourg court ruled that France had violated article 5 of the Convention by confining the crew on the boat. The Chamber said France had taken legal jurisdiction over the boat when they apprehended it. It meant article 5 applies.

Another case is now being discussed that involves a Syrian who is stuck in a transit zone at a **Russian airport** since September. The Russians argue his freedom is merely restricted and that this is not a violation of article 5. They say he can freely go back to Syria. His lawyers argue the transit zone is under Russian jurisdiction, which means the Syrian has his rights. The Russians are likely to lose.

In 1996 the Court ruled in favour of Somali defendants under similar circumstances at the **Paris-Only international** zone.

**It means any migrant or asylum seeker taken on board a boat in the Italian floating hotspot cannot be deprived of his or her liberty.**

Given that a person cannot jump into the water and swim to shore, any argument that a boat is only a restriction - not a deprivation - of the

freedom of movement would likely be shot down by the above two cases.

On land, conditions are already bad and it is unlikely standards will be higher on a boat, far away from public scrutiny.

Existing hotspots on the Greek islands, for example, quickly turned into de facto detention centres. Aid agencies like Medecins Sans Frontieres (MSF), the International Rescue Committee (IRC), the Norwegian Refugee Council and Save the Children pulled out in protest in March.

Meanwhile, police are arbitrarily separating people in Italian hotspots against asylum rules, according to the Association for Juridical Studies on Immigration.

"People are restricted, there is no real effective right to get information, and what we are seeing is that people are screened just on the basis of their country," Lorenzo Trucco, president of the Florence-based NGO, told this website on Wednesday (1 June).

The second big issue is conditions on the boat, especially for children and pregnant women.

That some 13,000 people were rescued in one week earlier this month suggests how big the task would be.

The Strasbourg court in another case ruled against Greece for detaining a 15-year old boy from Afghanistan. Aside from depriving his rights to liberty, he was kept in squalid conditions before being released on to the street and made homeless.

### The upshot for Italy

The costs involved in launching such a naval operation are likely to be very large.



But the financial impact for Italy would probably be offset by other bigger “political benefits”.

The EU's key asylum law, the Dublin regulation, in most cases rules that the country of an asylum seeker's first entry has to handle the entire application claim.

"If it is a joint-operation, then the flag-bearing nation would have to process the asylum claim as the first point of entry under Dublin rules,"

said Chiara Favilli, a professor of European law at Florence University.

Dublin, recognised as a failed policy, is being reformed.

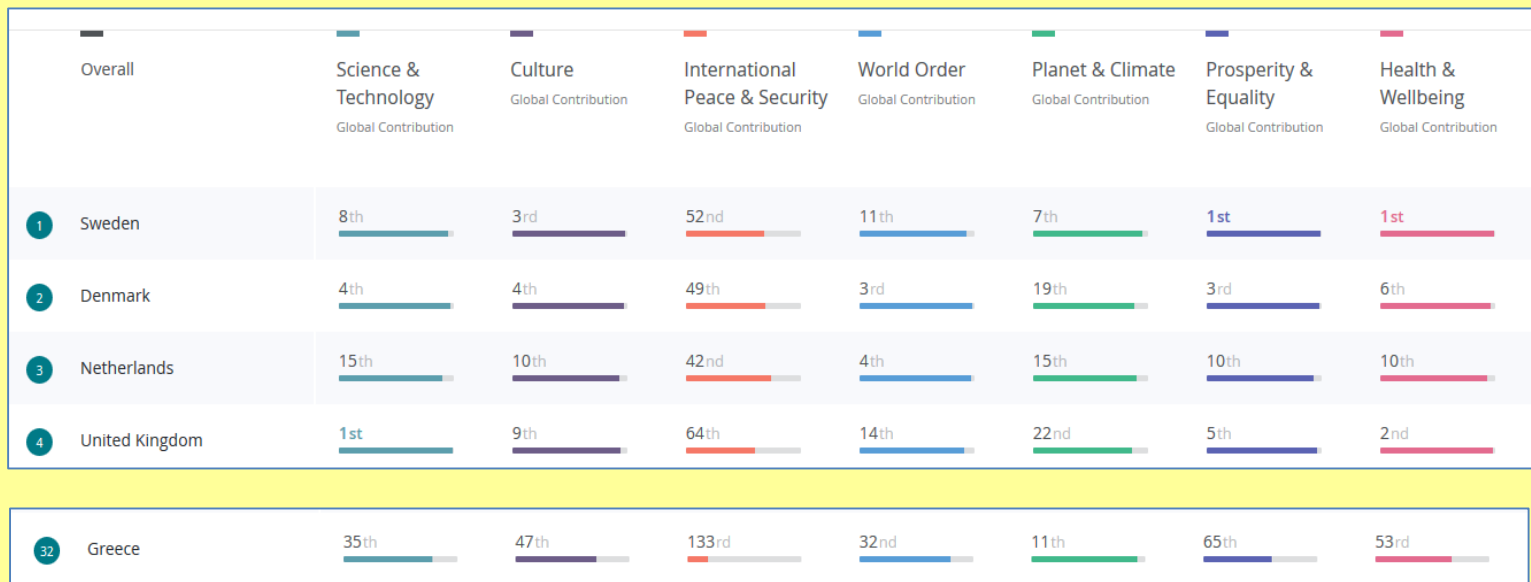
Should the EU commission's latest proposal on Dublin make it through the EU's co-legislative process, the distribution process would become automatic.

## The Good Country Index

Source: <http://goodcountry.org/good-country/data-treatment>

For the first time in history, this is an index that measures what each country contributes to the common good of humanity and to the planet.

The idea of the Good Country Index is pretty simple: to measure what each country on earth



contributes to the common good of humanity, and what it takes away, relative to its size. Using a wide range of data from the U.N. and other international organisations, we've given each country a balance-sheet to show at a glance whether it's a net creditor to mankind, a burden on the planet, or something in between.

It's important to explain that we are not making any moral judgments about countries. What we mean by a Good Country is something much simpler: it's a country that contributes to the greater good of humanity. A country that serves the interests of its own people, but without harming - and preferably by advancing - the interests of people in other countries too.

The Good Country Index is one of a series of projects that Simon Anholt and his friends are launching to start a global debate about what countries are really for. Do they exist purely to serve the interests of their own politicians, businesses and citizens, or are they actively working for all of humanity and the whole planet? The debate is a critical one, because if the first answer is the correct one, we're all in deep trouble.

► Explore the interactive index (and make your own conclusions) at:  
<http://goodcountry.org/index/overall-rankings>



## Britain's exit from the EU would necessitate review of British defense posture: Expert

Source: <http://www.homelandsecuritynewswire.com/dr20160603-britain-s-exit-from-the-eu-would-necessitate-review-of-british-defense-posture-expert>

June 03 – In a new report, Professor Malcolm Chalmers of the Royal United Services Institute (RUSI) presents a personal argument stating that **a U.K. decision to leave the EU would be as significant a shift in U.K. national strategy, as the decision in the late 1960s to withdraw from bases East of Suez. As a result, the decision to leave the EU would necessitate a new Strategic Defense and Security Review (SDSR).**

In November 2015 the UK government published its latest SDSR, setting out its national security strategy and announcing key decisions on strategic and spending priorities. RUSI notes that because of the political sensitivity of the subject, and the prime minister's then-ongoing negotiations on EU reforms, it did not assess the defense and security implications of a U.K. exit from the EU. Most of the leading participants in the referendum debate – from both sides – accept that an exit would lead to a fundamental change in the nature of the U.K.'s future relations with its European neighbors. As a result, if the U.K. votes to leave the EU there would be a very strong case to conduct a fresh review of the SDSR's key strategic judgements and policy choices, which would likely begin by

the end of 2016, with completion by the spring or summer of 2017.

In a 2017 SDSR current plans for defense spending over the next decade might have to be revisited, especially if projected GDP growth fails to materialize in the aftermath of an exit vote. A Brexit [British exit from the EU] could lead to calls for the United Kingdom to return to a more global defense posture, but there could simultaneously be countervailing pressures on the United Kingdom to redouble its commitment to European defense, in part to address concerns that an exit from the EU would risk undermining confidence in NATO, and in part because the U.K.'s commitment to European defense would represent one of its few bargaining chips as it entered a period of tough negotiations on the terms of its future economic engagement with its EU neighbors.

At the same time, Brexit would not necessarily increase the likelihood that Scotland would then vote to leave the United Kingdom. Indeed, a British exit from the EU would probably make it significantly harder for Scotland itself to then become an independent member of the EU. But the possibility of Scottish independence, in some form, would remain an ongoing risk to the stability of the UK's defense arrangements.

### Key Points

- A UK decision to leave the EU would be as significant a shift in national strategy as the country's decision in the late 1960s to withdraw from bases East of Suez. In these circumstances, it would be appropriate for the government to conduct a new Strategic Defense and Security Review, despite the fact that the last such Review was only completed in November 2015.
- Current plans for defense spending over the next decade might have to be revisited, especially if projected GDP growth fails to materialize in the aftermath of an exit vote.
- The end of the UK's membership of the EU could lead to calls for it to return to a more global defense posture. Yet there could simultaneously be countervailing pressures on the United Kingdom to redouble its commitment to European defense, in part to address concerns that an exit from the EU would risk undermining confidence in NATO, and in part because the U.K.'s commitment to European defense would represent one of its few bargaining chips as it entered a period of tough negotiations on the terms of its future economic engagement with its EU neighbors.
- A UK vote to exit the EU would not necessarily increase the likelihood that Scotland would then vote to leave the UK. Indeed, a British exit from the EU would probably make it significantly harder for Scotland itself to then become an independent member



of the EU. But the possibility of Scottish independence, in some form, would remain an ongoing risk to the stability of the U.K.'s defense arrangements

— *Read more in Malcolm Chalmers, [Would a New SDSR Be Needed After a Brexit Vote?](#)(RUSI, June 2016).*

## Quantifying the weight of forensic evidence

Source: <http://www.homelandsecuritynewswire.com/dr20160603-quantifying-the-weight-of-forensic-evidence>

June 03 – On 5 and 6 May 2016, NIST hosted a technical colloquium on an important question facing virtually every branch of forensic science today: **How should forensic examiners quantify the weight of evidence they find in a case?** This was the first technical colloquium in the United States to



focus specifically on this issue, and it generated an animated and much needed exchange of ideas.

The weight-of-evidence question comes up anytime a forensic examiner assesses the likelihood that a piece of evidence left at a crime scene originated from a particular source. For instance, a ballistics examiner compares a bullet found at a crime scene to a bullet that was test-fired from a suspect's gun. After comparing the surface patterns on the two bullets, the expert might testify in court on the likelihood that they were or were not fired from the same weapon.

**But how should the expert quantify that likelihood?** How should they account for the possibility that the pattern on the bullet found at the scene was actually caused by a different but similar weapon? The chances might be extremely remote, but when a person's liberty hangs in the balance, quantifying the weight of evidence is a critical step toward a just outcome.

This step is important in virtually every domain of forensic science—whether analyzing a bullet, a fingerprint, a DNA profile, a voice recording, or any other pattern-based evidence.

### An important conversation

NIST says that the need to quantify the weight of evidence was highlighted in the [2009 National Research Council report](#) that urgently called for strengthening the practice of forensic science in the United States. NIST, along with the Department of Justice, is leading an effort to do just that.

But what is the best way to quantify the weight of evidence? People have divergent and strongly held opinions on the subject, and the purpose of the colloquium, held at the NIST campus in Gaithersburg, Maryland, was to open a dialog that might eventually lead to a consensus. Participants included forensic practitioners, forensic science researchers, and members of the legal and law enforcement communities.

"We didn't want to direct the conversation, we just wanted to start it," said Elham Tabassi, an expert in fingerprint analysis and one of the NIST scientists who organized the event. "We wanted a free flow of ideas, and that definitely took place."

"Published papers and rebuttals can go on forever," said Reva Schwartz, another NIST scientist who organized the event. "But having so many people in the same room really moved the conversation forward."

Among other things, participants discussed likelihood ratios, which have emerged as a leading method for quantifying the weight of evidence. Likelihood ratios compare the probabilities of two events — for instance, the probability of observing the



features of a latent print left at a crime scene if the print was made by the suspect compared to the probability of observing those features if the print was made by some other, unknown, individual. A very high likelihood ratio indicates that the evidence is powerful.

#### Next steps

But there is no firm consensus yet on how exactly to calculate a likelihood ratio, or even if that is the best approach to quantifying the weight of evidence.

“I think it’s fair to say that there were intense, though always respectful, discussions on quantifying the weight of evidence using

likelihood ratios, including their limitations and different statistical approaches to implementing them,” Tabassi said.

**One of the problems, she noted, is that certain words mean different things to different people, and an important next step will be to settle on common language.**

NIST notes that Schwartz and Tabassi plan to publish a technical review of the colloquium within the coming months. They also hope to establish an online forum where the conversation can continue. And they are already planning the next installment of this colloquium, which will take place at the NIST Maryland campus in July of 2017.

► [Download the program and presentations](#); [view the video archive of the event](#)

#### Cerberus system equips dogs with extra eyes and ears

Source: <http://www.gizmag.com/cerberus-system-video-dogs/39502/>



Sept 2015 – Dogs may make excellent team mates, but they aren't very good at telling you what they see. Colchester-based Visual Engineering's Cerberus Digital Canine Transmission system is designed take this feedback way beyond barking by providing a high-tech set of eyes that let the handler see what the canine sees.

Aimed at the defense market, the Cerberus consists of a bespoke harness that holds a small camera arm and a SIRIUS LE transceiver snug against the ridge of a dog's spine. This transmitter sends back an encrypted video signal to the handler's 4.3-in, high-resolution portable receiver over a non-line-of-sight range of approximately **300 to 500 m** (1,000 to 1,600 ft). The entire unit weighs **less than 2 kg** (4.4 lb)



Visual Engineering says that Cerberus is very simple to use. The camera arm is spring loaded and releasing it activates the system. The handler can then select from eight radio channels that are



programmed using a PC application and an RS232 serial port. The spring also protects the arm from damage as the dog runs through brush or climbs through holes. The **transceiver case is also specially hardened for rugged handling.**

The battery-powered digital canine transmitter uses Cobham COFDM digital video modulation and encryption technology and a diversity receiver, which uses more than one antenna and receiving unit for maintaining the best signal. In addition to the high-sensitivity cameras and low-light Infrared (IR) cameras, with modulated IR LEDs and white light LEDs, the system also has microphones for audio and can be upgraded to include on-board SD card recording, thermal imaging, and high-definition cameras.

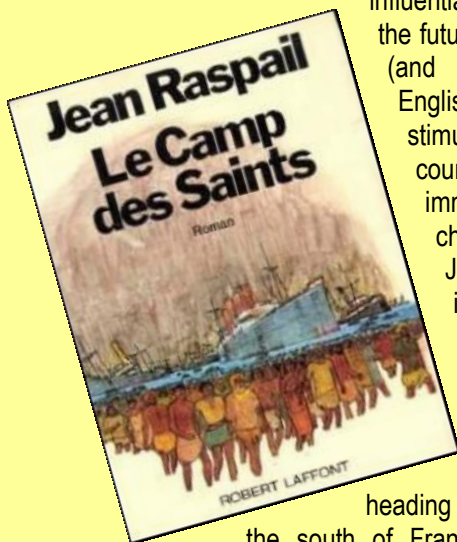
And this certainly isn't the end point for high-tech enhancements to the canine-human relationship, with sensor-carrying harnesses that relay information back to the handler or commands to the dog also in development.

## Who Will Write France's Future?

By Daniel Pipes

Source: <http://www.meforum.org/6061/who-will-write-france-future>

June 06 – Two high-profile French novels, dissimilar in timing and tone, portray two influential visions of France in the future. Not just good reads (and both translated into English), together they stimulate thought about the country's crises of immigration and cultural change.



Jean Raspail (1925-) imagines a racial invasion coming by sea, of rafts and boats taking off from the Indian subcontinent and heading slowly, inexorably for the south of France. In *Le Camp des Saints* (The Camp of the Saints, 1973), he primarily documents the helpless, panicked French reaction as the horde (a word used 34 times) "kept coming to join the swelling numbers."

It's a stark dystopian fantasy about the white race and European life that corresponds to

fears articulated by no less than Charles de Gaulle, the dominant politician of post-war France, who welcomed non-white French citizens "on condition that they remain a small minority. Otherwise, France would no longer be France. We are, after all, primarily a European people of the white race."

*Camp* also anticipates the notion of "The Great Replacement" (*Le Grand Remplacement*) conceptualized by the French intellectual Renaud Camus, which anticipates the quick replacement "of the historic people of our country by peoples of immigrant origin who are overwhelmingly non-European." Roughly this same fear – of immigrants pushing the indigenous French people aside and taking over the country – inspires the National Front party, now polling close to 30 percent of the vote and growing.

Michel Houellebecq (1956-) tells the story not of a country (France) but of an individual (François) in *Soumission* (Submission, 2015). François is a weary, somewhat decadent professor of the decadent movement in French literature. He





lacks family, friends, and ambition; although only in his mid-40s, his will to live has eroded through the ennui of take-out food and a procession of interchangeable sex partners.

When an ostensibly moderate Muslim politician unexpectedly becomes president of France in 2022, many radical changes to French life follow quickly.

In a surprise twist, what begins ominously (a corpse in the gas station) soon enough

turns benign (delicious Middle Eastern food).

Lured by a well-paying and satisfying job with the perk of

having access to marry multiple pretty,

covered students, François readily abandons his old life and converts to Islam, which offers him the rewards of luxury, exoticism, and patriarchy.

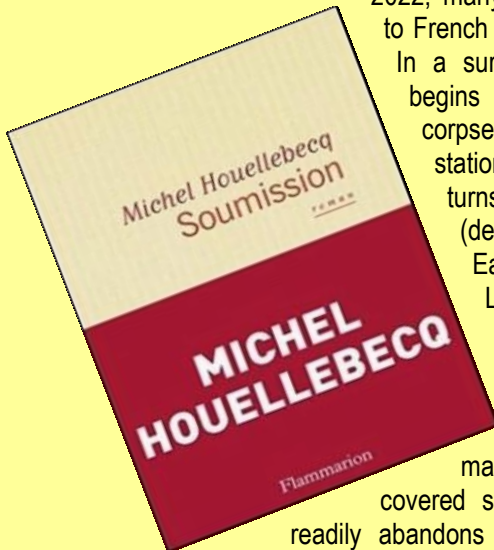
If the 1973 novel never mentions the word Islam or Muslim, its 2015 counterpart dwells on them both – starting with the title: *Islam* in Arabic means "submission." Conversely, the first book focuses on race while the second hardly notices it (François' favorite prostitute is North African). One takeover ends hellishly, the other agreeably. The earlier book is an apocalyptic political tract disguised as entertainment, the later one offers a literary and sardonic take on Europe's loss of will while not expressing animus toward Islam or Muslims. The one documents an aggression, the other a consolation.

The novels capture two major, almost contradictory post-war cross-currents: The lure of a wealthy and free Europe for remote, impoverished peoples, especially Muslims; and the lure of a vigorous Islam for an enfeebled, post-Christian Europe. Both ways, Europe – just 7 percent of the world's landmass but the dominant region for five centuries, 1450-1950 – stands to lose its customs, culture, and mores, becoming a mere extension, or even a dependency, of North Africa.

The novels imply that the alarming concern expressed decades ago (masses of angry, violent dark people) has become familiar and even benign (Middle Eastern universities pay higher salaries). They suggest that the time for panic has passed, replaced by a time for graceful capitulation.

*Camp* made a splash on the Right when it first appeared but both books address more widely-held concerns today; *Camp's* reissue in 2011 rocketed to the top of the bestseller list in France and *Submission* simultaneously became the #1 bestseller four years later in France, Italy, and Germany.

Forty-two years separate these two books; jumping another 42 years ahead, what story might a futuristic novel published in 2057 tell? Such thinkers as Oriana Fallaci, Bat Ye'or, and Mark Steyn would expect an account that assumes Islam's victory and narrates the chasing down of France's few remaining Christian believers. But I predict nearly the opposite: a report that assumes Camus' great replacement failed and imagines a violent repression of Muslims (in the words of Claire Berlinski) "shambling out of the mists of European history" accompanied by a nativist French reassertion.



*Daniel Pipes is president of the Middle East Forum.*



## Use of Hagia Sophia Turkey's 'internal matter', German Foreign Ministry says

Source: <http://www.dailysabah.com/diplomacy/2016/06/10/use-of-hagia-sophia-turkeys-internal-matter-german-foreign-ministry-says>

June 11 – **The use of the Istanbul landmark Hagia Sophia, former Byzantine cathedral and Ottoman mosque that now serves as a museum, is Turkey's internal matter, the German Foreign Ministry said Friday.**



Answering a reporter's question that whether he believes Turkish people's demand to convert the Hagia Sophia into a mosque 80 years after it was transformed into a museum was a coincidence, German



Foreign Ministry spokesperson Martin Schaefer said the Hagia Sophia served as a mosque for centuries and what he believes regarding the issue does not carry importance. Reminding that the Hagia Sophia is designated as a UNESCO World Heritage site, Schaefer said Germany hopes the museum would be used without any harm to its

current UNESCO status.

Built in the sixth century, Hagia Sophia, which means Holy Wisdom in Greek, was converted to a mosque in 1453 when the Ottomans conquered Istanbul, what was then called Constantinople. After the Republic of Turkey was founded in 1923, the mosque was transformed into a museum in 1935.

The edifice, a masterpiece of Byzantine architecture, features an immense dome supported by huge pillars, its walls sheathed with marble and decorated with mosaics.

After the city fell to the armies of Sultan Mehmet II the Conqueror, four minarets were added to the structure and the interior was decorated with Islamic art.

## The glory of sports...



UEFA EURO 2016: Switzerland-Albania game (1-0), at Stade Bollaert-Delelis (Lens, France).

**EDITOR'S COMMENT:** If you have such friends (Germans) and neighbors (Albanians), who needs enemies?



## Move over sniffer dogs: Witnesses can identify criminals by smell

Source: <http://www.homelandsecuritynewswire.com/dr20160610-move-over-sniffer-dogs-witnesses-can-identify-criminals-by-smell>

June 10 – **Move over sniffer dogs, people who witnessed a crime are able to identify criminals by their smell.** Police lineups normally rely on sight, but nose-witnesses can be just as reliable as eye-witnesses, new research published in *Frontiers in Psychology* has found.

“Police often use human eye-witnesses, and even ear-witnesses, in lineups but, to date, there have not been any human nose-witnesses,” explained Professor Mats Olsson, experimental psychologist at the Karolinska Institutet in Sweden; “We wanted to see if humans can identify criminals by their body odor.”

*Frontiers* notes that dogs have been used to identify criminals through body odor identification in court, but it is commonly thought that the human sense of smell is inferior to that of other mammals. However, research shows that humans have the ability to distinguish individuals by their unique body odor. Our olfactory sense is often associated with emotional processing and is directly linked to the areas of the brain associated with emotion and memory; the hippocampus and the amygdala.

To find out more about **human odor memory following stressful events**, Olsson and his team investigated how well we identify body odor in a forensic setup. In their first study, participants watched video clips of people committing violent crimes, accompanied by a body odor that they were told belonged to the perpetrator.

They also watched neutral videos, with a similar setup. Then they identified the criminal’s body odor from a lineup of five different men’s odors, showing correct identification in almost 70 percent of cases. “It worked beyond my expectation,” explained Olsson; “Most interestingly — participants were far better at remembering and identifying the body odor involved in the emotional setting.”

Olsson has tested the limits of our nose-witness ability. The team conducted the same experiment but varied the lineup size – three, five, and eight body odors, and the time between observing the videos and undertaking the lineup – fifteen minutes up to one week. In lineups of up to eight body odors, participants were still able to distinguish the criminal.

The accuracy of their identification did reduce with the larger lineup size, which is in line with studies on eye and ear-witnesses. The results also show that the ability to distinguish the criminal’s body odor is significantly impaired if the lineup is conducted after one week of having smelt the offender’s body odor.

There is ongoing research into how the memory of a crime scene can be affected by emotion. This is largely focused on visual memory as visual lineups are the common method of criminal identification.

“Our work shows that we can distinguish a culprit’s body odor with some certainty,” concluded Olsson. “This could be useful in criminal cases where the victim was in close contact with the assailant but did not see them and so cannot visually identify them.”

— Read more in *Laura Alho et al., “Nosewitness Identification: Effects of Lineup Size and Retention Interval,” [Frontiers in Psychology](#) (30 May 2016).*

## ‘Media Money Matters With the Olympics’

Source: <http://fair.org/home/media-money-matters-with-the-olympics/>

Janine Jackson interviewed Jules Boykoff about the Rio Olympics for the [June 3, 2016, episode](#) of *CounterSpin*. This is a lightly edited transcript.

**Janine Jackson:** The World Health Organization says concerns about the Zika virus are no reason to postpone or cancel the Olympic Games scheduled to start August 5 in Rio de



Janeiro, Brazil. Others cite the country's political and economic unrest — Brazil has had three Sports ministers in the last four months — as a reason to worry about the success of the Games. But what does the “success” of Olympic Games usually look like, such that our next guest would [say](#) that Brazil's current political chaos actually affords Rio organizers “a tiny respite from deeper scrutiny.”

Jules Boykoff is the author of three books about the Olympics, most recently *Power Games: A Political History of the Olympics*. He teaches political science at Pacific University in Oregon, and he spent last fall in Brazil, looking into the country's preparation for the 2016 Games. He's also an athlete who represented the US Olympic soccer team some years ago. He joins us now in studio. Welcome back to CounterSpin, Jules Boykoff.

**Jules Boykoff:** Thank you, Janine.

**JJ:** Well, the Rio Olympics do present some special circumstances; every city is different, really. But some of the fundamental problems don't have to do with impeachment or mosquitoes; they're really the same problems that we saw in London or in Beijing. I know you wrote for Extra! about Vancouver. What are some of those recurring problems, and how are they playing out in Brazil?

**JB:** The Olympics have become huge over the years, a massive juggernaut that rolls into the host city and affects all sorts of things—economic, political, social, environmental—and some of these issues, as you say, continue to rise up time and time again. One of them is spending, and how in the beginning, when the Olympics come to your town, they're supposed to cost one thing, in the end they cost multiple times that. It's like an economic Etch-a-Sketch.

On the front end, for example, London, the last Summer Olympics, was supposed to cost \$3.8 billion. In the end, it cost at least \$18 billion. So spending is definitely one of those things that comes up time and time again.

Another one that often comes up is displacement. For example, in Beijing, 1.5 million people were displaced to make way for the Summer Olympics that year, 1.5 million. In Rio, we've seen 77,000 people being displaced for Olympic structures and for Olympic venues since Rio got the games in 2009. You also see the militarization of public space. In a sense, the Olympics create a situation where security officials can use the state like their own private ATM, getting all of the weapons that they would have never been able to get during normal political times, sometimes special rules and laws that allow them to monitor not just potential terrorists but also activists as well. In fact, in Rio, there's actually a section in the Rio bid book called “Activism/Terrorism,” conflating the two, and we've seen that also in a number of Olympics prior to Rio.



*Protest graffiti in Vila Autódromo. (image: PharmaKoetivo)*

**JJ:** It's interesting; you list these very serious things, and the New York Times, when they're writing about it, there is some awareness that there's some downside, but the New York Times in its April 27 piece referred to Rio facing “the usual challenges that bedevil host cities, like delayed stadium construction and transportation concerns.” Well, we're talking about things that are actually

much deeper than that, when you're talking about displacing over a million people or, in Rio, 77,000 people.

I wanted to draw you out on each of those, really, but let's start with the displacement idea, because in Rio, I know that there is a particular focus on — although the mayor of Rio, Eduardo Paes, says no one's been displaced, there's evidence that people are being



displaced, and particularly in this place, Vila Autodromo, and I know that that's a particularly salient example. Can you tell us a little about that?

**JB:** Sure. Well, it's just staggering that the Rio mayor, Eduardo Paes, could say that there has been no displacement because of the Olympics. The city's own statistics say that 77,000 people have been displaced because of the Olympics.

Vila Autodromo is a particularly poignant example. It's a fishing village that began in the 1960s that happens to be located along the edge of the Olympic Park out in Barra da Tijuca, to the western zone of Rio de Janeiro, and it had many, many families there before, hundreds of families. Now they're down to about 20 families left, and they fought a really hard struggle to keep their homes, to keep their space, to keep their community alive.

And it's been a back-and-forth with the mayor, who's really flip-flopped on this issue. First he says they're going to get to stay, then he says, nope, everybody's got to go. And a lot of people, when they settle and they get a monetary payout, get a settlement that does not nearly match what the value of their home is. And so there's all sorts of problems, even for people that manage to negotiate with the government and get a payout.

So it's very sad. I went there numerous times over the course of my months in Rio this last fall, and I met incredible people. So on one hand, it's sad. On the other hand, I mean, it's just this incredible beacon of courage and tenacity in the face of power. And I really admire the people who stood up at Vila Autodromo, as well as their allies across Rio de Janeiro.

There's a group called Catalytic Communities, activists who've stood side by side. There's the Comitê Popular da Copa e das Olimpíadas, the Popular Committee of the World Cup and the Olympics, who've been right there the whole time with the residents, arm and arm with the residents of Vila Autodromo.

**JJ:** And the thing that you were talking about, about displacement and the mayor denying it's going on—Dave Zirin, who I know you worked with on a lot of this stuff, was saying that it shows how much we've got a fight for the narrative going on here.

And it's interesting, because in some ways the fact that the Olympic emperor has no clothes, if you will, that's kind of open knowledge, and that's why Brazil, in advance of these Olympics, they had this thing, this "ten commandments," that was kind of saying, we're not going to make these same mistakes that previous host cities have made, and that we're going to try to avoid these pitfalls. And one of those had to do with whose money was going to be spent on it, because one of the big issues is always about using public money to do things that wind up benefiting private interests. And in Rio, they said, oh, no, we're going to do it differently this time. Have they really done it differently?

**JB:** Well, first of all, I think it's interesting that the low estimate of the Rio Olympics is \$11 billion, and some media outlets have reported on it, "only" \$11 billion have been spent, \$11 billion on the Olympics. And when that happens, you know that we've sort of become inured to, very used to, super high budgets for the Olympic Games.

You hear from Rio officials that there's a huge amount of private input. That's incredibly deceptive. On one hand, there are these massive tax breaks for corporations, corporate sponsors of the Olympics, who will reap millions and millions, hundreds of millions of dollars of tax breaks when they helicopter into Rio with their wares.

Second, they include this northern zone, the Zona Portuaria, that really has nothing to do with the Olympics. And, sure, that's being developed by private entrepreneurs—including, I might add, Donald Trump, who is apparently going to make Brazil great again as well. He's building five skyscrapers in the Zona Portuaria.

But the fact is, there's no Olympic event in that area. So if you include that, you include all this private spending that's happening and you thereby inflate the amount of private input. So it's actually the public that is paying a large portion, an abundance, a majority of the bill for the Rio 2016 Olympics.

I think we really need to be on our toes with this Eduardo Paes. You mentioned Dave Zirin. He interviewed Paes face-to-face, and Paes said directly to him, he said the bike path that washed away had nothing to do with the Olympics. For your listeners that don't know



about that, that was a footbridge and bike bridge that was built to connect a couple communities, and it was pitched as this big Olympic legacy, and it was washed away by huge waves. Shoddy construction appears to be at the root of it, and five people went missing, two for sure have died, so a total tragedy. Paes can say with a straight face to Dave that this is not an Olympic legacy, whereas it definitely was. You look at the paperwork for all Olympic bidding and for all the recent Olympic paperwork on this issue, and it's absolutely an Olympic legacy, until it's not.

And same thing with the tickets. When the 2014 World Cup was happening in Brazil, Eduardo Paes was a savvy enough politician to realize that it was a disaster for people in Rio. And he said, oh, the Olympics are going to be much better than that, and what we're going to do is, we're going to give 1.2 million tickets to people who would otherwise not be able to afford them. Has he done that? Absolutely not.

So my point is, we really need to keep a close eye on Eduardo Paes, the mayor of Rio, who, by the way, has aspirations to become President Paes, and a lot of people think he's going to become president of Brazil in the not-too-distant future.

**JJ:** Along with the amounts of money that are being spent and the source of them, what a lot of folks are concerned about is essentially the priorities that they reflect. In other words, why are we spending, why is anyone spending, all this money on this spectacle, essentially, when, as we understand it, hospitals are being closed, people are protesting and sitting in schools because of cuts to the education budget? And so there's also that. It's also about priorities, right?

**JB:** Absolutely. I mean, it's gobsmacking that hospitals are being shut down, social services are being dialed way back, while they're spending billions on the Olympics. One example that really jumps out to me about priorities that you're talking about, Janine, is the construction of the Olympic Village. Typically Olympic Villages say a lot about the organizers in the host city. I really view the plans for the Olympic Village as ethical documents. And a lot of times in previous Olympics, the hosts have said, oh, we're going to turn these villages into places where we'll have mixed housing, it'll be a chance for lower-income people to move into these units, and so on. Now, they have not always come through on that promise, that's for sure, but that's a separate story.



*Promotional material for Ilha Pura stresses the access gate.*

In Rio, they're not even going along with that narrative at all. In fact, from the beginning the plan was to convert the Olympic Village into luxury condominiums. And the place is called Ilha Pura, which is Pure Island. And the fact of the matter is

Ilha Pura isn't even an island, geophysically speaking. It's definitely a social island, but it's not even a geophysical island.

And the Guardian interviewed Carlos Carvalho. He is the head of Carvalho Hosken, who's building the Olympic Village and will flip them over into condominiums, and he made it very clear what the priorities were for him and his fellow 1 Percenters. He said the space afterward, Ilha Pura, will be a space for elites, it will not be a place for poors. I mean, it's like Montgomery Burns times nine or something.

And that absolutely gives us a clue to what the priorities are for organizers of the Olympics, and it also raises an important point. For all the debt that occurs for cities, there are certain swaths of elites who absolutely benefit from the Olympics, and we need to keep our eye on that as well. Certain elites do tend to reconstitute class power through the Olympic Games.



**JJ:** I was going to say, to say that it's a fiasco or whatever wouldn't mean that it wasn't very lucrative for some. A failure for some would not be a failure for all.

And also on that point, the New York Times writing about how Rio has promised these transit projects and they might not get them together in time, for example, and there's some concern about whether everything's going to fall into place. But this New York Times article said, well, these projects might not materialize, but then they say, "To the vast majority of people watching the games on television, however, such infrastructure may not matter." And that seemed to me to be almost pointing to the fact that it could succeed in a Potemkin village kind of way; it almost said it matters more what it looks like on TV than what happens on the ground.

**JB:** Well, it definitely points up the fact that money matters with the Olympics, media money matters with the Olympics. NBC has forked over \$4.4 billion for four Olympic Games that include Rio, and they're not going to take any chances here. That's why you're not going to see the Games moved unless some incredible catastrophe happens before Rio. Not even Zika's going to get the thing moved. There's too much money at stake, too many power brokers who are going to make some money off of this deal, and media are absolutely at the center of it.

And, you're right, it's a little frustrating when the people of a city are sort of brushed aside in their actual interests. The extension of the metro line, Linea Quattro as it's known in Rio, that actually could be a benefit for everyday people in Rio. This could be one of the very few positive legacies of the Rio Olympics. And they're pushing up, right up to the very end, as to whether they're even going to get it done. They're saying they might open it four days, now, before the Olympics start.

I've also read in the Brazilian press that they might make it a direct line straight from Ipanema and Copacabana, which is to say the richer part of Rio de Janeiro, along the South Zone, straight as a pipeline into Barra da Tijuca, where the Olympics are going to be. In other words, skipping straight through, just ramming straight through the communities, and not even stopping off there. And that would be a total travesty, and it would incredibly symbolic about how everyday people are left to the side in the name of spectacle, in the name of speculation.

**JJ:** When you look at the story of the Rio Olympics, Zika, the Zika virus, really is at the center of it, right at the moment. The World Health Organization has responded to this letter from lots of health officials who said they thought it was a bad idea for people to go. What's your take on that angle of things?

**JB:** Well, first, Janine, I'm a political scientist, not a medical scientist, so I should say that straight up front. I think when I read about Zika in the US press, I've seen a tendency where the media frame it as a real danger to First World tourists, who might become ill should they travel. In other words, kind of focusing on a privileged sliver of the global 1 Percent who might travel to Rio, and really worrying about that small swath of elites who might make the trip. What that narrative leaves out, of course, is the everyday people of Rio, who don't have the choice to move, and who will be there no matter what.

There are important considerations that we should take into consideration with Zika, and one of them is the fact that they have already between 5 and 8 million tourists per year. They just had millions come in for Carnivale, and we didn't hear about this. And Carnivale, by the way, was during a high mosquito season. The Olympics will be happening in August, which up here in North America is of course summer, but in South America it's winter. For the mosquitos, that means they won't be breeding quite as quickly, so it should be a low time.

So there are some mitigating factors with Zika, but I'm really on my guard when I hear people talking about Zika if they're not also talking about everyday people. If Zika, in discussing it in the press, can be a way of putting pressure on the Brazilian government to offer more support to combat poverty, which really is at the root of the Zika issue, then I'm all for it. But if the people from Rio themselves get swept aside, I think we have a real problem.

**JJ:** One of the things that your work has brought out is the role that dissent and activism have always played in the Olympics. We have an image of athletes as kind of Captain America types who don't criticize powerful institutions, and it's just not true. And the Olympics, of course, is a time where the world is watching. And I understand, finally, that



that is why you hope that Rio won't be cancelled, and that it could in fact be used as a spotlight on political and popular dissent.



*African-American athletes Tommie Smith and John Carlos gave the black power salute at the 1968 Olympics, supported by New Zealand's Peter Norman.*

**JB:** That's right. The Olympics have given an unwitting gift to the people of Rio, and that is the opportunity to protest when the global media descends on their city, and get some attention for these key and important issues that plague the city from an international press.

You're right that the history of the Olympics is full of interesting examples of athlete activism. From the 1906 Olympics, when Peter O'Connor, an Irish athlete, was forced to participate under the Union Jack, because at the time Ireland was being governed by Westminster. And when he won a medal, he climbed over to the pole and he shimmied up it and he held the Union Jack to the side and waved an Ireland Forever flag instead, while his buddies from Ireland watched from the ground.

The Carlos Smith/Peter Norman episode you were referencing, and, even more recently, Damien Hooper at the 2012 London Olympics, an Aboriginal boxer from Australia, who wore a shirt into the ring that had the Aboriginal flag on it. So it can absolutely be a pedestal for courageous athletes.

One athlete I'm really keeping an eye on this year is a guy named Laurence Halsted. He's a fencer from Team GB, Team Great Britain, who's already qualified for Rio, so he's going to be there. And he wrote an essay in the Guardian that I urge your listeners to take a look at, where he says that athletes, if they don't speak up, can be considered complicit in the problem, and that he hopes that a sort of critical mass of athletes will come together and speak up on the issues that are plaguing Rio while the Olympics are in town. So we need to keep an eye on that. I think we need to show solidarity for courageous athletes like Laurence Halsted.

You also have movements that sort of piggyback the event, if you will, piggyback off of the Olympics and hijack it for their own political purposes. It is a real rare chance for activists who've been working on issues forever to get the attention of the world on them. And I mentioned some of the activist groups before. I had the good fortune of meeting many people who are activists across Rio.

Interesting fact is that over the last year, there have been more protesters that have hit the streets across Brazil than have hit the streets in the rest of the world combined. Now, of course, that includes right-wing protesters protesting Dilma Rousseff, but it also includes a lot of left-of-center protesters.

So you have seasoned activists with a list of grievances, and these international band of elites come into their town. It seems like a perfect recipe for banding together and asking big questions about what matters for your city.

**JJ:** We've been speaking with Jules Boykoff. The new book is *Power Games: A Political History of the Olympics*. Jules Boykoff, thank you very much for joining us this week on CounterSpin.

**JB:** Thank you.

## Swedish broadcaster cancels terrorism & anti-Semitism film over Muslim backlash fears – report

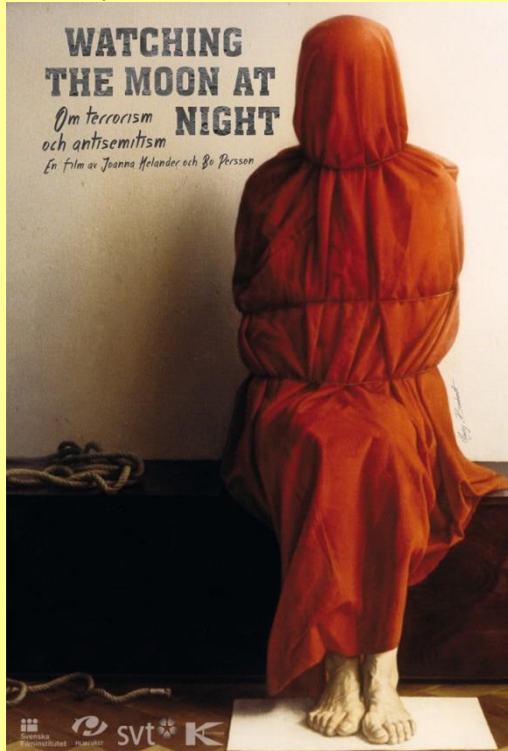
Source: <https://www.rt.com/news/346102-terrorism-documentary-sweden-muslims/>

June 10 – **Sweden's state broadcaster scrapped plans to air a documentary about anti-Semitism and jihad, fearing it could offend the nation's growing Muslim population**, Danish media reports. The station says it won't be aired because it failed to document reality.





The film, titled **'Watching the Moon at Night'**, reportedly takes a detailed look at anti-



Semitism and terrorism, alleging a link between the two. It goes on to mention crimes against Jews at the hands of Islamic terrorists.

But although the documentary was largely funded by state broadcaster SVT, the channel is now refusing to air it, declining to purchase the rights to show the film in Sweden.

According to Danish newspaper Berlingske, the decision is over fears of a backlash from Sweden's growing Muslim community.

It's not the first instance of SVT employees pushing back against the documentary, according to Marianne Ahrne, a former film consultant at the Swedish Film Institute who initially approved public funding for the documentary.

Ahrne said that after the funding was approved, the documentary was made subject to a list of conditions, and that SVT submitted *"one formal obstacle after another."*

That statement was echoed by director Bo Persson, who specifically accused SVT project manager Lars Säfström of rattling off demands in order for the film to secure funding.

According to Persson, Säfström wanted the film to be more anti-American and anti-Israel. He accused him of trying to *"influence the film's*

*content,"* adding that such behavior was *"totally unacceptable."*

However, the head of SVT's documentary department, Axel Arnö, said the decision was made because the film doesn't fit in with the channel's standards. He claimed it lacked serious journalism, as it was attempting to prove a point rather than document reality.

The move is a rare one for SVT, which almost always airs the projects it has funded. Two Swedish film festivals also chose to drop the documentary from their line-ups, though the documentary has been aired during limited releases in six other countries.

Critics have accused SVT of bowing to political correctness by not airing the film.

Speaking to RT, Rabbi Daniel Alter said the film is *"an expression of a larger situation in Sweden, where the Jewish community is under real severe anti-Semitic pressure, and most of it coming from the Muslim community..."*

*"...I think this is an issue of whether a society wants to remain democratic. And if it wants to remain democratic, then it has to protect all its minorities; not only a part of the minorities has to be protected...you shouldn't protect one community and leave the other community out in the rain alone, out in the cold..."*, he said.

**Films dealing with the Muslim faith have led to deadly attacks in the past. In 2012, a YouTube trailer for a documentary titled 'Innocence of Muslims' led to violent demonstrations across the Middle East, Africa, Afghanistan, and Pakistan.**

It's not the first time that the state-run TV channel has faced allegations of political correctness and left-wing bias.

In December, a handbook was leaked in which SVT journalists were told to avoid words like *"immigrants,"* and to instead call migrants *"people on the run."* Additionally, one of the station's journalists was arrested for smuggling a migrant into Sweden earlier this year.

Meanwhile, **Sweden has announced that a government-funded imam training course will begin in Stockholm this autumn, and several swimming pools have introduced women-only sessions to accommodate Muslims.**

**There are no official statistics on the number of Muslims in**



Sweden, with estimates ranging between 100,000 and 500,000 people. The population has grown since the EU refugee crisis began

last year, with Sweden and other European countries accepting an influx of asylum seekers from the Middle East and North Africa.

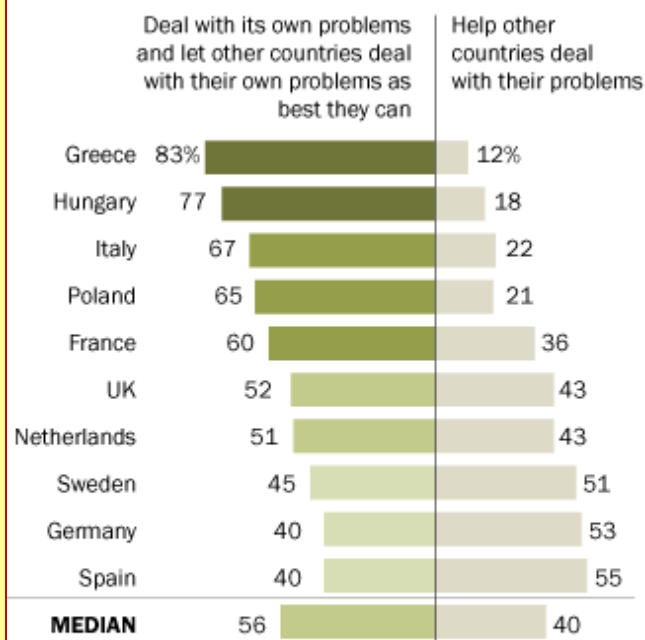
## Europeans Face the World Divided

Source: <http://www.pewglobal.org/2016/06/13/europeans-face-the-world-divided/>

In the wake of prolonged economic stagnation, a massive influx of refugees, terrorist attacks and a strategic challenge posed by Russia, many Europeans are weary – and perhaps wary – of foreign entanglements, according to a new Pew Research Center survey. Views of their respective countries' place in the world vary widely, but few see the past decade as a time of growing national importance. And across the continent publics are divided: Many favor looking inward to focus on domestic issues,

### Many Europeans focused on their own country's problems

*Our country should ...*



Note: Volunteered categories "Both" and "Neither" not shown.

Source: Spring 2016 Global Attitudes Survey. Q29.

"Europeans Face the World Divided"

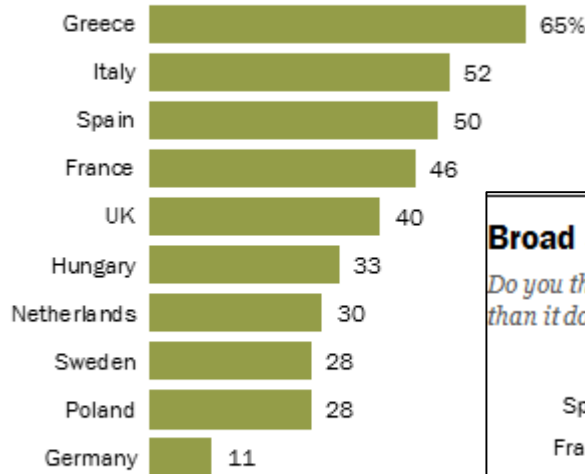
PEW RESEARCH CENTER

while others question whether commitments to allies should take precedence over national interests. Yet Europeans have not completely turned their backs on the world. Although deeply critical of how the European Union has handled the refugee crisis, the economy and Russia, they acknowledge the Brussels-based institution's rising international prominence and want it to take a more active role in world affairs. Involvement in the international economy is also widely supported and Europeans generally feel an obligation to help developing nations.



### Some nations' influence seen in decline

*Our country plays a less important role in the world today compared to 10 years ago*



Source: Spring 2016 Global Attitudes Survey, Q31a.

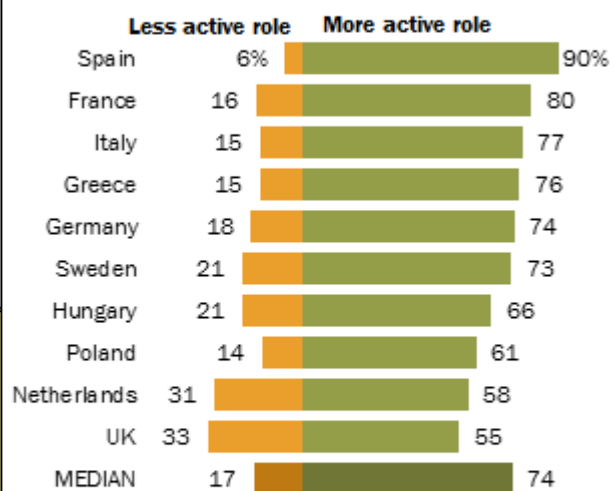
"Europeans Face the World Divided"

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In seven of 10 EU nations, half or more of the public believes that their country should deal with its own problems and let other nations fend for themselves as best they can. In five countries, roughly half or more believe that in foreign policy their government should follow its own national interests, even when its allies strongly disagree. Notably, those who believe their government should first focus on national

### Broad support for a more active EU

*Do you think the EU should play a \_\_\_ in world affairs than it does today?*



Note: Volunteered categories "About the same" and "No role" not shown.

Source: Spring 2016 Global Attitudes Survey, Q39.

"Europeans Face the World Divided"

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problems are far more likely to favor pursuing national interests regardless of the opinion of the country's international partners.

Waning international confidence afflicts a number of European societies. Only the Germans and the Poles believe their countries play a more important role as a world leader today compared to a decade ago. And pluralities of Greeks, Italians, Spanish and French say their countries are less prominent today, not more.

At the same time, Europeans are quite clear that they want the EU to play a more active international role in the future. A median of 74% across the 10 countries surveyed in Europe support Brussels being more globally engaged. Notably, in Greece, Italy, Spain and France majorities or pluralities believe their nations have lost global influence, and in each of these nations more than three-quarters favor the EU taking on more responsibility around the world.

These are among the key findings from a new survey by Pew Research Center, conducted in 10 EU nations and the United States among 11,494 respondents from April 4 to May 12, 2016. The EU portion of this survey covers countries that account for 80% of the member nations' combined population and 82% of the EU-28 gross domestic product.

Views of global engagement divide along ideological and party lines in many of the surveyed publics. In most countries people on the right of the political spectrum are much more likely than those on the left to say their nation should focus on domestic problems, not help others. And in six of the 10 countries polled people on the right are more likely



than those on the left to believe that their government should pursue national interests in foreign policy even if allies strongly disagree.



## Brighton College alters uniform code to accommodate transgender pupils

Source: <https://www.theguardian.com/uk-news/2016/jan/20/brighton-college-axes-uniform-dress-code-accommodate-transgender-pupils>

Jan 2016 – **A co-educational independent school is to scrap distinctions between**

to abolish the notion of boys' and girls' schools altogether," he said.



A boy (left) and a girl (right) or a boy (right) and a girl (left)???

"It ties in with my strong personal belief that youngsters should be respected for who they are. If some boys and girls are happier identifying with a different gender from that in which they were born, then my job is to make sure that we accommodate that. My only interest as headmaster is their welfare and happiness."

Sixth-form pupil Amy Arnell said: "When the headmaster announced it, no one was really surprised – there is

**boys and girls uniforms in an effort to accommodate transgender students.**

just no reason not to do it if it makes people feel more comfortable about themselves."

Dysphoric or transgender pupils at Brighton College, a private day and boarding school that takes pupils from reception to sixth form, will be **able to choose between wearing a traditional blazer, tie and trousers or skirt and bolero jacket.**



The school said at least one pupil had taken up the option, and several families had made inquiries. The school said it was "reacting to a changing society which recognises that some children have gender dysphoria and do not wish to lose their emotional gender identities at school. Public schools are usually seen as bastions of conservatism but Brighton College feels it is time to break ranks."

The school said families with gender dysphoric children would need to write to the head to advise him of the situation.

Richard Cairns, the headteacher, said the move followed discussions with a small number of families. "The college's approach is different from most other schools that have tended to give transgender children personal leeway with uniform. Brighton College has instead decided

Gender dysphoria is a condition where a person experiences a mismatch between their biological sex and gender identity, according to an [NHS website](#). It is



not the same as transvestism or cross-dressing and is not related to sexual orientation. People with the condition may identify as heterosexual, gay, lesbian, bisexual or asexual.

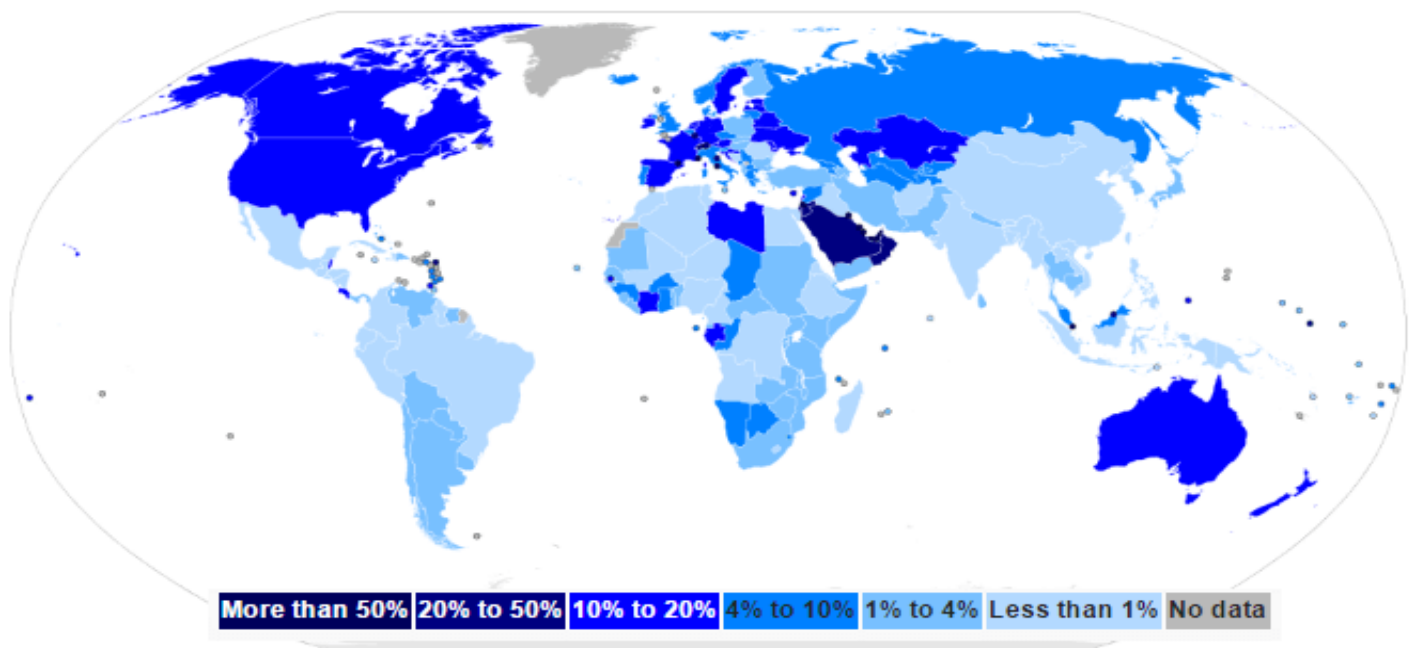
A 2014 survey by [Pace](#), the lesbian, gay, bisexual and transgender mental health charity, found that 48% of young people with gender issues had attempted suicide, while 58% had self-harmed.

Brighton College has a reputation for outstanding academic achievement, with fees ranging from about £21,000 a year for secondary day pupil and £33,000 for boarders.

The school [hit the headlines](#) recently after Cairns said women attending single-sex schools were at a huge disadvantage in dealing with men, and that single-sex education was “a deeply unrealistic world”.

## Top 10 Countries With The Largest Immigrant Populations

Source: <http://moverdb.com/largest-immigrant-populations/>



Map created by Stephen Bain [via Wikimedia](#)

The map above shows countries based on the percentage share of their population who are immigrants. As you can see the numbers vary widely by country.

Below we list the top 10 countries with the largest immigrant populations in terms of both relative and absolute numbers. The data comes from the UN's [Trends in International migrant stock 2015](#).

### Top 10 countries by relative share of the population made up of immigrants

1. **Vatican City** – 100% (800; <0.1% of world total)
2. **United Arab Emirates (UAE)** – 83.7% (7.8 million; 3.4% of world total)
3. **Qatar** – 73.8% (1.6 million; 0.7% of world total)
4. **Kuwait** – 70% (2.9 million; 1.3% of world total)
5. **Monaco** – 64.2% (21,000; <0.1% of world total)
6. **Sint Maarten** – 59.7% (27,000; <0.1% of world total)
7. **Andorra** – 56.9% (42,000; <0.1% of world total)
8. **Bahrain** – 54.7% (729,000; 0.3% of world total)
9. **Brunei** – 49.3% (206,000; 0.1% of world total)
10. **Luxembourg** – 43.3% (249,000; 0.1% of world total)



In addition to the countries listed above, the following territories also have immigrant populations above 50%: American Samoa (71.2%), Caribbean Netherlands (65.9%), Falkland Islands (62.1%), US Virgin Islands (59.3%), Macau (58.8%), Isle of Man (52.0%), Channel Islands (51.0%).

#### Top 10 countries with the largest total number of immigrants

1. **United States** – 46,627,102 (14.3% of country total and 19.8% of world total)
2. **Germany** – 12,005,690 (14.9% of country total and 4.9% of world total)
3. **Russia** – 11,643,276 (7.7% of country total and 4.8% of global total)
4. **Saudi Arabia** – 9,060,433 (31.4% of country total and 3.9% of world total)
5. **United Kingdom** – 8,543,120 (11.3% of country total and 3.7% of world total)
6. **United Arab Emirates** – 7,826,981 (83.7% of country total and 3.4% of world total)
7. **France** – 7,784,418 (11.1% of country total and 3.1% of world total)
8. **Canada** – 7,284,069 (20.7% of country total and 3.1% of world total)
9. **Australia** – 6,763,663 (27.7% of country total and 2.8% of world total)
10. **Spain** – 5,852,953 (14% of country total and 2.8% of world total)

#### A few more interesting facts the data above reveals:

- 1 in 5 immigrants live in the United States
- There are more immigrants living in the US than in the next four countries combined
- Only the UAE appears in both lists
- If birthright citizens in the US were counted as immigrants, then the total immigrant population would increase to 80-85 million

## In France we've lost our joie de vivre

By Agnès Poirier

Source: <http://www.theguardian.com/commentisfree/2016/jun/14/france-joie-de-vivre-terrorist-attacks-floods-euro-2016>

The writer Samuel Beckett, based in Paris, talked about “[the siege in the room](#)”. He was referring to intense periods of writing, when nothing else mattered. Life in France, in the last few months, has felt exactly like that siege – except the room is the whole country.

Coming on the back of two terrorist attacks, which shook us to the core and installed a new normality in our lives consisting of round-the-clock army patrols on the streets of Paris, the events of the last few weeks, days and nights have been particularly difficult.

**It seems that the Euro 2016 championship is bringing to the fore our existential malaise and crystallising our fears. Rocked by weeks of strikes over labour reforms, most people now view with increasing concern, almost dread, the trade unions arm-wrestling with President François Hollande's government.**

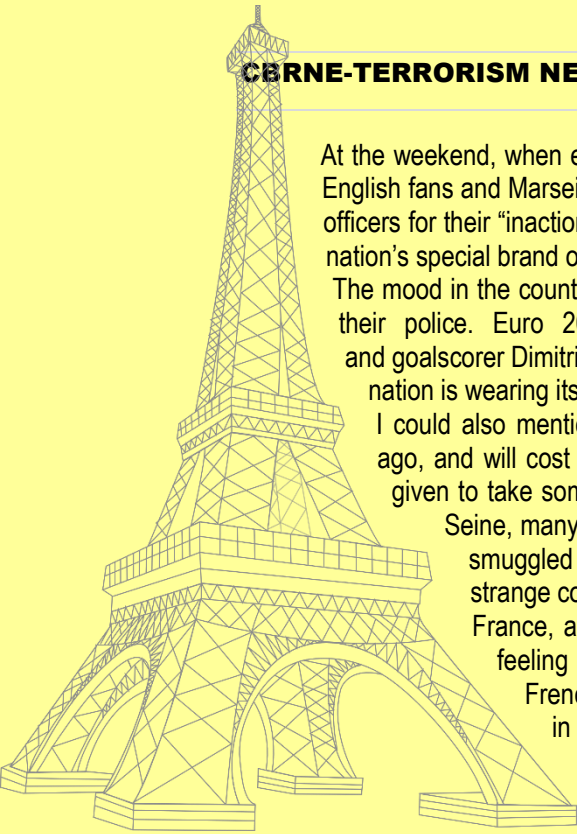
Continuous street demonstrations and transport strikes not only put pressure on police forces needed for the football tournament, but also send an alarming signal to visitors from abroad.

As I write, I can hear the continuous wailing of the police and firemen's sirens rushing to Boulevard du Montparnasse where the latest demonstration against the new labour law is degenerating into yet another confrontation between groups of hard-core anarchists and radical leftists and the riot police.

As I write, on social media I can see teargas, shattered glass on the pavements, rows of Vélib (bicycles for hire) on fire, a couple of people injured in front of Le Dôme – the 1900 brasserie where Lenin, Picasso and Hemingway used to go – and Parisians helping uncomprehending European football fans get away from the main boulevard where water cannon are advancing.

Many people in France worry about their police, who have been on the frontline for almost 18 months, and are overstretched and exhausted. The state of emergency has now been in place for six months and was extended for Euro 2016 to ensure maximum security, but not a day seems to pass without unexpected bursts of violence.





At the weekend, when extreme violence broke out in Marseilles, between Russian ultras, some English fans and Marseille's own brand of thugs, the British media were quick to criticise French officers for their "inaction" or delayed response. But before having to learn the minutiae of every nation's special brand of urban violence, they have enough on their plate to deal with.

The mood in the country is heavy and sombre. Citizens are as exhausted and demoralised as their police. Euro 2016's opening match, when France scored a last-minute winner and goalscorer Dimitri Payet started sobbing, is a timely reminder that, at the moment, the nation is wearing its heart on its sleeve.

I could also mention the recent floods, which devastated many French towns a fortnight ago, and will cost the country hundreds of millions of euros. In fact, when the order was given to take some of Le Louvre's arts to a place of safety away from the ever swelling Seine, many Parisians thought back to 1939 – when the whole public collection was smuggled out of the capital, beyond the reach of the invading Nazis. This is a strange comparison, but one that says a lot about the current atmosphere.

France, a nation used to laughter and lightness, is acquainting itself with a new feeling of weariness. Yesterday morning we woke up to the news that a French police commander had been knifed to death and his wife's throat slit in front of their three-year-old son at their home. The attacker, a 25-year-old compatriot, was reportedly acting for Islamic State and had been convicted three years earlier of plotting terrorist acts. It was the first time in the country that an off-duty policeman had been targeted and

murdered in his own home.

We later heard the now familiar voice of the French public prosecutor, François Molins, who has now become part of an extended bereaved family called France. After each terrorist act, he appears to tell us the facts and keep the nation informed of the investigation. Always dignified in his dark grey suits, and with an impeccable delivery, he seems to be telling the country that the road back to insouciance is going to be very long, and things might get worse before they get better.

So we all keep our fingers crossed that Russia loses as soon as possible, that English fans behave themselves, that French strikes are put on hold – at least until the end of Euro 2016 – and that this tournament goes without a glitch, brings us some respite, and perhaps even some joy. And if our friends in Britain voted to remain with us, this would perhaps lift our spirits a little more.

*Agnès Poirier is political commentator and film critic for the British, American, Canadian, French and Italian press.*

## Top officials put a Jewish stamp on the Rio Olympics

Source: <http://www.jta.org/2016/06/16/news-opinion/world/top-officials-put-a-jewish-stamp-on-the-rio-olympics>



The Jewish trio in charge of the Rio Olympics: Carlos Arthur Nuzman is flanked by Sidney Levy, left, and Leonardo Gryner, Nov. 9, 2012. (Marcio Rodrigues)

June 16 – Mazel tov! That's perhaps how the big shots in charge of the Rio 2016 Olympic Games, the first to take place in South America, will toast victories when the competition gets underway Aug. 5.



Three of the top officials of the Rio 2016 Organizing Committee, including its president, Carlos Arthur Nuzman, are Jewish.

But in the run-up to the games, there have been more “oy gevalts” than mazel tovs as organizers deal with reports of unfinished venues, polluted swimming and sailing sites and, most of all, concerns about the mosquito-borne Zika virus.

In an interview with JTA, Nuzman said the number of Zika cases in Rio have dropped sharply in recent weeks, and are expected to fall even further during the dry months of the Brazilian winter, as Rio 2016 organizers emphasized at a news conference on June 7. Last month, the World Health Organization said there is no public health justification for postponing or canceling the Games.

“None of the top athletes have declared not to come. If there’s a second-layer one who won’t come, good for him,” an irritated Nuzman told JTA.

One of Brazil’s most prominent sports figures, Nuzman, 74, is a former president of the Brazilian Volleyball Confederation and has been president of the Brazilian Olympic Committee since 1995.



An aerial view of Rio 2016 Olympic Park during construction ([Gabriel Heusi/Brasil2016.gov.br](http://GabrielHeusi/Brasil2016.gov.br))

Nuzman preferred to talk about the robust Jewish connections at the games, including a ceremony to honor the 11 Israelis murdered by Palestinian terrorists at the Munich Olympics in 1972, the Israeli company that is providing security for the games and his own deep ties — as an athlete, sporting official and Jew — to Brazilian sports.

“My connection with Judaism and with Israel is through sports,” said Nuzman, who was part of the first Brazilian male volleyball team in 1964 when the sport debuted at the Olympic Games. “I started my career playing at the Brazilian Israelite Club and I have attended four Maccabiah Games in Israel.”

The grandson of Russian immigrants, Nuzman was born in Rio, home to an estimated 40,000 Jews. He is an active member of the 440-family Conservative synagogue Congregacao Judaica do Brasil led by Rabbi Nilton Bonder, his nephew. Nuzman’s father, Izaak, presided over the Rio Jewish federation, the Hebraica Club and the local Keren Hayesod-United Israel Appeal.

“He was one the greatest leaders of our Jewish community. He brought [David] Ben-Gurion and Golda Meir to Brazil,” Nuzman boasted, noting the late prime ministers of Israel. Nuzman relies on other prominent members of the local Jewish community as deputies. Sidney Levy, a business executive, is the Rio 2016 committee’s chief executive officer and





has a \$2.2 billion budget to manage. Leonardo Gryner, a communications and marketing director who was part of the Rio 2016 bid, is deputy CEO.

“I have no connection to sports at all,” Levy said in an interview published at the Keren Hayesod webpage. “My duty is totally business-related.”

The Jewish trio at the helm of Rio 2016 is behind the ceremony to honor the Munich victims. The Aug. 14 event at Rio’s City Hall will be co-led by the International Olympic Committee along with the Olympic committees of Israel and Brazil.

Four years ago, the IOC rejected appeals for a moment of silence at the opening ceremonies of the London Games in 2012, the 40th anniversary of the tragedy. Critics at the time were not appeased by various events marking the anniversary that took place at other venues.



The IOC also announced a special area in the Rio Olympic Village to commemorate the memory of all Olympians who have died. In addition, a moment of reflection in honor of all dead Olympians will be held during the closing ceremony.

[The Midrash Centro Cultural in Rio de Janeiro opened August 2015.](#)

“There will be no minute of silence at the opening ceremony,” read an IOC note, frustrating a longtime request of families.

The widows of weightlifter Yossef Romano and fencing coach Andre Spitzer will instead light 11 candles at the City Hall event. The Israeli government will be represented by the minister of culture and sport, Miri Regev.

“The mayor will open the doors of his house in a gesture of great friendship with the Brazilian Jewish community and the whole people of Israel,” Israel’s honorary consul in Rio, Osias Wurman, told JTA. “We are deeply moved. Symbolically falling on Tisha b’Av, one of the saddest days of the

Hebrew calendar, the event will be a unique moment.”

The security of the 12,000 athletes and anticipated 500,000 visitors is among the most sensitive issues for organizers, and the Israeli company **International Security and Defense Systems**, or ISDS, won the international tender to secure the games. ISDS has coordinated security at previous Olympics and World Cups, and will provide services from consulting to security supply systems. “It’s an honor for ISDS to be the very first ever Israeli group to be part of the Olympic family,” Leo Gleser, ISDS president and a former Mossad agent, told JTA.

Last November, a French national identified as an executioner in ISIS propaganda videos tweeted, “Brazil, you are our next target.” Brazil’s counterterrorism director, Luiz Alberto Sallaberry, recognized the statement as credible.

“I can’t speak much about security or it won’t be security anymore,” Nuzman told JTA .



Brazil has long regarded itself as an unlikely target of extremists thanks to its historical standing as a nonaligned, multicultural nation. Security experts have warned that many Brazilian officials do not realize how big a stage the Olympics is for anyone seeking to sow terror.

Israel will make its 16th appearance at the Olympics by bringing to Rio its largest delegation ever, with nearly 50 athletes for the Olympics and another 50 for the 2016 Paralympic Games following immediately afterward. Some 10,000 Israelis are expected to make it to Rio to root for their national heroes. A temporary Israeli consulate will be established in Rio to serve the Israeli population during the games.

"The local Jewish community enjoys seeing the Olympics team in international cooperation with other countries. The federal police have very well trained staff. We are very optimistic," Octavio Aronis, head of security of the Brazilian Israelite Confederation, told JTA.

Rio's Jewish federation president, Paulo Maltz, is more guarded.

"There is always a first time, it has happened twice in Argentina and Brazil is not free of it," he told JTA, citing the **Buenos Aires bombings of the Israeli Embassy in 1992 and the AMIA Jewish center in 1994.**

"We'll be on total alert."

Schools will be closed during the Olympics following a Rio municipality decision to move the winter school vacations from July to August, in large part to reduce traffic.

"It's a relief," Maltz said.

Those who make it to Rio will be able to take part in two special Shabbat ceremonies. Some 300 guests are expected at Bonder's

synagogue, including Regev, the Israeli sports minister. Chabad will host a Shabbat event during the Paralympics.

In a joint educational project around Rio 2016, students from four Jewish schools and four municipal public schools will produce a book about the Munich murders and the Olympic spirit.

"Children must understand the evil caused by terrorism," said Sergio Niskier, one of the project organizers and a former Jewish federation president. "It's fantastic to see Jewish schools and public schools from the municipality, despite their abyssal social and economic realities, working hand in hand in this project."

The Israeli singer Ester Rada, whose parents were Ethiopian immigrants, will perform at official sites where fans can watch the sporting action on big screens.

"It's an example of the polyvalent, multicultural aspect of the Jewish state, which is formed by



over 70 different origins that make up the Israeli society," said Wurman, the honorary consul.

## The bravest lovers in Britain

Source: <http://www.dailymail.co.uk/news/article-3648482/Soldier-lost-half-body-war-hero-leg-destroyed-Iraq-bravest-lovers-Britain.html>

June 18 – Corporal Hannah Campbell was given just a one in ten chance of surviving the terrible injuries she sustained in Iraq when she was buried alive in a mortar blast.

Things were more desperate still for Sergeant Rick Clement, one of the most badly wounded British soldiers ever to survive his injuries.





He had been flown home from Afghanistan with one leg missing from the hip, the other torn off just a little lower, and with devastating damage to his genitals and bowel. He was given just a one in 50 chance of pulling through.

Now, however, the pair have defied even higher odds – by falling in love, having originally found themselves together in the same ward of the military wing of Selly Oak Hospital in Birmingham.

The two have much in common, including a long and very public fight, not just to reconstruct their ravaged bodies, but their lives too.

Despite his devastating injuries, Rick had to battle for full compensation from the Government.

Hannah, meanwhile, recounted her own story and the seemingly impossible birth of a baby girl in her book *Never Broken*, serialised in *The Mail on Sunday*.

Both soldiers then suffered the sadness of marriages that could not be sustained.

Yet today has brought a romance that will touch the nation, proving that love – and courage – really can conquer all.

Rick, 36, who is now a charity campaigner, says: 'It's miraculous either of us is still alive.

'To go through similar life experiences of recovery, acceptance, divorce and then to be reunited, is wonderful. It is as if fate waited until the time was right.'

It is a sentiment echoed by Hannah, 32. 'The way I see myself and the qualities I look for in a man have changed massively since I was injured,' she says.

'At the beginning I hated myself – I didn't think I would feel sexy again. Then I made peace with the fact that I was different, and it changed the way I thought about a partner too. I wanted someone who was my best friend as well as my lover.'

Their union has its roots in the ultra-clinical surroundings of Selly Oak's critical care unit in 2010.

Rick was in a medically induced coma after the explosion that had caused his horrific injuries.



Hannah was also there, unconscious, recovering from the elective amputation of a leg shattered by a mortar three years earlier in Iraq.

In the aftermath of the blast, she had been left wheelchair-bound, ballooned to 21st and, in her mind, become redundant as a mother, unable to play with her little girl because she was in so much pain.

After 18 operations, she decided to have her leg removed.

Although Rick and Hannah were too desperately sick to acknowledge each other's presence, his parents – accountant Kay and retired transport foreman Graham Plant – were meeting Hannah's mother and father, lecturer Ann and engineer Ron McIlwraith, almost daily in the family room next to the ward.



© Mail on Sunday

It was at the Ministry of Defence's rehabilitation centre, Headley Court, where the pair finally got to know each other.

As both were in committed relationships, they focused on their respective recoveries while enjoying the bond that unites all Headley Court veterans.

Rick, who spent two years there, says: 'At Headley Court, Hannah did stand out because for a time she was the only female soldier.

'I didn't see her in a romantic way as I was engaged to be married to Leanne, and Hannah was with her husband Jamie.

'But I do remember she was learning to walk again in high heels during one session, and I said, "Are you going out clubbing or are you off to the gym?" and everyone laughed.

'The lads were always having a joke and Hannah was involved with the banter.'

His rehabilitation was a life-changing experience. 'Seeing other guys with similar injuries opened my eyes to what I could achieve,' he says.

'Over time I learned to drive again, learned to swim and walked on prosthetic legs, although I'll always need my wheelchair. Independence was the one thing I really wanted and I achieved that goal.'

For Hannah too, Headley Court was a time of radical change.

Overweight, depressed and in pain from her damaged leg, she became an amputee who felt as if she'd been given a second shot at life.

But by the time the couple found themselves single, they were no longer in touch. Instead, both threw themselves on to the dating scene. Hannah tried blind-dating and trawled the internet for a match. Rick went on a string of doomed outings with women who he believes struggled to see past his disability.

He says: 'My self-esteem didn't change a great deal after I was injured as I was so grateful to be alive, and I've always had confidence. What was hard was seeing the massive change from others.

'A lot of women didn't look at me in the way they might have done before. Just being in a wheelchair, without the other injuries, made a difference to them. It wore me down to the point where, before I met Hannah, I had all but given hope of meeting someone.'

But in March, he spotted Hannah on social media and sent her a message: 'I'm so pleased to see how well you are doing.'

He says: 'I never imagined we would be anything more than mates. But I was delighted to hear back from her and we started keeping in touch. A month later I bought a copy of her book to take with me on a break to Majorca. I sent her a picture of it sticking out of my suitcase saying, "I'm taking you on holiday with me."



It was only as he flicked through the pages that he realised Hannah had been the female patient at Selly Oak all those years earlier. 'I emailed her and said, "I was there!"

'We started talking and I ended up spending my entire holiday trying to find wi-fi spots. The more I read and the more we talked, I realised how much we had in common.

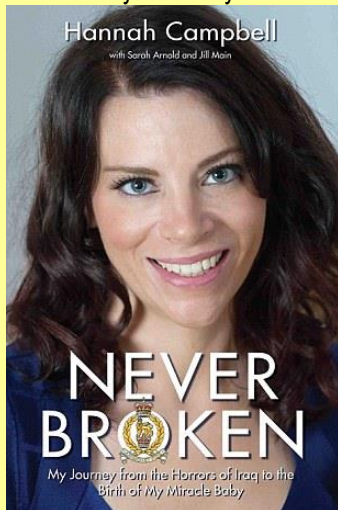
'Our chat turned to flirting and I realised this could be something deeper than friendship.'

Indeed it was. They began as tentatively as any other ordinary couple, with a meal at a romantic restaurant. Then they went to a Coldplay concert and took Hannah's two daughters – Milly and Lexi-River – to the funfair in Rick's home town of Blackpool. They have both met each other's family, an introduction made easier by those desperate days six years ago when both sets of parents were by their hospital bedsides.

They have decided to make their relationship public now because Hannah was spotted last Monday supporting Rick as he undertook a charity abseil.

They are undeniably well matched. Hannah understands Rick's need for independence, despite his wheelchair, and his hunger for life. And he is sympathetic to the body issues which have plagued her since she was injured. It is quite possibly the bravest love affair in Britain.

Hannah says: 'I fancy Rick – I find him attractive on many levels – but I also believe he's my soul mate.'



Hannah is divorced from Jamie, the man to whom she was married when she was critically wounded in June 2007.

He nursed her through all her injuries from the mortar attack, which left her blind in one eye and with shrapnel wounds to her abdomen, and split her left hand in two.

[Hannah recounted her own story and the seemingly impossible birth of a baby girl in her book \*Never Broken\*, serialised in \*The Mail on Sunday\*](#)

She says of her former husband: 'He showed remarkable strength of character in how he supported me through the worst years of my life. Yet neither of us were the people we married any more and it felt hard to be a sexual woman with someone who had performed the most intimate tasks as my carer... and I know he struggled too.'

Rick married the woman to whom he was engaged when he stepped on an improvised explosive device (IED) in 2010 but ultimately the union did not survive his physical reversal from fit, frontline sergeant to

wheelchair-bound former soldier.

Rick lost both his legs in extremely high amputations, his pelvis was broken in two, his genitals were badly damaged – both his testicles were lost.

Initially, he had to be fitted with catheters and a colostomy bag while a series of operations to repair his bowels and genitals was carried out. His right arm was also badly damaged and his stomach had to be sewn back together.

His marriage suffered similarly. He says: 'The dynamics of our relationship had changed since I was injured. It transformed our relationship into a platonic friendship, like brother and sister.

'I will always appreciate that Leanne stuck with me through the hardest time possible but we were better off separating in the end.'

Although he has undergone reconstructive surgery so that he can have sex and use the toilet, he can no longer father a child, something that encouraged him to campaign for frontline soldiers to be allowed to freeze their sperm.

Now he and Hannah are together and refusing to let their disabilities hold them back. Rick admits: 'What began as a friendship has developed into love. I didn't think it would happen this quickly – it's been completely unexpected.

'Emotionally my walls were still up, but Hannah has broken through them very quickly.'

Both agree that all they've been through has made them stronger and that their own experience of disability has taught them that looks fade but courage and good humour stand the test of time.



Rick says: 'The past few years have been hard. We've both been blown up and had to overcome life-changing injuries. Yet here we are today, sharing how much we feel about each other. We are both pretty confident that this is going to last.

'Like any new couple we're getting used to the fact we've got someone to trust and lean on after being on our own. We're enjoying that so who knows what we'll go on to achieve and do together in our future. 'All I can say is that love really does conquer all.」

## 2nd Largest Nationality Living In Each European Country

Source: <http://brilliantmaps.com/2nd-largest-nationality/>



Map by [reddit user JimWillFixIt69](#)

June 07 – The map above shows the flag of the 2nd largest nationality, by country of birth, living in each European country. Thus, it may include citizens and those who have moved temporarily for work. Nevertheless, there are many surprises, such as:

- Ireland is no longer the largest source of foreign born residents to the UK. Since 2011, they've dropped to 4th, behind India, Poland and Pakistan.
- Neither the Czech Republic nor Slovakia are each other's second largest nationality, despite both being successor states to Czechoslovakia.
- Despite both being comprised primarily of ethnic Albanians, neither Kosovo nor Albania are each other's second largest national group.
- Poles make up the 2nd largest group in Ireland, Iceland, Norway and Lithuania.
- Turks make up the 2nd largest group in not only Germany, but also the Netherlands, Denmark, Austria and Bulgaria.



- Although you can barely see it on the map Portugal born residents are the 2nd largest group in Luxembourg, while Brazilians make up the 2nd largest group in Portugal.
- The impact of the former USSR can still be fairly clearly seen, given that Russians make up the 2nd largest group in Estonia, Latvia, Belarus and Ukraine. However, in Russia itself Ukrainians are the 2nd largest group.
- Similarly Serbs make the 2nd largest group in 4 of the 7 successor states to Yugoslavia (Slovenia, Croatia, Bosnia and Herzegovina and Montenegro) yet Hungarians are the 2nd largest group in Serbia.
- Finally, the 2nd largest group in Spain, Italy and Hungary are Romanians not Chadians.

Controversially, the map author decided to include Kurdistan as a separate nation. And states that: "I did have a dilemma with Turkey because although Kurdistan isn't a country, Kurds (who don't consider themselves to be Turkish) are by far the 2nd most popular, and it would be misleading to suggest otherwise."

Finally, because I know somebody is going to mention it, the United Kingdom is treated as single country in the map above in keeping with the Countries in the International Organization for Standardization. None of the the 4 constituent countries of the UK is a Sovereign state and thus is not be listed separately.

► For more you should also have a look at the [Most Popular Migrant Destinations By Country](#) map.

## 2015 global forced displacement breaks records

Source: <http://www.homelandsecuritynewswire.com/dr20160620-2015-global-forced-displacement-breaks-records>

June 20 – Wars and persecution have driven more people from their homes than at any time



since the UN High Commissioner for Refugees (UNHCR) records began, according to a new report released today by the UN Refugee Agency.

UNHCR says that the report, entitled **Global Trends**, noted that on average twenty-four people were forced to flee each minute in 2015, four times more than a decade earlier, when six people fled every sixty seconds.

The detailed study, which tracks forced displacement worldwide based on data from governments, partner agencies and UNHCR's own reporting, found a total **65.3 million people were displaced at the end of 2015, compared to 59.5 million just twelve months earlier.**

It is the first time in the organization's history that the threshold of sixty million has been crossed.

"More people are being displaced by war and persecution and that's worrying in itself, but the factors that endanger refugees are multiplying too," said UN High Commissioner for Refugees Filippo Grandi.

"At sea, a frightening number of refugees and migrants are dying each year; on land, people fleeing war are finding their way blocked by closed borders. Closing borders does not solve the problem."

Grandi said that politics was also standing in the way of those



seeking asylum in some countries.

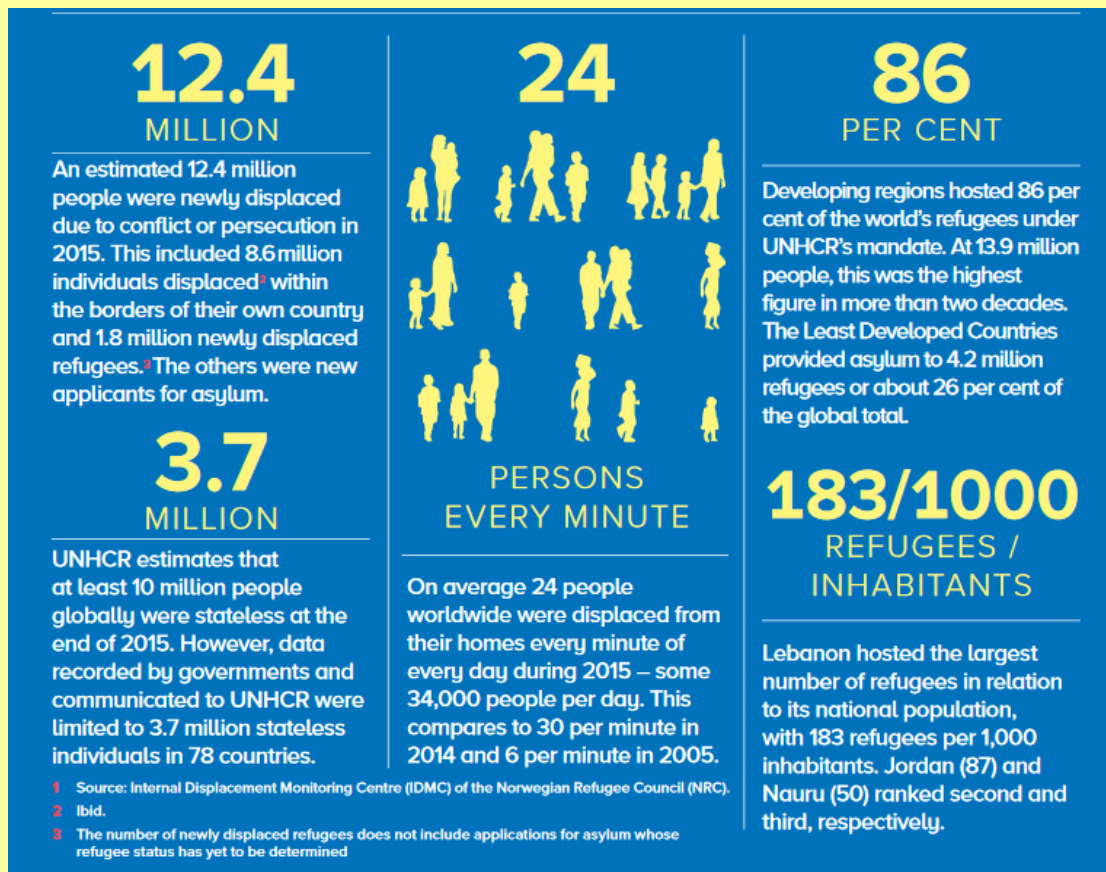
“The willingness of nations to work together not just for refugees but for the collective human interest is what’s being tested today, and it’s this spirit of unity that badly needs to prevail,” he declared.

The report found that, measured against the world’s population of 7.4 billion people, one in every 113 people globally is now either an asylum-seeker, internally displaced or a

Forced displacement has been on the rise since at least the mid-1990s in most regions, but over the past five years the rate has increased.

**The reasons are threefold:**

- conflicts that cause large refugee outflows, like Somalia and Afghanistan – now in their third and fourth decade respectively – are lasting longer;
- dramatic new or reignited conflicts and



refugee – putting them at a level of risk for which UNHCR knows no precedent.

To put it in perspective, the tally is greater than the population of the United Kingdom – or of Canada, Australia, and New Zealand combined. It is made up of 3.2 million people in industrialized countries who, at the end of 2015, were awaiting decisions on asylum – the largest total UNHCR has ever recorded.

Also in the tally are a record 40.8 million people who had been forced to flee their homes but were within the confines of their own countries, another record for the UN Refugee Agency. And there are 21.3 million refugees.

situations of insecurity are occurring more frequently. While today’s largest is Syria, wars have broken out in the past five years in South Sudan, Yemen, Burundi, Ukraine and Central African Republic, while thousands more people have fled raging gang and other violence in Central America;

- the rate at which solutions are being found for refugees and internally displaced people has been on a falling trend since the end of the cold war, leaving a growing number in limbo.

“We’re stuck here. We can’t go on and we can’t go back,” said Hikmat, a Syrian farmer driven





from his land by war, now living in tent outside a shopping centre in Lebanon with his wife and young children. “My children need to go to school, they need a future,” he added.

**The study found that three countries produce half the world’s refugees. Syria at 4.9 million, Afghanistan at 2.7 million, and Somalia at 1.1 million together accounted for more than half the refugees under UNHCR’s mandate worldwide. Colombia at 6.9 million, Syria at 6.6 million, and Iraq at 4.4 million had the largest numbers of internally displaced people.**

While the spotlight last year was on Europe’s challenge to manage more than 1 million refugees and migrants who arrived via the Mediterranean, the report shows that the vast

majority of the world’s refugees were in developing countries in the global south.

In all, 86 percent of the refugees under UNHCR’s mandate in 2015 were in low- and middle-income countries close to situations of conflict. Worldwide, Turkey was the biggest host country, with 2.5 million refugees. With nearly one refugee for every five citizens, Lebanon hosted more refugees compared to its population than any other country.

Distressingly, children made up an astonishing 51 percent of the world’s refugees in 2015, according to the data UNHCR was able to gather (complete demographic data was not available to the report authors). Many were separated from their parents or travelling alone.

— *Read more in [Global Trends: Forced Displacement in 2015 \(UNHCR, June 2016\)](#).*

## What it’s like to be a Muslim in the CIA

By Yaya J. Fanusie

Source: <http://www.vox.com/2016/6/22/11970280/muslim-cia-officer>

June 22 – It was the day after the 2009 Fort Hood shooting. I was working as a CIA analyst. I sat in a



room with the director of the National Counterterrorism Center, along with several other analysts, as we discussed the attack. The mood was intense and somber. We focused on the killer, an Army psychiatrist and practicing Muslim named Nidal Malik Hasan, and how he had slipped through the cracks — how

had he not been identified as an insider threat to our military? I was the only Muslim in the room — an observant Muslim convert who also is African American.

Did I feel in any way awkward or conflicted as a practicing Muslim? No. My colleagues knew my character and allegiances. And I know my own. It pained me, though, to realize that more people, both Muslim and not, would now consider a Muslim working in US military, law enforcement, or intelligence to be at odds with Islam.

Many Muslims see America’s national security focus on violent Islamist groups as evidence of an anti-Islam conspiracy. And many non-Muslims assume that religiously adherent Muslims must sympathize with the jihadist cause. As a practicing Muslim who worked inside the national security establishment, I found both of those perceptions invalid.



**For me, fighting terrorism is an act of faith**

There are Muslims like myself who believe not just that we must denounce terrorists but that stopping them is an honorable act of faith. The practice of Islam encourages cultivating Salaam inwardly and outwardly. This term means more than peace. It denotes establishing security and safety.

I understood even before 9/11 that building a prosperous life for my faith in America meant accepting leadership for my country's defense. So applying to the CIA a few years after 9/11 was not a far leap in logic after studying international affairs in graduate school. I was hired as an economic analyst, covering economic security issues.

But in 2005, when the July 7 bombings in London were carried out by four young British Muslims (including a Jamaican-born convert), I started to think about how I could use my skills to help prevent such carnage. I felt that my love and firsthand understanding of Islam could be an asset in stopping the people who falsely claimed to represent my faith.

The next year, I volunteered to join an analytic unit at National Counterterrorism Center focused on identifying and preventing al-Qaeda attacks.

Muslim Americans should be at the forefront of establishing the security of their neighbors. While my perspective is grounded in my religious sensitivities, I don't think that sermons or scholarly rebuttals against extremist arguments are what's needed to defeat terrorists.

Muslims should counter them on two overlooked fronts: by engaging in necessary counterterrorism work as active participants and by cultivating a Muslim pop culture that makes such work relatable and honorable.

Clearly, not every Muslim American can, or should want to, do counterterrorism or intelligence work as a career — that was my choice. But all Muslim Americans should understand that the Quran takes a very practical view about the nature of security, fighting, and war. It is never something to take lightly, but it is considered an option within the context of the right of self-defense and to prevent violations of human freedom.

The Quran says, "Had not God checked one set of people by means of another, there would

surely have been pulled down monasteries, churches, synagogues, and mosques, in which the name of God is commemorated in abundant measure. God will certainly aid those who aid his cause."

This verse sounds like it could be describing the turmoil we're witnessing around the world, with places of worship attacked by Islamist groups bent on exterminating others' modes of worship. These Islamists certainly need to be "checked."

And with the Quran describing the prevention of religious persecution as part of God's cause, the most devout Muslim should be comfortable with national security work in principle. Certainly, religious freedom in America means little if the faithful do nothing to defend it.

**What Muslims and non-Muslims alike get wrong about Islam and counterterrorism**

A misperception I encountered at times from my fellow Muslims is that counterterrorism is an effort to undermine Islam as a faith. To some, the US government's focus on fighting terrorism was a cover for imperialistic aims.

When I first became a counterterrorism analyst, I had more than one conversation with Muslims who were skeptical about the role of al-Qaeda in the 9/11 attacks. It took me looking people in the eyes and telling them that al-Qaeda was real and actively plotting to attack for them to accept that the terrorist threat was not some government fabrication.

As the Islamic State has gained prominence, similar conspiracy theories are circulating in social media. And just a few hours after the Orlando shootings, I noticed Internet postings calling the shootings a probable "false flag" operation, orchestrated by the US government. It's not necessarily Muslims initially peddling these theories, but those who latch onto them perpetuate a culture of denial, making it harder for Muslims to take ownership of the fight against terrorism.

A misperception I encountered from my fellow Muslims is that counterterrorism is an effort to undermine Islam as a faith

A cultural shift must come about where Muslims view counterterrorism not from the standpoint of critics on the sidelines, but as thoughtful



citizens who should be leading the charge with their unique insights and sensibilities.

And, more broadly, Americans as a whole should have greater knowledge about what Muslims are doing in the fight against terrorism, because it corrects the misperception by some non-Muslims that we're not committed to our country's security.

### **I was far from the only Muslim in the intelligence community**

Muslims and non-Muslims might be surprised that the intelligence community has other converts — both African American and white — and Muslims of South Asian, Arab, African, and Persian descent. We varied in our levels of religious observance. Some prayed five times a day. Others might rarely set foot in a mosque. But we all had unique stories that could broaden how the public sees the US counterterrorism fight.

One officer I know — a white convert — once used her vacation leave to make pilgrimage to Mecca. When she returned, she explained to her CIA colleagues how her spiritual experience strengthened her in both life and work.

Another officer, a Pakistani American in her 20s, was visiting Islamabad for a few months in 2008. She had visited the Marriott Hotel there shortly before it was bombed in a terrorist attack that killed dozens and wounded hundreds. She told me she was frazzled by the close call and was considering shortening her assignment to return home. Ironically, she told me that her father, a man of faith, encouraged her to complete her trip; that he believed in her work and that she should remember that Allah was in control of life and death.

I left the CIA in 2012. But only last year did I decide to become more public about my experience as an African-American Muslim in the intelligence community. On my personal storytelling [podcast](#), I shared what it was like as a Muslim joining the CIA and what went through my mind during and after the London bombings. Many Muslims responded positively to my story. One person told me that I inspired him to consider working in national security.

Even when I was in the CIA, I knew that US government activity was only one part of the effort against terrorism — albeit a critical one.

As I see it, my work in the classified environment was to prevent terrorist attacks from those already radicalized.

But in my post-government personal life, I now use culture and media to amplify alternative narratives; promoting cultural expression reflecting the experiences of faithful, thinking Muslims. And by taking counterterrorism out of the headlines and relating it a Muslim's point of view within the field, I hope it will help Muslims engage national security issues from a more informed perspective.

The stakes are too high not to engage.

The Islamic State recently launched a series of new and renewed threats at Muslims in the West. The latest edition of the group's high-quality magazine Dabiq features a 10-page article called ["Kill the Imams of Kufr in the West."](#) It calls for the murder of a wide range of Muslim public figures in the US and Europe whom the group deems to have strayed from the faith.

After naming names, including Congress member Keith Ellison, the article ends by exhorting Muslims to use any means available to make an example out of them.

### **Why it's so important to tell the stories of Muslims in intelligence**

This jihadist narrative relies on a thin, one-dimensional perception of Islam, of America, and of the West. And it seduces those who don't look beyond the surface of religious rhetoric.

But there's a [hadith](#) that says if you see wrong occurring, you should change it by your hand. If you can't do that, try to change it with your words. And if that's too difficult, simply feel bad about it in your heart, which is the weakest of faith. I'm not a religious scholar, but I've made it a priority of the practice of my faith to help change the wrong I see coming from jihadists.

Muslims in the US and Europe must be confident in our beliefs and not defensive or dismissive about terrorism. That confidence can come from learning the true stories of Muslims preventing and combating jihadist violence. Counterterrorism must be reframed, with Muslims not just as subjects but as actors. This is not PR. It is about shedding light



on what already exists in counterterrorism circles.

Thankfully, the media is beginning to cover Muslim Americans working in the intelligence community. If more Muslims know how their brothers and sisters in faith have taken risks to fight terrorism, they will see defeating groups like the Islamic State as an Islamic endeavor.

With few well-known examples of Muslims working in US national security besides Nidal Malik Hasan, it is crucial for us to first consider what anyone who actually spends time with Muslims in America will learn. Our weapon against Islamist radicalization already exists

within the authentically American Muslim experience. It is about time it no longer remained a secret.

The Fort Hood shootings dealt a blow to everyone working in US intelligence at the time. But Muslim officers probably felt the most betrayed by Hasan's actions.

In the days that followed, however, I remember sensing a greater resolve among other Muslim Americans at the CIA, FBI, and other agencies. We wanted to be of greater service in the national security mission we signed up for. Doing so was not about seeking approval from the public, but about being true to our faith.

*Yaya J. Fanusie is the director of analysis at the Foundation for Defense of Democracies' Center on Sanctions and Illicit Finance.*



## Can Brazil protect the Olympic Games and its own citizens?

By Robert Muggah and Nathan B. Thompson

Source: <http://www.latimes.com/opinion/op-ed/la-oe-muggah-thompson-rio-games-security-20160622-snap-story.html>

June 22 – «Brazil, you are our next target." The tweet went unnoticed at first, lost in the aftermath of the devastating Paris attacks of November 2015. It was sent by Frenchman Maxime Hauchard, a self-declared jihadist and Islamic State affiliate. News of the post resurfaced in April this year after Brazil's counterterrorism czar, Luiz Alberto Sallaberry, confirmed that he was taking such threats seriously in the run-up to the Olympic Games in August.

Brazilian security personnel are not the only ones preoccupied with security threats. **In all, intelligence officials from 55 countries are setting up shop in Rio de Janeiro to monitor the digital and physical terrain.** They have reason to be nervous. **Last month Islamic State launched a new social media channel — Nashir Portugues — designed specifically to attract Portuguese-speaking sympathizers, using an encrypted messaging system. This is the first such effort in Brazil, according to the SITE Intelligence Group, which monitors extremist activities online.**

Besides Islamic militants, Brazil's intelligence agency, **ABIN, has identified at least 1,600**

**hackers involved in more than 12,400 attacks on government domains since 2012.** They are potentially less lethal than religious extremists, but still worrisome. Virtually the entire IT system for the Games has been migrated to the cloud instead of physical servers, improving efficiency but introducing new vulnerabilities to cyberattacks. Of the hackers Brazil identified, **only 10% were linked to cybercrime; more than half were associated with ideologically motivated hacktivists, the kind who might target the Olympics to embarrass the government and corporate sponsors as the hashtag #OpOlympicHacking implies.** The hacking network Anonymous has already proved itself capable of disruption in Brazil. Anonymous temporarily shut down the official website of the Rio 2016 Olympic Games on May 11 and Brazil's Ministry of Sports site the following day.

In order to counter digital threats, the government has set up a cybersecurity task force that includes ABIN, the military and the country's Internet Steering Committee. In March, ABIN gathered representatives from 33 international intelligence



agencies to review its cyberdefenses. In addition to the cybersecurity efforts, **Brazilian authorities are ramping up physical security. Around 47,000 police officers and 38,000 members of the armed forces will be deployed during the Games.**



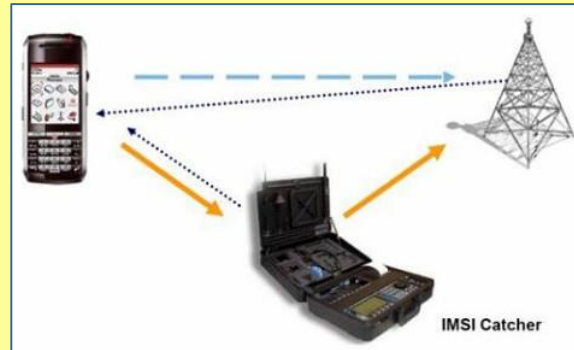
This is more than twice the security contingent for the 2012 London Olympics, and Rio is likely to be the most militarized Games on record.

The cash-strapped Brazilian government allocated \$100 million to the Ministry of Justice to bolster its security preparations; the Ministry of Defense has also invested hundreds of millions of dollars, including for anti-terrorism training. **Three thousand marines are on standby. Police and military personnel have been dispatched to gain experience at the Boston Marathon, the Tour de France and U.N. General Assembly meetings in New York.**

Security efforts on the ground will be coordinated by the federal police. The command and control headquarters in Brasilia is connected to the principal operations center in downtown Rio de Janeiro and multiple satellite offices at key Olympic installations such as Deodoro, Maracanã, Barra and Copacabana and will be equipped with closed-circuit cameras, surveillance balloons, drones and other technologies.

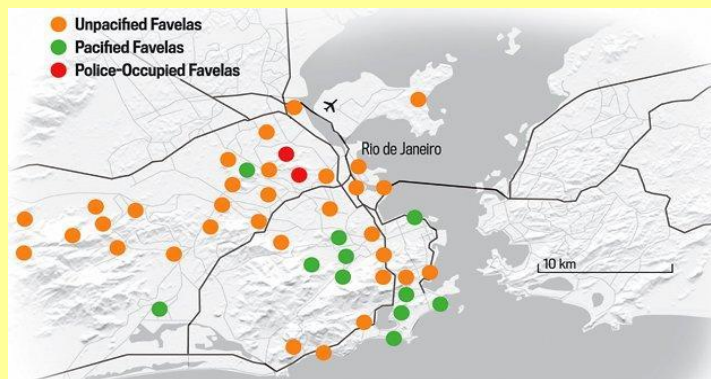
Civil liberties groups have voiced concern about Brazil's sprawling surveillance infrastructure. They are worried that new anti-

terrorism laws could stymie legitimate public protest. **Brazil's telecom regulator, Anatel, recently gave the military the green light to block cellular signals at the latter's discretion.** And there is concern that the armed forces are also preparing to deploy new



surveillance platforms such as **IMSI catchers, devices (left) that mimic cellphone towers and can be used to capture personal information.**

Brazil hopes to welcome more than half a million tourists for the Olympics, along with 10,000 athletes from close to 200 countries. Given the security preparations, it is likely that VIPs and most visiting foreigners will be well-protected. After all, Brazil has pulled off a handful of major events over the last decade, including the Rio+20 Conference (2012), a visit from Pope Francis (2013) and the FIFA World Cup (2014), with literally tens of millions of people safely passing through Rio de Janeiro.



Yet Brazil has a less stellar record of protecting its own, especially the poorest residents of Rio, many of whom live in the city's most marginal settlements, the **favelas**. A widely lauded public security program — known as pacification police units — has ground to a halt. According to Rio's Institute of Public



Security, **between January and April of this year, there were 1,715 murders in the city, a 15% increase over the same period last year, with the violence concentrated in low-income areas.** As police are redirected to Olympic duty, those crime statistics, and insecurity in the *favelas*, may rise.

As corruption scandals and the Zika crisis rumble on, Brazil is also under pressure to

deliver a secure Olympic Games. At exceptional cost, it is taking its responsibilities seriously. However, the country also badly needs to prioritize long-term public security and safety strategies — especially for Rio de Janeiro's most vulnerable populations, during the Games and after the Olympic torch goes out.

*Robert Muggah is the research director of the Igarapé Institute, an independent think tank based in Rio de Janeiro, where Nathan B. Thompson is a researcher.*

**EDITOR'S COMMENT:** A short well written article providing some insights on security issues – a big change to similar articles with a lot of bla-bla from so-called “experts”.

## New Manual Identifies Community Policing Practices To Prevent Violent/Extremism

Source: <https://today.duke.edu/2016/06/communitypolicingpractices>

June 20 – A new manual designed for police departments identifies a set of promising practices for using community policing to prevent violent extremism.

“Creating a comprehensive community outreach program can build the kind of trust necessary to combat violent extremism,” said Elizabeth Miller, lead author of the report and a research associate at the Police Executive Research Forum (PERF).

The manual is based on a research project led by David Schanzer, associate professor at Duke's Sanford School of Public Policy and director of the Triangle Center on Terrorism and Homeland Security.

“We believe community outreach and engagement with communities are key to preventing more tragedies like the one that took place in Orlando,” Schanzer said.

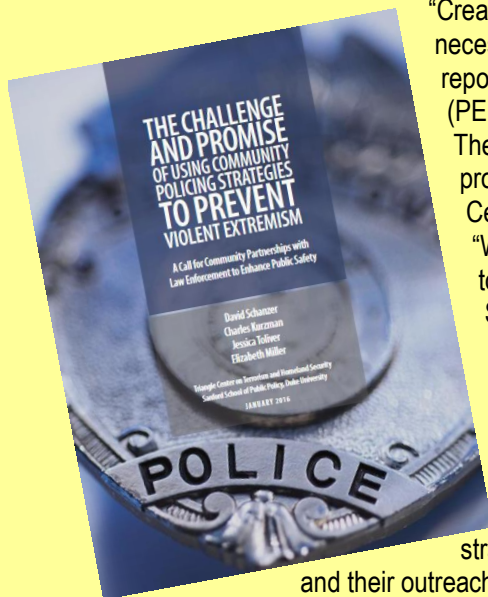
“Building trust between communities, the police and other government agencies can create the type of environment where community members will feel more comfortable identifying individuals who may be contemplating violence,” Schanzer said.

“The importance of community policing cannot be overstated,” said Jessica Toliver, director of technical assistance at PERF. “Using the tools and strategies outlined within this practitioner manual will assist police executives and their outreach teams in building relationships of trust with all members of the community.”

The manual includes advice on how police departments can plan and implement a community outreach and engagement program to prevent violent extremism. These techniques can be used to address multiple forms of violent extremism and promote public safety.

### The recommendations include:

- Using a “whole of community approach” so that no single ethnic or minority group feels singled out for scrutiny
- Ensuring that community outreach and engagement programs are kept separate from police units that collect intelligence and conduct criminal investigations
- Staffing programs with officers who are committed to community interaction and reflect the racial, ethnic, religious and gender composition of communities they serve



**CBRNE-TERRORISM NEWSLETTER – June 2016**

- Partnering with other local agencies to provide needed social and mental health services to community members
- Creating intervention programs to assess and, if appropriate, provide services to individuals who have not engaged in criminal activity but may be at risk of engaging in violent extremism.

The research project and manual were funded by the National Institute of Justice, United States Department of Justice. The opinions, findings and conclusions or recommendations expressed in these publications are those of the authors and do not necessarily reflect those of the Department of Justice.



► The research report, “*The Challenge and Promise of Using Community Policing Strategies to Prevent Violent Extremism*,” is available online at: <http://sites.duke.edu/tcths/files/2013/06/2015-full-report-FINAL1.pdf>



## The Evolving CBRN Threat

By Douglas Bryce

Source: <http://www.cbrneportal.com/the-evolving-cbrn-threat/>

May 25 – The chemical, biological, radiological and nuclear (CBRN) threat is not new. It has evolved



over time and can be traced from the use of chemical weapons in World War I through the 20th century and into threats we face today. In fact, the last five years revealed the Fukushima nuclear reactor incident, the need to destroy Syria's weapons of mass destruction material, and the Ebola outbreak in West Africa. **The constant question on my mind is, "What will be next?"** Will it be man-made threats from state or non-state actors? Or will a natural disaster make itself known? And just how does an organization posture itself to stay ahead of an ever-evolving CBRN

threat? One thing that is certain in our mission environment is that we cannot remain stagnant regarding how we assess and combat new and emerging threats.

► Read the full article at source's URL.

*Douglas Bryce is the Joint Program Executive Officer for Chemical and Biological Defense (JPEO-CBD).*

## DARPA's New Method For Demilitarising Chemical Weapons

Source: <http://i-hls.com/2016/05/darpas-new-method-for-demilitarising-chemical-weapons/>

May 27 – Chemical weapons have been banned under international law since the



1990s, but many countries still hold on to pretty large stores of some of the deadliest agents known to man. Hundreds of Syrian civilian died in a gruesome attack in 2013, which prompted

the intervention of international bodies in order to eliminate the country's stockpiles. By August

2014, some 600 tonnes of chemical agents were destroyed aboard the US Navy container ship MV Cape Ray.

Destroying – or demilitarising – chemical weapons, however, is no easy task. "The Cape Ray did a great job achieving its objective, which was to demilitarize Syria's chemical weapons," said chemist and DARPA programme manager Dr Tyler McQuade. "The downside is, the

weapons had to be transported a long distance, and we did the demilitarization on the Mediterranean. If anything had gone wrong, it could have been





really horrible for the local environment.” Hydrolysis, the procedure used to destroy chemical weapons, is tricky and dangerous. It produces large quantities of potent acids which need to be transported and disposed of in turn. McQuade has another solution, which he claims will be safer, cleaner, and simpler: burning the chemical agents and mixing whatever is left with soil.

“When you combust something at high enough temperatures, it breaks down into its constituent elements,” McQuade told Gizmodo. “We want to scavenge that exhaust and deposit those elements back on soil.”

Regular soil is a great absorbent. Gases from the atmosphere are naturally extracted and sequestered by clay and mineral mixture, and this process could be useful for chemical weapons as well. In his research, McQuade has shown that the complex molecules of chemical weapons (and similar materials) break down into simple gases when incinerated

at high temperatures. Some of these gases could be extremely dangerous if released into the air, but storing them in soil provides a clean and effective solution.

“Agnostic Compact Demilitarization of Chemical Agents,” as the concept is called, supposedly leaves no toxic waste, and the setup for operation is simple and straightforward. One of “McQuade’s set ups, a waste-to-energy engine, could run its electrical systems entirely off the power generated during combustion,” Gizmodo reports.

Now, McQuade and his team are studying how stable the sequestering is. “There is nothing that won’t eventually leach out in water,” he said. “But we want it to be on a time frame that’s consistent with natural processes.”

First field test of the procedure are scheduled for spring of 2017. If they’re successful, this could revolutionise how we get rid of chemical weapons.

## A Dirty Brussels Secret On Cancerous Chemicals

Source: <http://www.worldcrunch.com/pnl/world-affairs/a-dirty-brussels-secret-on-cancerous-chemicals/c1s21215/>

May 27 – It’s one of Europe’s best-kept secrets. It’s locked away somewhere in the maze of corridors of the European Commission, in a room that only about 40 authorized functionaries are allowed to access. And only with paper and pen. Smartphones are banned. Pockets are searched.

This secret is a 250-page report. Or, to use the Commission’s jargon, an “impact assessment.” This particular one assesses the “socio-economic” consequences of regulating endocrine-disrupting chemicals.

Capable of messing with the hormones of animals and humans, endocrine disruptors are thought to be responsible for many serious illnesses, including certain cancers, infertility, obesity, diabetes, neurobehavioral issues, and others. These substances can be found in a multitude of products used in everyday life, from cosmetics and pesticides to plastics. Entire industries would be affected by the [regulation of these chemicals](#). Billions of euros are at stake.

The prospect of regulation, even possible bans, worries industrialists. The pesticide sector, in particular, never kept secret that it was fiercely opposed to certain European measures on [pharmaceutical products of plant origin](#). The many twists during the discussions prior to the bill being adopted would make a great TV show. Passed by lawmakers in 2009, these measures give pesticides special treatment: those officially recognized as endocrine disruptors would no longer be allowed on the European market. Provided of course that European Union legislators can identify them.

So the Commission was supposed to find the way to distinguish between endocrine disruptors and other chemical products. In concrete terms, its job consisted of formulating criteria that would make it possible to identify endocrine disruptors. Without it, the law can’t be enforced. Today, seven years later, these criteria still don’t exist.

And it’s largely this impact study’s fault. The assessment, the conclusions of which are apparently as confidential as the location of the Fountain of Youth, wasn’t initially part of the plan.







## **Scott Patriot 5510: The World's First Network Centric Hybrid Life Support System**

Source: <https://www.scottsafety.com/en/emea/pages/NewsDetails.aspx?Code=Scott+Patriot+5510%3A+The+World%E2%80%99s+First+Network+Centric+Hybrid+Life+Support+System>



Blueforce Tactical and our Command Center products were specifically designed to enable “small unit swarming”, an ability for responders from diverse agencies, to rapidly form responder networks to counter coordinated and simultaneous assaults by our adversaries which are often directed against multiple targets, and using highly mobile groups to inflict casualties, garner press, and to inflict considerable human and infrastructure damage. These hybrid operations (such as the Mumbai attack in 2008) highlight the destructive impact that trained, mobile “swarms” can cause.

Nothing is more frightening than asymmetric threats that involve the use of chemical, biological, radiological, and nuclear (CBRN) agents by non-nation state actors. Deployed tactical teams are increasingly being exposed to CBRN threats, including terrorist attacks with non-conventional means and where threats involve large quantities of toxic

industrial chemicals, all posing severe hazards to deployed forces. A lack of warning and reaction time is a prime characteristic of this type of scenario and can be deadly for the responders concerned, even with the most advanced CBRN detection and warning capabilities. Tactical gear must allow for rapid field adaptation as there simply is no time to swap out gear based on a changing operational environment.

Many agencies are adopting “network-centric operational” (NCO) models as a proven approach to mitigate asymmetric threats. NCO refers to forces participating as a part of a continuously-evolving, complex “network” of people, devices, information and services interconnected by communications networks to provide superior information on events and

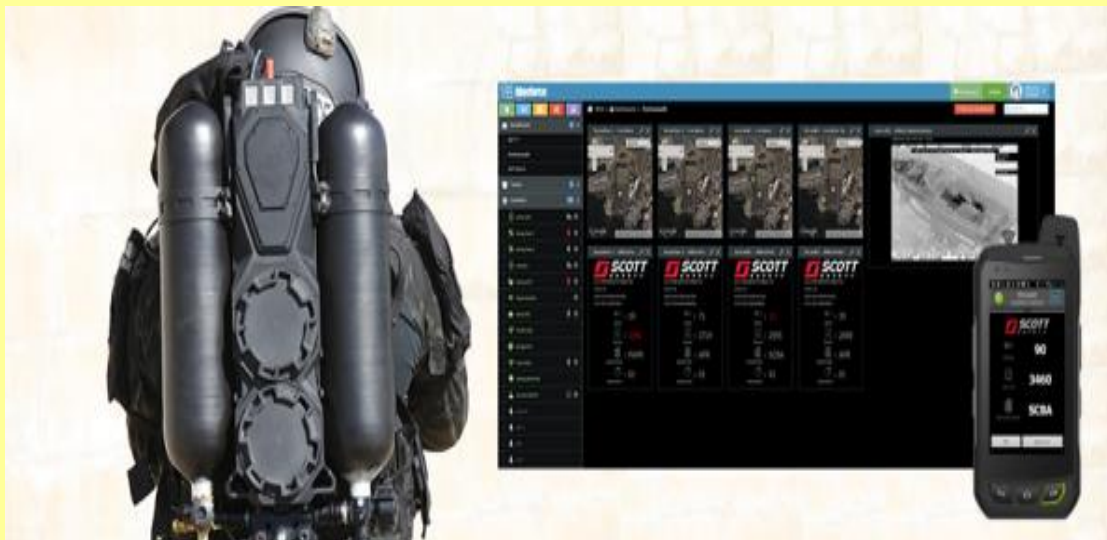


ground truth intelligence needed to empower decision makers. Blueforce Tactical provides a superior platform for NCO and it is most exciting that device manufacturers are beginning to embrace this capability by exposing communications and data interfaces in their tactical equipment. Furthermore,



some are implementing capability to adapt to changing threats on the ground.

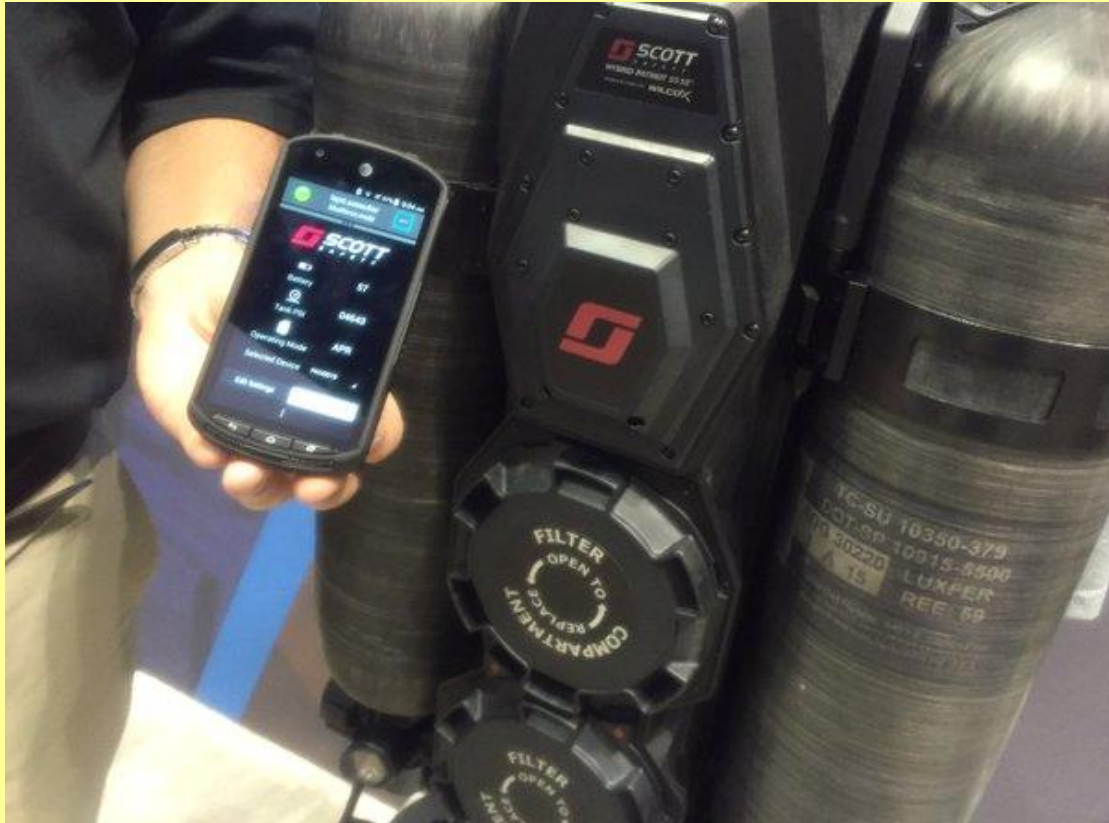
Enter Scott Safety and Wilcox Industries who unveiled the new Scott Patriot 5510 Hybrid APR/PAPR/SCBA at SHOT Show last week in Las Vegas. Whether you are law enforcement, military,



or first responder, the 5510 is a modular system that provides rapid adaptation to overcome any situation in CBRN environments. The system can be used in any mode of operation using a single mask and the operator can change operating modes by flipping the mode selector switch attached to the mask allowing for truly effortless breathing while conducting combat missions or law enforcement operations.



What makes the 5510 “network-centric” is the electronics package option which includes Blueforce Tactical (BTAC) and the Scott Patriot 5510 BTAC plugin. When used with Blueforce Tactical, 5510



telemetry such as PSI, battery, and operating mode can be shared in real-time with fellow operators as well as incident commanders using nothing more than the responder's smartphone (off the shelf, or hardened/IS devices from companies like Sonim). Fellow operators and commanders can consume real-time telemetry of an entire deployed force and receive real-time notification when parameters fall below prescribed thresholds or when operating modes are switched during the course of a response.

What really makes the package stand out is the ability to fuse other operator worn sensing devices, thereby turning the operator into a moving sensing platform. Blueforce Tactical for the Scott Patriot 5510 also includes BTAC plugins for biotelemetry (heart rate, respiration, body temperature) and accelerator/gyroscope (reports operator motion and inclination), but can also be extended to include environmental gas sensing, radiological sensing, and telemetry from other body-worn or person-carried sensors.

Asymmetric threats are fundamentally non-predictive. The Scott Patriot 5510 provides a multi-modal life support system that adapts on the fly. Blueforce Tactical enables rapid formation of predictive and non-predictive responder teams and then securely shares location, sensor telemetry, and other information in real-time amongst the entire deployed force offering a superior level of incident awareness amongst responders and their commanders.

## The neuroweapons threat

By James Giordano

Source: <http://thebulletin.org/neuroweapons-threat9494>

May 31 – Nearly two years ago, Juliano Pinto, a 29-year-old paraplegic man, [kicked off the World Cup in Brazil](#) with the help of a brain-interface machine that allowed his thoughts to

control a robotic exoskeleton. Audiences watching Pinto make his gentle kick, aided as he was by helpers and an elaborate rig,



could be forgiven for not seeing much danger in the thrilling achievement. Yet like most powerful scientific breakthroughs, neurotechnologies that allow brains to control machines—or machines to read or control brains—inevitably bring with them the threat of weaponization and misuse, a threat that existing UN conventions designed to limit biological and chemical weapons do not yet cover and which ethical discussions of these new technologies tend to give short shrift. (It may seem like science fiction, but according to a September 2015 [article](#) in *Foreign Policy*, “The same brain-scanning machines meant to diagnose Alzheimer’s disease or autism could potentially read someone’s private thoughts. Computer systems attached to brain tissue that allow paralyzed patients to control robotic appendages with thought alone could also be used by a state to direct bionic soldiers or pilot aircraft. And devices designed to aid a deteriorating mind could alternatively be used to implant new memories, or to extinguish existing ones, in allies and enemies alike.”)

Despite the daunting complexity of the task, it’s time for the nations of the world to start closing these legal and ethical gaps—and taking other security precautions—if they hope to control the neuroweapons threat.

The technology on display in São Paulo, pioneered by Miguel Nicolelis of Duke University, exhibited the growing capability of neurorobotics—the study of artificial neural systems. The medical benefits for amputees and other patients are obvious, yet the power to read or manipulate human brains carries with it more nefarious possibilities as well, foreshadowing a bold new chapter in the long history of psychological warfare and opening another front in the difficult struggle against the proliferation of exceptionally dangerous weapons.

**[The full range of potential neuroweapons covers everything from stimulation devices to artificial drugs to natural toxins, some of which have been studied and used for decades, including by militaries.](#)** Existing conventions on biological and chemical weapons have limited research on, and stockpiling of, certain toxins and “neuro-microbiologicals” (such as ricin and anthrax, respectively), while other powerful substances

and technologies—some developed for medical purposes and readily available on the commercial market—remain ungoverned by existing international rules. Some experts also worry about an ethics lag among scientists and researchers; as the September 2015 *Foreign Policy* [article](#) pointed out, a 200-page report put out last spring on the ethics of the Obama administration’s BRAIN Initiative didn’t once mention “dual use” or “weaponization.” In America, federally funded medical research with potential military applications can be regulated by [Dual-Use Research of Concern policies](#) at the National Institutes of Health, which reflect the general tenor of the Biological and Toxin Weapons Convention and the Chemical Weapons Convention. Yet these policies do not account for research in other countries, or research undertaken (or underwritten) by non-state actors, and might actually create security concerns for the United States should they cause American efforts to lag behind those of other states hiding behind the excuse of health research or routine experimentation, or commercial entities sheltered by industry norms protecting proprietary interests and intellectual property.

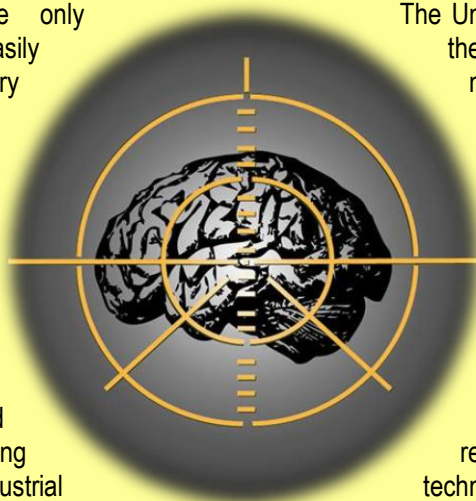
In addition to a more robust effort on the part of scientists to better understand and define the ethics of neuroscience in this new era, one obvious solution to the neuroweapons threat would be progress on the bioweapons convention itself. In preparation for the biological weapons convention’s [Eighth Review Conference](#) at the end of this year, member states should establish a clearer view of today’s neuroscience and neurotechnology, a better understanding of present and future capabilities, and a realistic picture of emerging threats. They should also revise the current definitions of what constitutes a bioweapon, and what is weaponizable, and set up criteria to more accurately assess and analyze neuroscience research and development going forward.

I would also argue that the United States and its allies should take the proper security precautions in the form of increased surveillance of neuroscience R&D around the world. As a preliminary measure, government monitors can develop



a better understanding of the field by paying attention to “tacit knowledge”—the unofficial know-how that accumulates among individuals in labs and other venues where a particular science is practiced or studied. (For more on tacit knowledge and arms control, see Sonia Ben Ouagrham-Gormley’s recent [Bulletin article](#) about its crucial importance for the bioweapons convention.) In a similar vein, authorities should also follow the neuroscience literature in an effort to assess trends, gauge progress, and profile emerging tools and techniques that could be enlisted for weaponization.

Of course these are only preliminary measures, easily stymied by proprietary restrictions in the case of commercial research and state-secret classifications in the case of government work. Thus deeper surveillance will require a wider effort to collect intelligence from a variety of sources and indicators, including university and industrial programs and projects that have direct dual-use applications; governmental and private investment in, and support of, neuroscience and neurotech R&D; researchers and scholars with specific types of knowledge and skills; product and device commercialization; and current and near-term military postures regarding neurotechnology. This type of surveillance, while requiring more nuanced and more extensive investigations, could produce highly valuable empirical models to plot realistic possibilities for the near future of neuroscience and neurotechnology. These could then be used to better anticipate threats and create contingency plans.



It’s important to note the danger of this type of surveillance as well. As a 2008 [report](#) by the National Academies in Washington warned, increased surveillance could lead to a kind of arms race, as nations react to new developments by creating countering agents or improving upon one another’s discoveries. This could be the case not only for incapacitating agents and devices but also for performance-enhancing technologies. As a 2014 [report](#) by the National Academies readily acknowledged, this type of escalation is a realistic possibility with the potential to affect international security.

The United States and its allies should therefore be cautious if they deem it necessary to establish this kind of deep surveillance. And on the international front, they should simultaneously support efforts to improve the Biological Weapons Convention to account for neuroweapons threats in the offing.

Finally, they should keep in mind just how hard it is to regulate neuroscience and neurotechnology during this time of great discovery and expansion. Ethical ideals can be developed to shape guidelines and policies that are sensitive to real-world scenarios, but the flexibility of these approaches also means that they are not conclusive. Those charged with monitoring potential threats must be constantly vigilant in the face of changing technologies and fuzzy distinctions between medical and military uses, all while navigating the complexities of the health-care industry, political and military ethics, and international law. In light of the work ahead, it remains to be seen just how well the nations of the world will rally to face the neuroweapons threat.

*James Giordano is a professor of neurology, chief of the Neuroethics Studies Program, and co-director of the O’Neill-Pellegrino Program in Brain Science and Global Health Law and Policy at Georgetown University Medical Center. He is an member of the Defense Advanced Research Projects Agency’s panel on neuroethics, legal, and social issues, and serves as a senior science advisory fellow to the Joint Staff at the Pentagon. His latest book is Neurotechnology in National Security and Defense: Practical Considerations, Neuroethical Concerns (CRC Press).*



## Pool Re partners with Guy Carp on CBRN terrorism risk model

Source: <http://www.intelligentinsurer.com/news/pool-re-partners-with-guy-carp-on-cbrn-terrorism-risk-model-8756>

June 07 – **Pool Re, the mutual reinsurer, has partnered with Cranfield University and Guy Carpenter to develop what it says is the UK's first terrorism risk model to include the potential impact of a chemical, biological, radiological or nuclear (CBRN) attack.**



Julian Enoizi, chief executive of Pool Re, said: "Major strands of our modernisation programme have been concerned with the introduction of more risk reflective pricing and an improved understanding of the exposures faced by both the insurance community and the broader UK business community in the face of a changing terrorism threat.

"This important partnership will develop a risk model that helps us in both of these areas. We are fortunate to be able to work with Cranfield University whose leading academic experience in security issues is crucial in the model's development and with Guy Carpenter whose risk modelling expertise and resources are so highly regarded in the insurance industry."

Sir Peter Gregson, vice chancellor of Cranfield University, added: "Cranfield is at the forefront of defence and security research and education. Through our partnerships with

government and private industry we offer a unique set of expertise, capabilities and facilities to deliver practical solutions that make a real difference to the lives of military, security personnel and civilians around the world.

"Supporting the aims of the National Security Strategy and working with Pool Re and Guy Carpenter, we are developing a terrorism risk model for use by the insurance sector which will include the capacity to analyse the impact of a CBRN attack on the United Kingdom to enhance our nation's resilience from terrorist threat."

Nick Frankland, chief executive officer of EMEA operations, Guy Carpenter, commented: "We are delighted to be recognised as the natural partner in the development of such a ground-breaking model with Pool Re and Cranfield University. Guy Carpenter is a global leader in advising terror pools and has already developed 3-D blast scenario modelling with Pool Re.

"This exciting project allows us to lend our expertise in the development of enhanced and broader models for exposure management and potential loss quantification to help Pool Re and their Members better understand the evolving risk of terrorism."

Pool Re, Guy Carpenter, Cranfield University, Reinsurance, Terrorism risk, CBRN attack, Julian Enoizi, Sir Peter Gregson, Nick Frankland, UK, North America

## Oregon explosion reminds us that oil trains are "weapons of mass destruction"

Source: <http://grist.org/climate-energy/oregon-explosion-reminds-us-that-oil-trains-are-weapons-of-mass-destruction/>

June 06 – **An oil train that went off the tracks and burst into flames in the Columbia River Gorge in Oregon last week hasn't been cleaned up yet, but the railroad is already back to business as usual.** And many North Americans are feeling renewed anxieties about the danger of what activists call "bomb trains."

On Friday, 16 Union Pacific train cars filled with highly combustible fracked oil from the Bakken shale formation in North Dakota derailed outside Mosier, Ore. Multiple cars caught fire, and about 100 people were evacuated from nearby homes. Elizabeth Sanchez, one of





the first responders, told Oregon Public Broadcasting that the scene “looked like the apocalypse.” This weekend, a sheen of oil was spotted on the Columbia River nearby.



THE SEATTLE TIMES

Mosier city officials quickly passed an emergency motion calling on Union Pacific to remove all oil from the damaged cars before the line was reopened, but Union Pacific just pushed the disabled cars to the side of the track and restarted operations. As of this writing, the cars are still filled with oil.

Oil train derailment in Mosier, Ore. Columbia Riverkeeper

“Restarting trains before the high-risk carnage of their last accident is even cleared from the tracks is telling Mosier they are going to play a second round of Russian roulette without our town,” said Mayor Alrene Burns in a statement. “It’s totally unacceptable.”

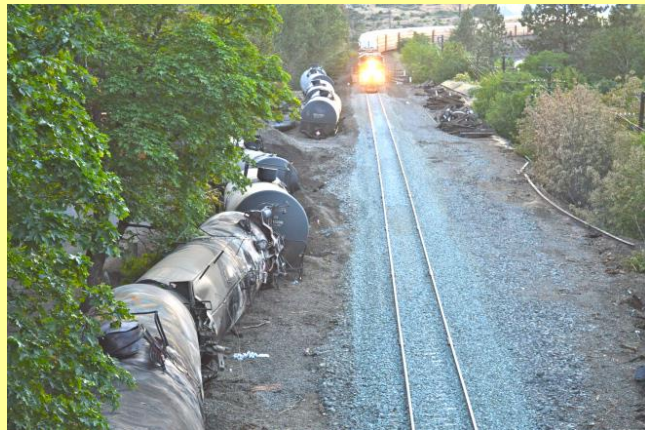
Mosier’s citizens agree. Dozens of locals — including city officials, tribal representatives,

faith leaders, and members of environmental groups — gathered in nearby Hood River, Ore., over the weekend to protest the oil trains moving through their communities.

Protesters gathered after Mosier oil-train explosion. Columbia Riverkeeper

Mosier, of course, isn’t the only town at risk.

Crude oil from the Bakken shale is especially flammable, and it is transported all across the U.S. and Canada. In 2013, a train moving Bakken crude derailed in Lac-Mégantic, Quebec, killing 47 people and destroying much of the town center. It was the most deadly oil-train derailment in recent history, but it was far from the only one. In the past



few years, more than a dozen derailments and explosions have occurred, leading to evacuations, oil spills, and, in some cases, fires that burned for days.



The 2013 oil-train disaster in Lac-Mégantic, Quebec. Public Herald

Though oil transport by rail is increasingly common, many residents have no idea that these trains are passing through their communities. In 2014, national railroad operators agreed to eight voluntary measures to lower the risk of derailments, including reducing speed in some cities and increasing inspections, but communities still aren't getting the information they would need to effectively respond to disasters, let alone prevent them.

Mosier has about 400 residents, but these oil trains aren't only going through rural areas and small towns. They go through major American cities as well.

In Seattle, an oil train carrying nearly 100 cars derailed underneath a bridge in 2014. While all the cars were left intact and there was no public safety risk, according to officials, the incident underscored the potential for disaster. And that potential is huge: **Last year, a KOMO News investigation captured video of more than a hundred train cars filled with oil rolling past the Seattle Seahawks football stadium as 32,000 fans watched a game inside.** The Seattle City Council has called for railroads to curb oil train shipments through the city, but the companies have refused to comply, or even to release train schedules. And there's no law that requires them to.

"The railroads are bringing weapons of mass destruction through our cities," Fred Millar, oil safety and hazardous materials expert, tells Grist, and the only thing firefighters can do in the event of an explosion is to back off and let it burn.

As for Mosier, all evacuees have been allowed to return home, but their ordeal is far from over. The city's wastewater treatment plant is offline, residents have a boil advisory for drinking water, and the full oil cars are still sitting there beside the tracks.



## ISIS trains 'scores' of suicide bombers for global chemical weapons attacks – report

Source: <https://www.rt.com/news/345763-isis-chemical-weapons-attacks/>

June 07 – **Islamic State could carry out chemical weapons attacks in any part of the world, a Kurdish military source has said,** as cited by Iranian media. Various international organizations have previously warned of the possibility of such terror acts.

A large number of Islamic State (IS, formerly ISIS/ISIL) militants have already been trained for suicide attacks with chemical bombs, Iranian FARS News Agency (FNA) reported a general within the Kurdish People's Protection Units (YPG) as saying.

"ISIL has equipped its terrorists with chemical bombs to use them in a suicide attack in Iraq, Syria or any other country," General Akram Mohammad Abdulrahman said. Claiming that "scores of youngsters" have been instructed to be part of such attacks, he added that "both explosive and chemical material" might be "simultaneously" used by the terrorists.

It's not the first time IS and its affiliated groups have been linked to possession of chemical weapons.



In April, the head of the Organization for the Prohibition of Chemical Weapons (OPCW), Ahmet Uzumcu, said the intergovernmental watchdog was "extremely worried" that terrorist groups in the Middle East might be developing such explosives.

**Saying that the OPCW had discovered evidence suggesting that sulfur mustard chemical agent had been used in attacks in Syria and Iraq, Uzumcu added that "there are strong suspicions" the weapons might have been used and produced by Islamic State. "It proves that they have the technology, know-how and also access to the materials which might be used for the production of chemical weapons," the OPCW director general said.**

Earlier this year, Russia's Foreign Minister Sergey Lavrov said the threat of weapons of mass destruction falling into the hands of non-government groups is widely recognized, warning that chemical terrorism is now a reality. Extremists from IS and other terrorist groups possess the technical capabilities to produce "proper chemical war agents," Lavrov said.

**NATO and EU security chiefs have also shared information on IS' alleged intentions to use chemical or nuclear weapons to attack Britain, while US Central Intelligence Agency (CIA) chief John Brennan has warned of a "number of instances where ISIL has used chemical munitions on the battlefield."**

## BBC Four to take viewers into the laboratory Inside Porton Down on its 100th anniversary

Source: <http://www.bbc.co.uk/mediacentre/latestnews/2016/inside-porton-down>



June 14 – With unprecedented and unique access, BBC Four will bring audiences into the laboratories at one of Britain's most secretive military and scientific research bases to examine its controversial history and to reveal the most hazardous work being done by scientists to respond to the threat of chemical and biological weapons.

Following on from the success of Inside Sellafeld, where BBC Four took audiences into a nuclear reactor, Inside Porton Down



goes behind the scenes and under the microscope to learn more about some of the most hazardous chemical and biological agents of our age. It was at Porton Down that the research scientists confirmed sarin as the nerve agent used on the Syrian population in 2013, triggering a worldwide response. Presenter Dr Michael Mosley considers the repercussions of its use.

One of the world's first weapons of mass destruction - an anthrax bomb - also falls under Michael's investigating eye as he explores the Scottish island of Gruinard, and simulates the secret vapourising experiments that took place decades ago. Only in recent years has Gruinard been declared as safe. Michael also examines the truth behind one of the most controversial events in MOD research history – the death of a young airman called Ronald Maddison in the 1950s.

Michael is given access to watch the distillation of one of the most dangerous chemical agents today,



VX, which is made at Porton Down to test British military protective equipment. Inside Porton Down will also take viewers inside some of the site's most secure biological research labs, where scientists have been tasked to find out how ebola - potentially one of the biggest public threats facing us today - has the power to spread.

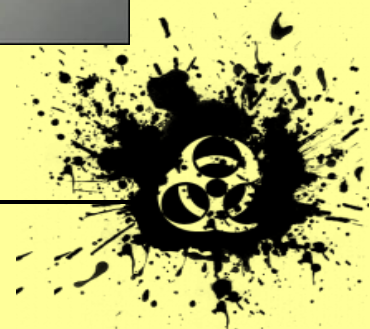
Cassian Harrison, Channel Editor of BBC Four, says: "Inside Porton

Down will take viewers right in to one of the most significant research laboratories in the UK, with unprecedented access to explore some of the biggest biological and chemical threats to human life in the world today. Following on from the success of Britain's Nuclear Secrets: Inside Sellafield in our BBC Four Goes Nuclear season last year, BBC Four continues to invite audiences to consider the crucial influence that scientific developments can have on our everyday lives. Telling the story behind such groundbreaking and terrifying work is vital."

**Inside Porton Down** was made by Artlab Films for the BBC, presented by Dr Michael Mosley, and commissioned by Rachel Morgan, Commissioning Editor, BBC Specialist Factual. The executive producers are Julian Mercer and Mark Tattersall from Artlab Films.



► Watch trailer at: <https://www.youtube.com/watch?v=oLC83n2aZD8>



## The Threat of Evolving and Emerging Bio-Threats

By Frank G. Rando

Source: <http://www.cbrneportal.com/the-threat-of-evolving-and-emerging-bio-threats/>

“And I looked, and behold a pale horse! And its rider’s name was Death...to kill with sword and famine and pestilence”...**Revelations 6: 8**



May 25 - “However secure and well-regulated civilized life may become, bacteria, protozoa, viruses, inflected fleas, land stalk us in the bodies of rats, mice, ticks, mosquitoes, and bedbugs will always lurk in the shadows ready to pounce when neglect, poverty, famine, or war lets down the defenses. And even in normal times they prey on the weak, the very young, and the very old, living along with us, in mysterious obscurity waiting their opportunities. About the only genuine sporting proposition that remains unimpaired by the relentless domestication of a once free –living human species is the war against these ferocious little creatures, which lurk in the dark corners and stalk us in the bodies of rats, mice, and all kinds of domestic animals; which fly and crawl with the insects, and waylay us in our food and drink and even in our love” – Hans Zinsser, *Rats, Lice and History*, 1934

While the morbidity and mortality from infectious diseases has declined dramatically since the 1900s due to improvements in sanitation and the development of effective vaccines, antibiotics and antiviral agents, novel and emerging microbial agents with increased virulence and infectivity continue to pose a threat to global health security.

Novel and emerging infectious diseases are those that are: (1) newly recognized as occurring in humans, animals or plants, (2) newly occurring in a different population than previously, (3) affecting greater numbers of individuals, or, (4) evolving new attributes (e.g., resistance or virulence).

► Read the full 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.*

## **US Army selects Battelle to develop vaccines for biological and chemical threats**

Source: [http://www.army-technology.com/news/newsus-army-selects-battelle-to-develop-vaccines-for-biological-and-chemical-threats-4904413?WT.mc\\_id=DN\\_News](http://www.army-technology.com/news/newsus-army-selects-battelle-to-develop-vaccines-for-biological-and-chemical-threats-4904413?WT.mc_id=DN_News)

May 26 – The US Army Joint Program Executive Office for Chemical and Biological Defense has chosen Battelle to develop vaccines and therapeutics for biological and chemical threats.

A \$59m contract to this effect has been awarded to the company.

The five-year contract was awarded as part of the General Service Administration's (GSA) OASIS contracting vehicle, which is open to federal government agencies worldwide.

To date, Battelle has received awards in all seven unrestricted OASIS pools established by GSA.

Under the new contract, the company will develop vaccines for potentially weaponised viruses, such as plague, botulinum, equine encephalitis, and filovirus.

It will also develop medical countermeasures against nerve agents and poisonous toxins used in chemical warfare.

Battelle Life Sciences Research group general manager Julie Swick said "We're proud of the work we do at Battelle to protect people from threats like the Ebola and Zika viruses or ricin.

"Our dedicated employees come into work every day knowing they are contributing solutions to important, worldwide problems."

Battelle conducts research and development, as well as designs and manufactures products at major technology centres and national laboratories around the world.

In addition to national security interests, the company serves the health and life sciences, energy and environmental industries.

## **After Thousands Of Years Of Stitching, Israelis Invent New Wound-Closure Method**

Source: <http://nocamels.com/2014/12/topclosure-wound-closure-stitching/>

When it comes to treating large, open wounds, not much has changed in the past five thousand years. Just as the ancient Egyptians used needles and thread to patch up their wounded, doctors employ the same stitching 'technology' today to prevent infection and facilitate healing. Nonetheless, when a wound is too big, too complex, or when the patient is subject to a higher mortality rate, the average suture procedure just doesn't do it.

While treating numerous casualties in his capacity as chief of plastic surgery at Israel's Hillel Yaffe Medical Center in Hadera, Dr. Moris Topaz realized that sutures could not effectively seal cuts and fasten the skin

together for proper healing. According to him, in the majority of cases, surgery was the only viable solution to treat and close complex wounds, which led Dr. Topaz to develop a unique method to secure wound closure, called [TopClosure](#).

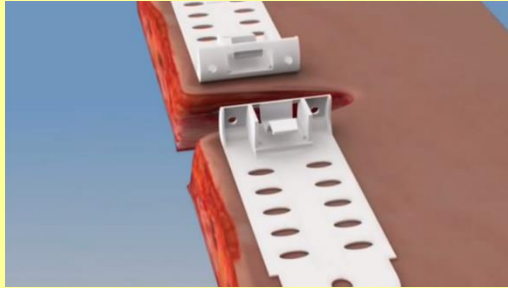
An invaluable medical tool already being applied in Israeli hospitals, TopClosure works by first stretching out the skin around the wound to avoid the need for skin grafts, and second by ensuring that the wound scars in an aesthetic and healthy fashion. According to Dr. Topaz, it's time to bid farewell to skin grafts, surgery and stitches



for complex wounds, and to welcome a new method that he hopes will soon become the standard in severe wound treatment.

### Reducing tension to facilitate healthier healing

The TopClosure tension-reduction system consists of two main parts: fastening cables



and attachable clasps. The cables come in a variety of lengths to accommodate the size of the wound, and each clasp contains an adhesive bottom to mount onto the skin, as well as hole for staples if additional support is



needed. The two clasps are placed facing each other on opposing sides of an open wound, much like two supporting ends of a bridge. A cable is strung through the clasps, drawing the skin tissues together until they eventually close. Stitches are then applied over this

temporarily facilitated enclosure as the final seal.

“It’s actually a new method of closing wounds,” says Dr. Topaz. “Suturing, for me, is an anachronistic issue – we should not close wounds with sutures; we need to close them with this kind of system.”

Made with a special polymer that’s been tested to be durable and supportive for suture, TopClosure is specifically designed to collapse just before too much tension starts tearing skin tissues, as stitching big wounds may do. Taking into account the bio-mechanical properties of the skin, TopClosure’s system claims to take advantage of the elastic properties of the skin to optimize wound closure, be it naturally or with surgery. According to Dr. Topaz, “[TopClosure] places one-hundred thousand times less tension on the skin than a suture,” he continues, “If I do it with suture, it would be very painful pulling for the patient.”

Indeed, TopClosure’s unique method is likely to improve the current suture practice significantly. The method can be used before surgery to prepare the skin incisions, during surgery to relieve tension on the skin, and after surgery as additional fastening support along with stitches, to speed up the healing process as a whole. A kind of modern tourniquet, TopClosure can and already is being used in field hospitals to temporarily treat soldier’s combat wounds and prevent immediate infection as they await proper medical care.

Though Dr. Topaz himself has been using the product already for years, the marketed version of the TopClosure tension-relief system took him and his team about one month to develop as a physical product, but several years for improvements. By documenting every suture surgery he’s performed while using TopClosure, Dr. Topaz has built an extensive record of the different types of wounds, body location, patients, and even situations in which the TopClosure method proved effective, as well as those in which it didn’t.

Although complicated and long suture surgeries will require an ‘invasive’ use of TopClosure, which means using staples to



provide additional mounting support for the clasps, the potential scars left behind by staples are minor compared to the deep scarring caused by strained suture pulling and/or skin grafts. Furthermore, infections can still occur around the TopClosure system if the clasps are not closely observed during the healing process.

“The most important thing about TopClosure is its simplicity,” Dr. Topaz said. “Doctors commonly say, ‘Why didn’t we think of this earlier?’ My wish is that it would be exposed to every doctor and every patient as an emerging

technology that can be applied anywhere in the world without sophisticated plastic surgery procedures.”

Currently, TopClosure is publishing more updated cases of its use in medical journals. Yet, given the understandably conservative culture of the medical world, it will take time before TopClosure is accepted as a legitimate and commonplace apparatus among surgeons around the world. In the meantime, three different models of TopClosure are available for purchase on the company’s official website.

## Art or Bioterrorism? The Implications of the Kurtz Case

Source: <http://www.nonproliferation.org/art-or-bioterrorism-the-implications-of-the-kurtz-case/>

July 2004 – One spring morning, Professor Steven Kurtz of the State University of New York (SUNY), Buffalo campus, woke to the horrid discovery that his wife of 20 years had died overnight from a cardiac arrest. He called 9-1-1. Paramedics arriving at the Kurtz home noticed technical equipment that would normally only be found in a laboratory. If the emergency responders had not been suspicious and reacted, it would have been worrisome, particularly given the unexpected death. What happened later – the investigation of Kurtz and colleagues by the Department of Justice and the Federal Bureau of Investigation’s (FBI’s) Joint Task Force on Terrorism under bioterrorism statutes – may have more worrisome implications.



### The Art

Professor Kurtz is a founding member of the Critical Arts Ensemble (CAE).

CAE is a multi-media, artist collective exploring the political and social implications of science, particularly biotechnology, on people and for people who *aren’t* scientists. Many of the CAE productions are theatrical in nature. One current project is intended to evoke dialogue regarding the historical and modern roles of the United States in biological warfare (BW). As part of a mock “anthrax” attack, the CAE uses BW simulants – some of the same microbes that the U.S. military used for testing the dispersal and spread of BW agents. Some of these simulations were done over civilian areas.[1] Among the materials seized from Kurtz’s home were unspecified books on BW, books which had been incorporated in the CAE’s “The Marching Plague” project.

Neither Kurtz nor the CAE is the first to incorporate biotechnology or even transgenics into art.[2] Chicago-artist Eduardo Kac caused something of a stir in 2000 when he announced the creation of Alba – a green fluorescent bunny.[3] Kac’s transgenic artwork involved the insertion of a gene isolated from jellyfish, for the green fluorescent protein (GFP), into the rabbit’s DNA. MIT’s Joe Davis actually preceded Kurtz and Kac in pursuing the interplay between genetic engineering and art.

But his work, like *E. coli* engineered with an iconic image encoded into the bacteria’s DNA, is considerably less tactile.[4] Other artists to explore biotechnology include Lauri Cinto, who has





claimed to create a cactus that grows human hair, and Marta de Meneze, artist-in-residence at Imperial College in London, who uses modern biology techniques to manipulate developing butterflies that display unnatural “artistic” wing patterns.[5]

### The Agents

**The three agents found in Kurtz’s home, *Bacillus atrophaeus*, *Serratia marcescens* and a nonpathogenic variant of endogenous *E. coli*, do not appear on any select agent list.** All of the microbes are considered suitable for manipulation under the lowest level Biosafety standards (Biosafety Level 1, or BSL-1). These microbes are the types found in high school and freshman college biology laboratories, even some middle school laboratories. The New York State Health Department acknowledged that the microbes found at the Kurtz home “posed no health risk in or around the house.”[6]

One of the agents, *S. marcescens*, is a classic BW simulant. Used as model organisms in place of more lethal biological agents, simulants are non-pathogenic microbes or biological substitutes. Between September 1950 and February 1951, aerosolized *S. marcescens* (“SM” in U.S. military code) was intentionally released from offshore U.S. Navy vessels in the San Francisco Bay and spread over the inland San Francisco area to test the effectiveness of novel dispersal methods.[7] The simulant was successfully disseminated and tracked. It later was implicated in the death of one man and the hospitalization of 10 men and woman.[8] Though the cause of this particular outbreak has never been conclusively linked to the BW simulations, *S. marcescens* is now known to be a human pathogen responsible for a significant percentage of nosocomial (i.e., hospital-acquired) infections.[9]

Kurtz wanted to use *S. marcescens* for the same reason that the former U.S. offensive biological weapons program did – it has a bright red-pink color that is easy to track making the determination of its successful spread simple and straightforward, whether used as a true BW dispersal simulation or part of a performance art project. Kurtz received the samples from Professor Robert Ferrell, chair of the University of Pittsburgh’s Human Genetics Department within the Graduate School of Public Health. When Kurtz became aware that *S. marcescens* has been rarely associated with pneumonia and urinary tract infections, he wrote to Ferrell asking for “any other ideas on another bacteria [sic] that can travel by air and be easily identified on a petri [sic] dish, and-most importantly, is unequivocally classified as nonpathogenic?”[10] Kurtz was clearly concerned with using bacteria that would not harm himself or anyone in a CAE project audience.

The non-pathogenic *E. coli* recovered from Kurtz’s home was part of a two-year-old performance art project that toured across the nation.[11] There was no subterfuge or attempt to conceal what was being attempted by any of the CAE members.

Concern for public safety was cited as a major factor prompting investigation.[12] This is a legitimate reaction. Supporters of Kurtz recognize and accept this public health need. Even the CAE Legal Defense Fund spokesman, Greg Bardowitz, has acknowledged that the initial circumstances “were enough to warrant a full investigation.”[13] Claire Pentecost of the School of the Art Institute of Chicago and past collaborator on CAE projects agreed. “I think it was reasonable for them to look into it when they first saw the equipment in someone’s house.”[14]

### The Legal Case

The original search warrant and subpoenas issued to Kurtz and eight art colleagues by the FBI’s Joint Terrorism Task Force referred to the portion of the U.S. Biological Weapons Anti-Terrorism Act of 1989 dealing with prohibitions on possessing “any biological agent, toxin, or delivery system of a type or in a quantity that, under circumstances, is not reasonably justified by a prophylactic, protective, bona fide research, or other peaceful purpose.” It is that last part — for other peaceful purpose — that CAE supporters from art and science see covering Kurtz’s activities. Richard Mears, University of Maine professor of criminal justice commented that “the real issue is what was his intent.”[15]

Eventually, Kurtz was not charged under bioterrorism laws but was indicted on two counts of mail fraud and two counts of wire fraud for each of two bacterial cultures found in his



home, *S. marcescens* and *B. atrophaeus*, which had been obtained from the American Type Culture Collection (ATCC).[16] His wife's death was determined to be from natural causes, nothing related to the bacteria found in their home. Indicted along with Kurtz was Professor Robert Ferrell, who gave Kurtz the ATCC samples. Recipients of ATCC products are prohibited, by contract, from redistributing any microbiological samples purchased. According to the indictment (available at CAE Defense Fund, [www.caedefensefund.org](http://www.caedefensefund.org)) basically Kurtz is charged with not being a properly registered customer with the ATCC – which he wasn't. He did apparently submit an application to become a registered customer, but it was denied due to his improvised facilities and lack of established biosafety protocols. Ferrell is charged with ordering with intent to transfer material to Kurtz and with the transfer of the ATCC-supplied material in violation of the letter of the contract he signed – which he did.

### Implications

At this writing, the case has not gone to trial. Questions about the after-effects of the investigation and indictment are already surfacing. The main issue is whether this case will discourage those contemplating work that might bring similar scrutiny. The question of a “chilling effect” is probably less critical for iconoclastic artists than researchers seeking tenure track positions or National Institutes of Health grant renewals. In direct response to the Kurtz case and after questioning by the FBI, Professor Adele Henderson, chair of the SUNY-Buffalo art department, commented “this is a free speech issue, and some people at the university remember a time during the McCarthy period when some university professors were harassed quite badly.”[17] This cooling enthusiasm, however, can be read in the skeptical words of Steven Teitelbaum, President of the Federation of American Societies for Experimental Biology: “Bureaucracies want to justify their existence. They tend to be overzealous.”[18] Teitelbaum speculated that scientists will not pursue research that attracts “such negative scrutiny.”

The Kurtz investigation follows two other academic cases with bioterrorism overtones. University of Connecticut graduate student Tomas Foral was convicted of possession of anthrax-containing tissue. Texas Tech University Health Sciences Center Professor Thomas Butler, like Kurtz and Ferrell was charged with mail and wire fraud along with more serious accusations relating to illegal payments from major pharmaceutical firms;[19] he was convicted. These cases further illustrate the tough stance that the Justice Department is taking toward allegations that even hint at bioterrorism or the involvement of select agents. These two legal actions involved practicing academic researchers – one just starting a technical career and the other a highly respected expert on *Yersinia pestis* (the causative agent of the plague and high on the select agent list).

The Kurtz case pulled in a bioscientist, University of Pittsburgh's Ferrell. Before moving to SUNY-Buffalo, Kurtz had taught at Carnegie Mellon University, also located in Pittsburgh.[20] Allegedly Ferrell obtained microbes from the ATCC then transferred them – apparently as a collegial gift – to Kurtz. Rarely have academics been charged for exchange of samples. Small samples are regularly shared domestically and internationally by life and physical scientists. Many such collaborations have existed for a decade or more. Some of these may be formalized in grant proposals or co-authorships in technical papers, but more often the exchange is noted in acknowledging footnotes to a manuscript. Typically it is considered part of the academic culture or, more realistically, done with the expectation that in the future there will be a return of assistance in some manner.

On the bench-side, researchers with historical access to agents for legitimate purposes cannot return to the old way of thinking or behaving. The research culture is struggling to catch-up to the legal culture. Attitudes and boundaries on biotechnical research have changed. Scientists need to understand and internalize the reality that there are no longer *pro forma*-style regulations that can just be checked off or initialed without considerable fore- and after-thought. This applies to both the choice of research – what agents might be involved and repercussions for terrorist use – and how research and sharing of samples will be done. Casual exchange of materials for legitimate research endeavors among colleagues who have known each other for years or decades – from cell lines to mutants (transgenic organisms) to DNA sequences – cannot be done without



considering implications regarding bioterrorism and the associated U.S. statutes. The scientific culture has to change to keep up with the Justice Department's shift in focus.

Reactive prosecution is one route that can be taken to accomplish this culture change. Another, path is via pro-active education of the scientific community on the risks and new responsibilities of biotechnology research in an age of terrorism.[21] The Federation of Atomic Scientists (FAS) recently launched a pilot program, "Biosecurity for Biologists," to promote awareness of security issues among undergraduate- and graduate-level biologists at Research I institutions.[22] Academics need to participate in meaningful dialogue to implement policies and protocols from within their ranks. If scientists ignore the ways research culture might need to be systematically altered or react purely defensively to an enjoiner to their scientific or proprietary territory, a regulatory policy will develop and be implemented from outside the scientific and technical community. Alternatively, federal investigations of scientists might proliferate. More bridges need to be built and fortified between technically trained individuals, especially those with recent experience in the modern research setting, and those instrumental in policy development and implementation, on the national and international stage.

It is notable that all three of these cases – Kurtz, Butler, and Foral – have focused on individuals engaged in academics, from art to molecular biology. We haven't seen any publicized investigations of behavior in violation of bioterrorism prevention statutes directed toward private industry.

There is another "chilling effect" to be considered in the fallout from the Kurtz case. The seriousness devoted to bioterrorism investigations risks being diluted to the level of white powder "anthrax" scares. While law enforcement *must* react to every case, the greater public's response is quickly numbed. As an *LA Times* editorialist wrote "the effort to paint Kurtz as a bioterrorist in the making would be funny if it wasn't so frightening." [23] It is a legitimate question to ask how this case contributes to securing the nation from a bioterrorist attack. In the end, Kurtz and Ferrell have been charged with mail fraud. The individual or individuals responsible for the fall 2001 anthrax deaths have not been identified or caught to be charged with anything. Preventing another bioterrorist attack is a very serious matter. By comparison mail fraud is not.

The Kurtz case may also be valuable in terms of assessing the capability of non-technically trained individuals to generate an air-dispersed microbiological. How good of a job did the CAE artists do in making their anthrax simulants? Much of the argument surrounding the fall 2001 mailings of anthrax-spore containing envelopes has revolved around the question of expertise required to produce the weaponized agents that resulted in five deaths.[24] How successful was the CAE at creating a free-flowing, micron-sized powder? What did they try? And what resources did they find that led them to pursue those choices? These are all legitimate questions that can provide information for construction of empirical models of behavior as part of threat anticipation and reduction. From a technical security studies perspective, there is an edifying aspect regarding how successful a group of non-technically-inclined individuals can be without any malicious intent.

In the late 1990s, the Defense Threat Reduction Agency (DTRA) sponsored a project that attempted to assemble a make-shift laboratory to produce weaponized *Bacillus anthracis* (the causative agent of anthrax) in Nevada.[25] It was called Project Bacchus. How does CAE compare to Project Bacchus? The comparison should provide useful information in distinguishing a makeshift BW production facility from improvised biotechnology for peaceful purposes. What critical differences distinguish the two experimental set-ups? Most of these answers can only be evaluated by someone with access to both the DTRA exercise and the FBI investigation. This is a further example of the need for interaction across traditional boundaries in the fight against bioterrorism, against co-option of legitimate research for malicious purposes and in protection of the civil liberties that underlie America's freedom.

A June editorial in the pre-eminent British science journal, *Nature*, encouraged scientists to support Kurtz, noting that "art and science are forms of human enquiry that can be illuminating and controversial, and the freedoms of both must be preserved as part of a healthy democracy – as must a sense of proportion." [26] In the war against terrorism, neither art, science, nor democracy should be an unintended casualty.

► References are available at source's URL.



## Pennsylvania superbug infection could mean "the end of the road" for antibiotics: Researchers

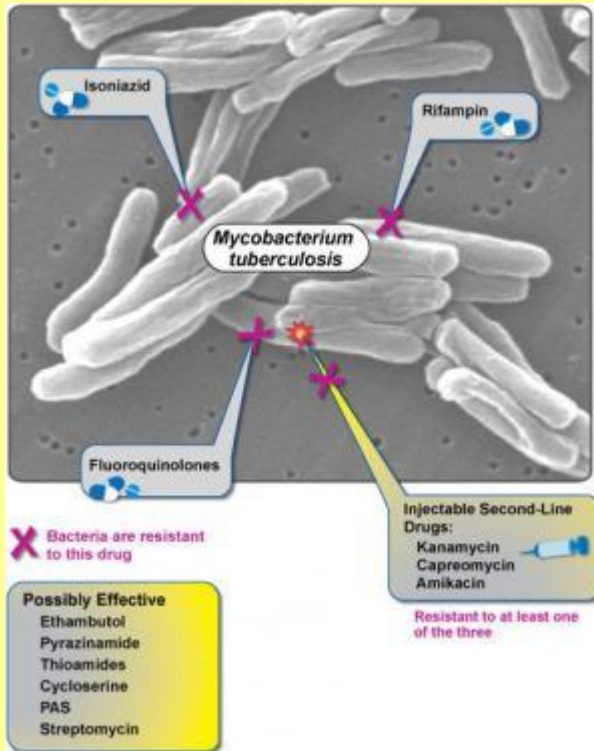
Source: <http://www.homelandsecuritynewswire.com/dr20160527-pennsylvania-superbug-infection-could-mean-the-end-of-the-road-for-antibiotics-researchers>

May 27 – Researchers have, for the first time, found a person in the United States carrying a bacteria resistant to antibiotics of last resort. Top U.S. public health officials say this is alarming, and could mean "the end of the road" for antibiotics.

The antibiotic-resistant strain was found last month in the urine of a 49-year-old Pennsylvania woman. Researchers at the Department of Defense concluded that her infection involved **a strain of E. coli resistant to the antibiotic colistin**, according to a study [published Thursday](#) in *Antimicrobial Agents and Chemotherapy*, a publication of the American Society for Microbiology. The authors wrote that the discovery **"heralds the emergence of a truly pan-drug resistant bacteria."**

The *Washington Post* notes that **Colistin is the antibiotic of last resort for especially dangerous types of superbugs**, including a family of bacteria known as CRE, which health officials have dubbed "nightmare bacteria." These superbugs can kill up to 50 percent of patients who become infected. The Centers for Disease Control and Prevention (CDC) has described CRE as among the U.S. most urgent public health threats.

Medical experts say that this is the first time this colistin-resistant strain has been found in a person in the United States. Last November researchers reported finding the colistin-resistant strain in pigs, raw pork



meat, and in a few people in China. A small number of people in Europe were also found to be infected with the strain.

"It basically shows us that the end of the road isn't very far away for antibiotics — that we may be in a situation where we have patients in our intensive-care units, or patients getting urinary tract infections for which we do not have antibiotics," CDC director Tom Frieden in an interview Thursday.

"I've been there for TB patients. I've cared for patients for whom there are no drugs left. It is a feeling of such horror and helplessness," Frieden added. "This is not where we need to be."

Scientists, public health officials, and international health organizations have been warning for a while that if the resistant bacteria continue to spread, it could seriously restrict medical treatment options, as routine operations could become deadly, minor infections could become life-threatening, and

pneumonia could be more and more difficult to treat.

Colistin, which doctors have been using more and more as a last-line defense against antibiotic-resistant bacteria, is a problematic drug. It was developed more than fifty years ago, and patients using it run the risk of serious damage to their kidneys. As the medical



profession is running out of ammunition to combat a growing number of antibiotic-resistant infection, doctors have been left with no choice except prescribing colistin.

**The colistin-resistant *E. coli* found in the Pennsylvania woman is especially insidious: The *E. coli* strain became infected with plasmid, a small piece of DNA which carries a gene for antibiotic resistance.** The plasmids can replicate themselves and transfer the genes they carry to other bugs within the same family, but they can also jump to other families of bacteria, thus making the other bacteria antibiotic-resistant as well.



## Rapid detection of *E. coli* in water

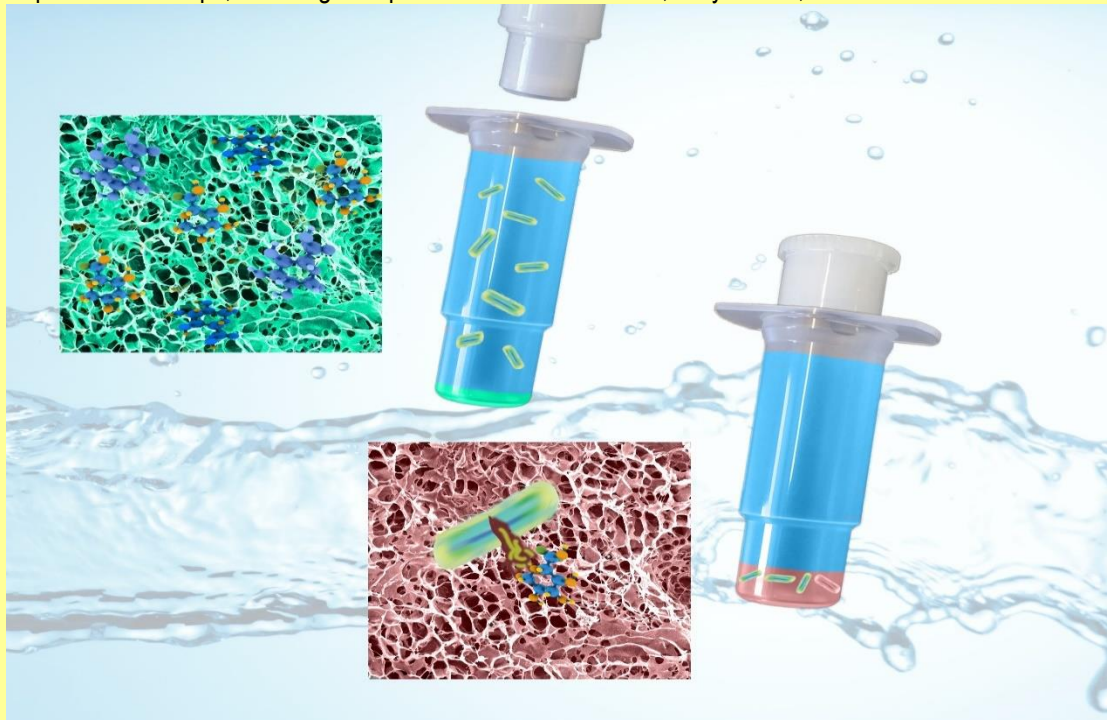
Source: <http://www.homelandsecuritynewswire.com/dr20160527-rapid-detection-of-e-coli-in-water>

May 27 – Tragedies like the *E. coli* outbreak in Ontario's Walkerton in May 2000 could be averted today with a new invention by researchers at York University that can detect the deadly contaminant in drinking water early.

"We have developed **a hydrogel based rapid *E. coli* detection system that will turn red when *E. coli* is present,**" says Professor Sushanta Mitra of York University's Lassonde School of Engineering. "It will detect the bacteria right at the water source before people start drinking contaminated water."

York U notes that the new technology has cut down the time taken to detect *E. coli* from a few days to just a couple of hours. It is also an inexpensive way to test drinking water (C\$3 per test estimated), which is a boon for many developing countries, as much as it is for remote areas of Canada's North.

"This is a significant improvement over the earlier version of the device, the **Mobile Water Kit**, that required more steps, handling of liquid chemicals and so on," says Mitra, Associate Vice-President of



Research at York U. "The entire system is developed using a readily available plunger-tube assembly. It's so user-friendly that even an untrained person can do the test using this kit."

Traditional methods of testing for *E. coli* contamination involves collecting water samples to send to an appropriate microbiological lab where the bacteria is cultured before a plate count is done to detect *E. coli* presence.

The testing device uses the porous hydrogel matrix, developed by Mitra's team at his Micro & Nano-scale Transport Laboratory that cages specific enzymatic substrates that release certain enzymes in *E. coli* cells. These enzymes then chemically react with the



substrates to change color. If there is no *E. coli*, the color of the hydrogel won't change, as there is no chemical reaction.

The results of the water test can be instantly broadcast using a mobile app already developed by the team.

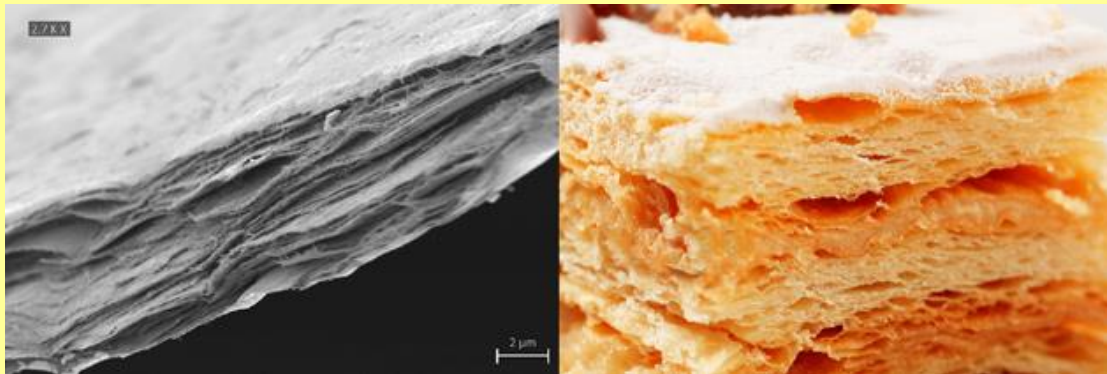
The breakthrough invention has resulted in forming of Glacierclean Technologies Inc., an Innovation York spinoff company, in partnership with York U. "We have received a significant number of queries from related industries. We strongly believe that the product is in a unique position as the only one available in the market for rapid detection of *E. coli*," says Naga Siva Gunda, president and CTO of Glacierclean, talking of the commercialization plan for affordable rapid *E. coli* detection tool, adding that the company has recently hired a CEO.

This innovation is the cover feature titled "A hydrogel based rapid test method for detection of *Escherichia coli* (*E. coli*) in contaminated water samples" in the current issue of [Analyst](#), a journal published by the Royal Society of Chemistry.

## New paper filter removes viruses from water

Source: <http://www.homelandsecuritynewswire.com/dr20160527-new-paper-filter-removes-viruses-from-water>

May 27 – Made of cellulose nanofibers, is called the **mille-feuille filter** as it has a unique layered internal architecture resembling that of the French puff pastry mille-feuille ("thousand leaves" in English).



The filter's pastry-like layers come from hot pressing cellulose from green algae

'With a filter material directly from nature, and by using simple production methods, we believe that our filter paper can become the affordable global water filtration solution and help save lives. Our goal is to develop a filter paper that can remove even the toughest viruses from water as easily as brewing coffee', says Albert Mihranyan, Professor of Nanotechnology at Uppsala University, who heads the study.

Access to safe drinking water is among the UN's Sustainable Development Goals. More than 748 million people lack access to safe drinking water and basic sanitation. Water-borne infections are among the global causes for mortality, especially in children under age of five, and viruses are among the most notorious

water-borne infectious microorganisms. They can be both extremely resistant to disinfection and difficult to remove by filtration due to their small size.

UU notes that today we heavily rely on chemical disinfectants, such as chlorine, which may produce toxic by-products depending on water quality. Filtration is a very effective, robust, energy-efficient, and inert method of producing drinking water as it physically removes the microorganisms from water rather than inactivates them. But the high price of efficient filters is limiting their use today.

"Safe drinking water is a problem not only in the low-income countries. Massive viral outbreaks



have also occurred in Europe in the past, including Sweden,” continues Mihranyan referring to the massive viral outbreak in Lilla Edet municipality in Sweden in 2008, when more than 2,400 people or almost 20 percent of the local population got infected with Norovirus due to poor water.’

Cellulose is one of the most common filtering media used in daily life from tea-bags to vacuum cleaners. However, the general-purpose filter paper has too large pores to remove viruses. In 2014, the group has described for the first time a paper filter that can remove large size viruses, such as influenza virus.

— Read more in Abigail Hallows, “Water gets the mille-feuille treatment,” [Chemistry World](#) (18 May 2016).

## Guarding produce against bioterrorism

Source: <http://theproducenews.com/the-produce-news-today-s-headlines/18893-guarding-produce-against-bioterrorism>

May 27 – **One of the most critical issues surrounding consumers today is the safety of fresh fruits and vegetables purchased at the supermarket.**

**Where was that lettuce before you bought it at the store? How many people handled it? What did they handle before the lettuce? Who cut up that fruit in the container you just put in your shopping cart? Where and how was it processed? How clean is it? Is it safe to eat? Was the display case cleaned where you picked up that broccoli? How was it cleaned? What type of cleaning material was used near the product?**

These may seem like intimidating questions, but they're legitimate. After all, we're talking about the safety of our food, especially in the produce department where a good portion of the product is exposed in bulk form.

Our food supply is the safest in the world. We have the strictest rules and regulations from farms to dinner tables that protect our food throughout the system. Besides governmental rules and regulations, companies have added

Small size viruses have been much harder to get rid of, as they are extremely resistant to physical and chemical inactivation. A successful filter should not only remove viruses but also feature high flow, low fouling, and long lifetime, which makes advanced filters very expensive to develop. Now, with the breakthrough achieved using the mille-feuille filter the long awaited shift to affordable advanced filtration solutions may at last become a reality. Another application of the filter includes production of therapeutic proteins and vaccines.

their own in-house programs to further ensure the safety of food they grow, pack, ship and sell to consumers. And those companies work very hard at making it right.

The FDA Food Safety Modernization Act concentrates on averting food problems beforehand rather than just taking action whenever foodborne illnesses materialize. However, that is a huge challenge in itself.

The industry has made considerable headway in establishing safety programs throughout our food chain system. But even though we have all the structures in place, our food is still sensitive to harm by other means, such as vandalism or bioterrorism.

Whenever these crimes occur, they have an effect across the board, including on personal lifestyles. And they increase rules on manufacturing and products, which comes with a costly price.

**In September of 1982, poisoning deaths occurred when someone deliberately tampered with bottles of Tylenol.** Soon afterwards, more deaths followed as a result of copycat criminality. Tragic deaths from these crimes led to the foundation of tamper-proof containers.



In 2001, a traveler boarded an airliner with explosives hidden in his shoes. Thanks to alert passengers, he failed to detonate it. But now we have to remove our shoes at the airport while going through security screening.

**More recently, there was an incident in Michigan where someone intentionally sprayed poison on fresh produce in several supermarkets.** A suspect was taken into custody and the case is now being investigated by the FBI.

And here we are with still another price to pay. Will this incident force us to change the manner in which we display produce and how we stock the grocery store shelves? After all, spraying poison onto fresh fruits and vegetables by some deranged individual is not exactly expected in our produce departments. In fact, it's downright frightening.

Could this act force us to focus on the expansion of packaging? It could strengthen additional protection for the product and consumers. But it may not be a guarantee in totally stopping foodborne illnesses or dangerous people.

Tim Vaux, vice chairman of FreshXperts LLC in Fresno, CA, said, "My first thought is that packaging can help, but if someone wants to

cause harm, they'll find a way, in spite of the best attempts at trying to protect consumers."

Packaged produce has its value to both retailers and consumers. It safeguards sanitation, seals in freshness, controls shrink and adds convenience.

All these reasons are favorable when it comes to packaged produce. However, in a much-changed world today, we must still be on high alert for any similarities like the incident in Michigan.

The FDA.gov website has some worthwhile information on industry security and preventative guidance related to food. It lists some very good advice, especially for employees to be watchful of any signs of product tampering or various other acts of sabotage. It also encourages employees to immediately alert management of any suspicious or criminal conduct.

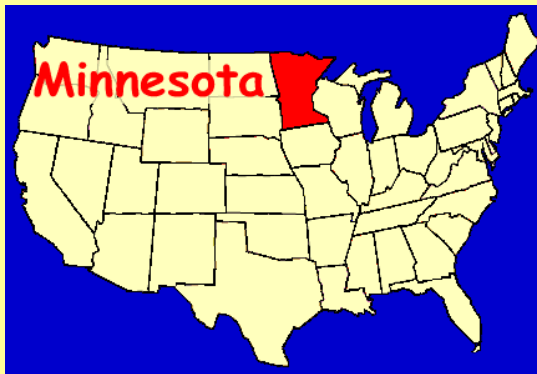
**You've heard the phrase, "If you see something, say something." We all play a vital role in preventing our produce from becoming the victim of bioterrorism by being on the high alert.**

This is yet another unpleasant challenging battle out in the trenches.

## Shocking 22% of resettled refugees in Minnesota test positive for tuberculosis... but the CDC says your healthy child is the real problem

Source:[http://www.naturalnews.com/054154\\_infectious\\_disease\\_refugees\\_tuberculosis.html](http://www.naturalnews.com/054154_infectious_disease_refugees_tuberculosis.html)

May 26 – Federal and state governments under authoritarian Left-wing regimes are increasingly *demanding* that parents subject their children to [potentially dangerous vaccine regimens](#), but when it



comes to migrants and refugees coming into the country, that demand hypocritically vanishes – despite the fact that more than *one-in-five* of them in parts of the country test positive for a dangerous disease.

As [reported by Breitbart News](#) in recent days, a shocking **22 percent of refugees** who the Feds have resettled in Minnesota (already home to a burgeoning immigrant population), tested positive for tuberculosis in 2014, according to [the state's health department](#).

That compares with just 4 percent of the entire U.S. population, according to the [most recent information](#) from the [Centers for Disease Control and Prevention](#).





The April 2016 edition of the Refugee Health Quarterly, published by the Minnesota Department of Health [reports](#) that:

**Minnesota had 150 cases of TB in 2015, compared to 147 cases in 2014 (a 2 percent increase). The most common risk factor for TB cases in Minnesota is being from a country where TB is common. TB screening is offered to all [refugees](#) during the domestic refugee health exam.**

*In 2014, 22 percent of refugees screened tested positive for LTBI [latent tuberculosis infection].*

By the way, about 10 percent of latent tuberculosis cases progress to active disease, killing about half of those affected, [according to](#) the World Health Organization, which also notes in a March 2016 fact sheet about the disease that one-third of the world's population harbors latent TB, making it the top infectious disease killer in the world.

Twenty-six percent of all foreign-born cases of TB in Minnesota were from people born in Somalia, the state health department said. Somalians enter the state almost exclusively via the refugee resettlement program, which is [handled by](#) the U.S. Dept. of Health and Human Services.

**Over the past three decades, more than 70,000 have been resettled in the U.S. by the federal government each year.**

As further noted by *Breitbart News*, it isn't just [tuberculosis](#) that is being imported along with the refugees – measles, whooping cough, diphtheria and other diseases are also being brought in, diseases that had long been eradicated or were on their way to becoming eradicated.

In fact, as *Breitbart News* [reported previously](#), a recent outbreak of measles occurred in Memphis, Tenn., at a center for refugee resettlement, a local mosque.

As for the Minnesota TB statistics, the news comes on the heels of reports from the CDC that in 2015 the incidence of tuberculosis in the United States increased.

**"Data from 2015 show that the number of TB cases has increased (by 1.7 percent) nationally [in the United States] for the first time in 23 years, with a total of 9,563 TB cases reported," the [Minnesota](#) Department of Health reported.**

These statistics and reports should make all Americans angry, but unfortunately, they won't.

One of the primary arguments made by Leftist vaccine thugs in the United States is that so-called "herd immunity" won't really protect our children from getting diseases, even if most kids have been vaccinated. Well, what will *importing diseases* into the country do – make our kids *safer* or *more at risk*?

**But, because they are afraid someone might label them racist bigots for daring to suggest that the smart thing to do is to always put our own country and its people first, they stay silent when a refugee population is 20 percent more likely to harbor a deadly disease than citizen populations.**

**That's worse than hypocrisy, it's stupidity.**

Meanwhile, our kids are being put at double risk – risk of catching an imported disease, and risk of being severely disabled by mega-doses of vaccines. Some choice.



## **Cutaneous Leishmaniasis and Conflict in Syria**

Al-Salem W, Pigott DM, Subramaniam K, Haines LR, Kelly-Hope L, Molyneux DH, et al. Cutaneous leishmaniasis and conflict in Syria [letter]. *Emerg Infect Dis*. 2016 May

Source: [http://wwwnc.cdc.gov/eid/article/22/5/16-0042\\_article](http://wwwnc.cdc.gov/eid/article/22/5/16-0042_article)

**To the Editor:** War, infection, and disease have always made intimate bedfellows, with disease recrudescence characterizing most conflict zones (1). Recently, increasing violence from civil war and terrorist activity in the Middle East has caused the largest



human displacement in decades. A neglected consequence of this tragedy has been the reemergence of a cutaneous leishmaniasis epidemic.

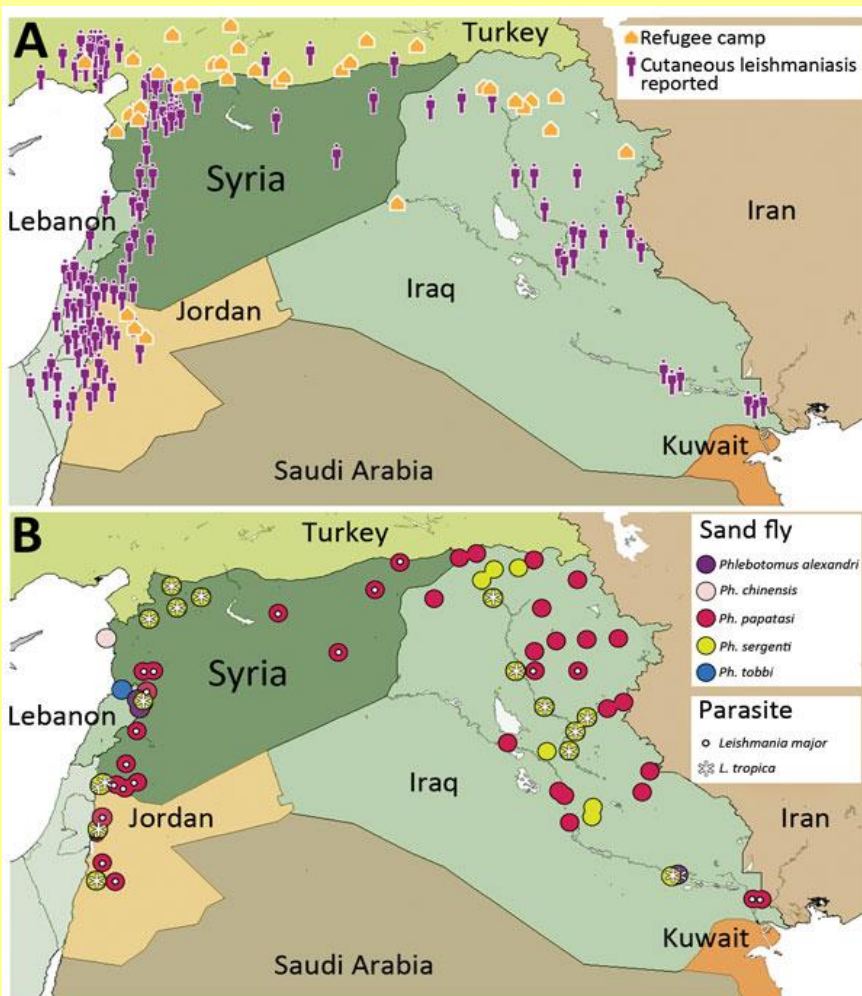
Old World cutaneous leishmaniasis is one of the most prevalent insectborne diseases within the World Health Organization's Eastern Mediterranean Region (2). Zoonotic cutaneous leishmaniasis is caused by the protozoan parasite *Leishmania major*, which is transmitted through the infectious bite of the female *Phlebotomus papatasi* sand fly; the animal reservoirs are the rodent genera *Rhombomys*, *Psammomys*, and *Meriones*. Anthroponotic cutaneous leishmaniasis is caused by *L. tropica* and transmitted between humans by the *Ph. sergenti* sand fly.

Until 1960, cutaneous leishmaniasis prevalence in Syria was restricted to 2 areas to which it is endemic (Aleppo and Damascus); preconflict (c. 2010) incidence was 23,000 cases/year (3). However, in early 2013, an alarming increase to 41,000 cutaneous leishmaniasis cases was reported (3,4). The regions most affected are under Islamic State control; 6,500 cases occurred in Ar-Raqqah, Diyar Al-Zour, and Hasakah. Because these places are not historical hotspots of cutaneous leishmaniasis, this change might be attributed to the massive human displacement within Syria and the ecologic disruption of sand fly (*Ph. papatasi*) habitats. According to the United Nations High Commissioner for Refugees, >4.2 million Syrians have been displaced into neighboring countries; Turkey, Lebanon, and

Jordan have accepted most of these refugees. As a result, cutaneous leishmaniasis has begun to emerge in areas where displaced Syrians and disease reservoirs coexist (5).

Cutaneous leishmaniasis prevalence within Syria and neighboring countries of the World Health Organization's Eastern Mediterranean Region, 2013. A) Prevalence among refugee camps. B) Distribution of sand fly and parasite species. Country names and boundaries are not official.

According to the Lebanese Ministry of Health, during 2000–2012, only 6 cutaneous leishmaniasis cases were reported in Lebanon. However in 2013 alone, 1,033 new cases were reported, of which 96.6% occurred among the displaced Syrian refugee populations (5). Similarly in Turkey, nonendemic parasite strains *L. major* and *L. donovani* were introduced by incoming refugees (6). Many of the temporary refugee settlements are predisposed to increased risk because of malnutrition, poor housing, absence of clean water,



and inadequate sanitation. The combination of favorable climate, abundant sand fly populations, displaced refugees, and deficient medical facilities and services has created an environment conducive to cutaneous leishmaniasis reemergence. For example, refugee settlements in Nizip in southern Turkey have reported several hundred cases (7).

Using current datasets published in English and Arabic, we mapped cutaneous leishmaniasis prevalence within Syria and its neighboring countries (Figure). Our results demonstrate that cutaneous leishmaniasis prevalence coincides with the presence of refugee camps (Figure, panel A), which is plausible given the strong association between disease outbreaks and refugee settlements (8). The deterioration of Syrian health systems, including the cessation of countrywide vector control programs, has created an ideal environment for disease outbreaks (9). Likewise, the sand fly vectors are widely distributed throughout the Middle East; expansive *Ph. papatasi* and *Ph. sergenti* sand fly populations exist in Syria and Iraq (4). The presence of these vectors in regions of instability can create new cutaneous leishmaniasis foci, which might have debilitating, and often stigmatizing, consequences for residents and deployed military personnel (10). In addition, the distribution of *Leishmania* spp. overlaps with sand fly habitats (Figure, panel B) and disease reservoirs (W. Al-Salem, unpub. data). Consequently, the movement of large refugee populations into regions that are ill-equipped to manage imported cutaneous leishmaniasis has resulted in outbreaks in Turkey and Lebanon (5,6).

Our findings emphasize the importance of contemporaneous disease tracking to identify human populations at highest disease risk. To ameliorate the current cutaneous leishmaniasis crisis, particularly during the winter when cases start to appear, accurate disease monitoring and strategic training of persons based within refugee camps (medical staff, aid workers, volunteers, and military personnel) needs to be prioritized. Moreover, clinicians and other medical personnel residing in refugee-hosting countries must be suitably trained to diagnose cutaneous leishmaniasis because other local diseases (e.g., sarcoidosis and cutaneous tuberculosis) can have similar manifestations. Along with vector and rodent control, new cutaneous leishmaniasis outbreaks should be managed by prompt diagnosis and treatment, which are even more pertinent given that *L. tropica*-associated cutaneous leishmaniasis typically is resistant to several treatment regimens. In summary, the coexistence of sand fly populations and *Leishmania* spp. within refugee camps, together with the considerable influx of persons who already have cutaneous leishmaniasis, create a dangerous cocktail that can lead to an outbreak unprecedented in modern times.

► References are available at source's URL.

## Bat-eating monkeys caught feasting on camera 'for first time in history' sparking Ebola spread fears

Source: <http://www.mirror.co.uk/news/weird-news/bat-eating-monkeys-caught-feasting-8044409>

May 25 – **A group of bat-eating monkeys have been caught on camera feasting on the winged mammals for the first time in recorded history.**

But while the findings are significant, scientists are concerned the monkeys' behaviour could lead to the transmission of deadly diseases between species. And that includes increased cases of the Ebola virus.

The two animals in Tanzania and Kenya were filmed and photographed stripping the flesh off two different species of bats.

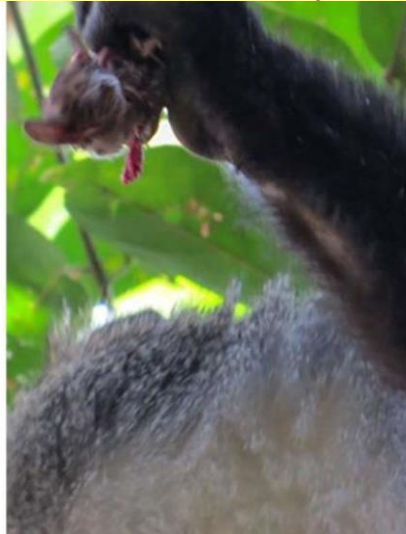
They spent between 10 minutes and one hour on a single meal.

**The findings were documented in EcoHealth journal and scientists believe this is the first time in history that this kind of behaviour has ever been filmed.**

Co-author Kate Detwiler said: "Our study found *Cercopithecus* monkeys opportunistically preyed on bats not only in Gombe, but in the Kakamega Forest in Kenya.



"The behaviour that we observed and the persistence of these monkeys to capture their



prey indicate that bats are desirable items in their food repertoires."

The Cercopithecus monkeys usually feed on fruit and leaves and often share their habitats and diets with bats, which are known to carry deadly diseases including Ebola and Marburg

virus - known to be extremely dangerous and consisting of haemorrhagic fever symptoms.

But the monkeys' diets could lead to the increased transmission of disease

In the past, scientists believed that monkeys could catch diseases by eating fruit containing an infected bat's saliva.

Even more worryingly, all instances of the monkeys eating the winged mammals took place extremely close to human habitats.

Elizabeth Tapanes said:

"While effects of habitat change on bats are unknown and merit further study, our observations suggest that Cercopithecus monkeys preying on bats may be habitat specific, and possible affected by anthropogenic habitat changes."

## Russian Ebola Vaccine Passes First Phase of Clinical Tests on 60 Volunteers

Source: <http://sputniknews.com/world/20160525/1040206695/russia-ebola-vaccine.html>

May 25 – The vaccination against Ebola created by Russia's Vektor scientific center has **passed the first phase of clinical tests on 60 volunteers and has shown its effectiveness**, the head of Russia's consumer watchdog said Wednesday.

"We literally turned over all the documents the day before yesterday to the Russian Health Ministry to register the first stage of clinical research...They passed successfully. The vaccine proved to be highly effective with a 100-percent [effectiveness] after two inoculations," Rosпотребнадзор head Anna Popova said.

In March, Russia claimed it obtained the legal basis to test a [recently-developed](#) Ebola virus vaccine. According to reports, 2,000 Guinea citizens are to be vaccinated during the test.

## Sensor detects signs of cancer, Alzheimer's, and Parkinson's

Source: <http://www.gizmag.com/cancer-alzheimers-parkinsons-biosensor-transistor/43475/>

May 24 – The biosensor is able to detect molecules linked to various cancers and neurological diseases for rapid diagnosis (Credit: LNNano)

Cancer and neurodegenerative diseases like Alzheimer's and Parkinson's are all able to be better treated if detected early. Unfortunately, this is not always the case as symptoms may

not appear until these diseases are well established. To help counteract this problem, scientists at the National Nanotechnology Laboratory (LNNano) in Brazil have created **a biosensor capable of rapidly detecting molecules specifically linked to various cancers and neurological diseases.**



Essentially a nanometer-size, single-layer organic transistor mounted on a glass slide, the new biosensor contains a reduced form of a peptide (a short chain amino acids; also referred to as "small proteins") known as glutathione (GSH). This substance, when exposed to the enzyme glutathione S-transferase (GST) – associated with Parkinson's, Alzheimer's, breast cancer and a number of other diseases – creates a reaction that is detected by the transistor.



"This is the first time organic transistor technology has been used in detecting the pair GSH-GST, which is important in diagnosing degenerative diseases, for example," said Carlos Cesar Bof Bufon, Head of LNNano's Functional Devices & Systems Lab (DSF). "The device can detect such molecules even when they're present at very low levels in the examined material, thanks to its nanometric sensitivity."

As part of a larger project focusing on the evolution of point-of-care devices for a range of specialized areas, LNNano researchers are developing functional materials to manufacture uncomplicated sensors and associated

microfluidic (devices that incorporate biochemistry and nanotechnology to process low volumes of fluid) systems for rapid diagnosis.

"Platforms like this one can be deployed to diagnose complex diseases quickly, safely and relatively cheaply, using nanometer-scale systems to identify molecules of interest in the material analyzed," said Carlos Cesar Bof Bufon.

As well as being highly portable and cheap to make, the nanometric biosensor is also very sensitive in detecting specific molecules and could be adapted to sniff out other substances, for example particles associated with other forms of disease or contaminants in other materials. This can be readily achieved by replacing the detecting peptides in the sensor with others that react similarly with other substances examined.

The researchers are also attempting to reduce costs by developing paper-based, disposable biosensors. As paper is an insulator in its standard state, Bufon and his team have come up with a way to make paper conductive and able to transmit sensing data by inserting conductive polymers into the cellulose fibers of the paper.

Using a technique of gas-phase chemical polymerization, the paper acquires the conductive properties of the polymers and can be further improved by optimizing the element embedded in the paper for the chemical application it is designed to test. In this way, future iterations of the biometric sensor may be paper-based, semiconductive detectors able to interact with molecules across physical, chemical, and electrochemical ranges.

The research has been published in the journal [Organic Electronics](#).

## Predicting the spread of the Zika virus

Source: <http://www.homelandsecuritynewswire.com/dr20160531-predicting-the-spread-of-the-zika-virus>

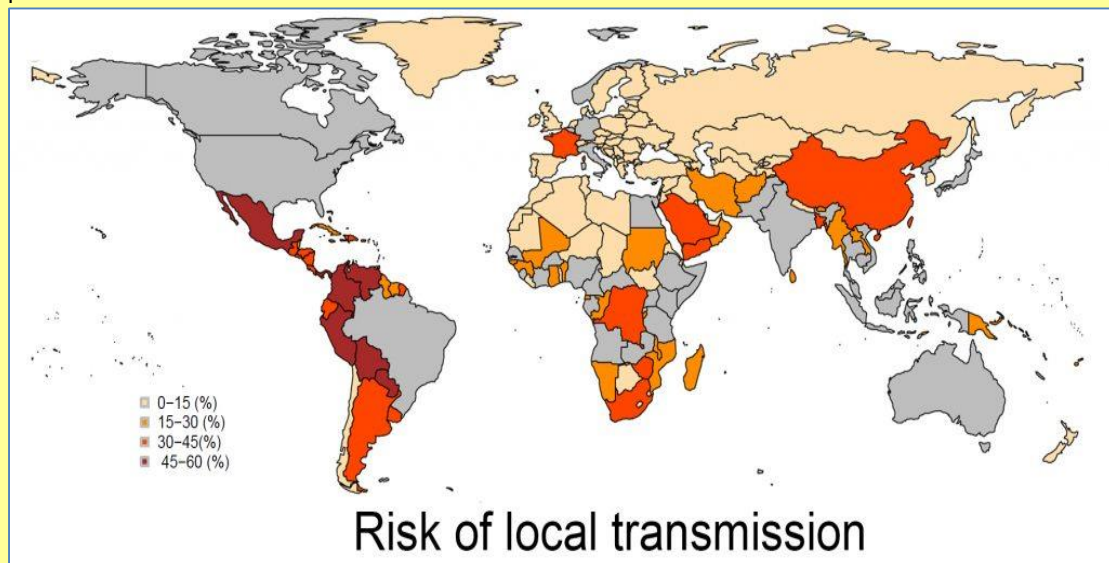
May 31 – Countries that are well connected to Brazil have been at particularly high risk of importation, according to the analysis by a

team of researchers from the University of Tokyo, Hokkaido University, and the Japan Science and Technology Agency.



However, **subtropical and tropical countries with a history of dengue and other mosquito-borne diseases have the greatest risk of the virus spreading once it arrives in the country.** This means many nations in South and Central America, as well as the Caribbean, face the highest risk of infection and should take measures to prevent mosquito bites, according to the study that was recently published in *PeerJ*. France, southern parts of China, and the United Arab Emirates also fall into this category having experienced previous outbreaks.

Brazil was soon followed by a high number of microcephaly cases, in which babies are born with abnormally small heads. The link between the two is not definitively understood, but is strongly suspected. Since the Brazil outbreak, Zika virus has been detected in an additional thirty-nine countries, including in Europe, the United Kingdom, South America, and Asia. Many researchers are working to anticipate the virus's potential spread, especially given that it can be carried by lightly infected travelers and then passed onto others by mosquitos. Global concern and attention are elevated with



#### Global distribution of the risk of local transmission with Zika virus.

The risk is given as the percentage of observing local transmission by the end of 2016, clored by intensity (0-15, 15-30, 30-45 and 45-60%, respectively). The origin country Brazil and countries that have already experienced case importation prior to importation event in Brazil are colored by grey. [copyright: Hiroshi HISHIURA]

“We have shown that the predicted risk of local transmission was frequently seen in tropical and subtropical countries with dengue or chikungunya epidemic experience, while the risk of importation was more scattered around the world,” said Hiroshi Nishiura, a professor of hygiene at Hokkaido University.

Hokkaido University notes that the **Zika virus was first found in Uganda in 1947**, and then detected in thirty-nine countries around the world, including the United States, India, and Japan. In early 2015, a Zika virus outbreak in

thousands of visitors set to attend the Olympics in Rio de Janeiro this summer.

Professor Nishiura and his colleagues predicted the virus's potential of importation and local transmission by the end of 2016 using a survival analysis model, information about airline transportation networks, and transmission data for dengue and chikungunya viruses, which are also transmitted by the same mosquito species. They collected Zika data up to 31 January 2016, and they note that new cases were confirmed in more countries shortly thereafter.

The authors recommend that a finer scale analysis be done to more accurately predict the spread within regions. For example, models should incorporate ecological information about mosquitoes.

“Despite a clear need to improve predictions in the future, the present study successfully devised a simple



global risk prediction of importation and local transmission,” Prof. Nishiura said. “Countries at low risk may focus on prevention among

pregnant women who must travel to epidemic areas.”

— Read more in *Kyeongah Nah et al., “Estimating risks of importation and local transmission of Zika virus infection, PeerJ (5 April 2016).*

## Zika virus expert: Tourists should “think twice” about going to Disney World

Source: <http://www.homelandsecuritynewswire.com/dr20160531-zika-virus-expert-tourists-should-think-twice-about-going-to-disney-world>



May 31 – Jimmy Whitworth, Professor of International Public Health at the London School of Hygiene and Tropical Medicine, has **warned tourists to “think twice” about visiting parts of the United States, including Walt Disney World in Florida, because of the future threat of the Zika virus in the country.**

Pregnant women and couples looking to conceive should be particularly wary of going on holiday to southern states such as Florida, Texas, and Louisiana, he said.

There are fears the Olympic Games in Brazil this summer could facilitate the spread of Zika, which has been connected to birth defects in babies if their mothers are infected during pregnancy.

The *Daily Mail* reports that in a letter to the World Health Organization (WHO), 150 of the world’s top doctors, researchers and medical ethicists demanded the event be moved or at least postponed. The WHO rejected these calls, however, claiming the Games would “not significantly alter” the spread of the virus.

Whitworth suggests the situation could worsen with the onset of summer weather, allowing mosquitoes to flourish.

He told *The Mail on Sunday*: “At the moment, if you said to me, ‘I’m going to Disney World tomorrow,’ I’d say, ‘Go for it! That’s fine’.

“Because we don’t think there’s any Zika in mosquitoes in the U.S. right now. But will there be, in two or three months’ time? Well, there



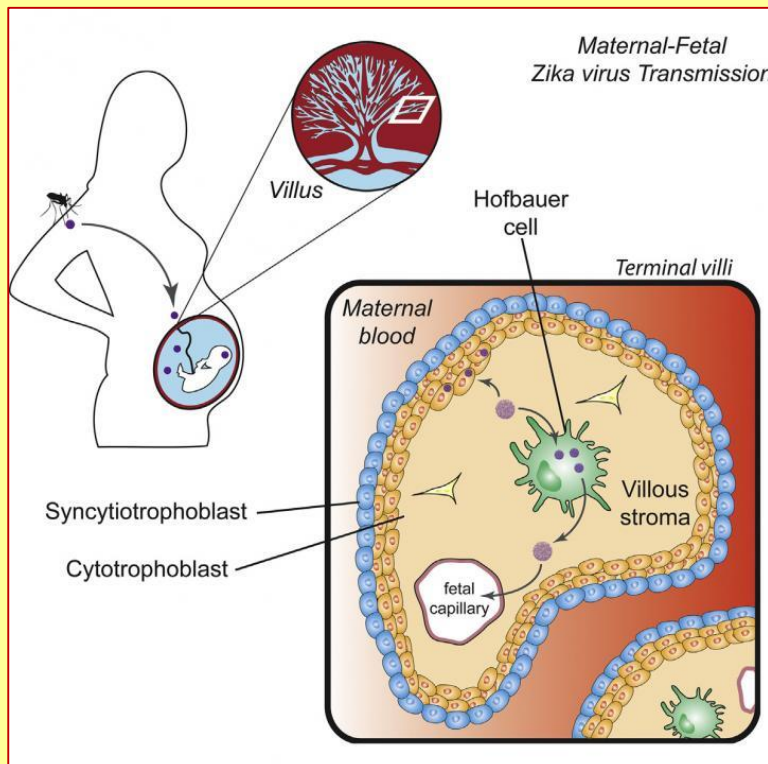
might be, as the situation might change.” Whitworth said that pregnant women and those trying for a baby “need to consider their plans and, if there is an alternative to going to those parts of the U.S., strongly consider it.” He added: “They should think twice and seek up-to-date expert advice.”

The Senate earlier this month voted to allocate \$1.1 billion in emergency funding to fight the ongoing threat of the Zika virus. **The United States has had only 591 travel-related cases of Zika, all described as “travel-associated cases”** by the Center for Disease Control.

## Zika virus infects human placental macrophages

Source: <http://www.medicalnewstoday.com/releases/310628.php>

May 27 – **One of Zika's mysteries is how the virus passes from an infected mother, through the placenta, to a developing fetus.** The route may not be direct either - transmission via multiple cell types may be necessary. A study appearing May 27, 2016 in *Cell Host & Microbe* supports the possibility that **placental immune cells called Hofbauer cells, which have direct access to fetal blood vessels, are one cell type involved.**



"One group has recently discovered viral antigen in Hofbauer cells collected from placental tissue of a fetus that unfortunately died as a result of Zika virus infection," says senior author and Assistant Professor in Pediatrics at the Emory University School of Medicine, Mehul Suthar. "Our study indicates that this cell type may be a target for Zika virus in the placenta and replication in these cells may allow the virus to cross the placental barrier and enter the fetal circulation," adds co-author Rana Chakraborty, a pediatric infectious disease specialist, also at Emory.

The researchers studied a small sample of donated full-term human placentae to identify cell types that might

be vulnerable to Zika virus infection (using a strain that is currently circulating in the Caribbean). In addition to Hofbauer cells, which are placental macrophages that originate from the connective tissue (mesenchymal) stem cells of a developing fetus, infection was also detected to a lesser extent in cytotrophoblasts - cells found in the middle layer of the placental barrier.

One explanation for how the virus crosses the placental barrier is by initial infection of syncytiotrophoblasts, the outermost layer of cells that surrounds and nurtures the fetus. However, [earlier work](#) has shown that these cells can resist the virus. The work from the Suthar Lab shows that the less-differentiated cytotrophoblasts are permissive for Zika virus infection, suggesting that if the virus is able to cross the syncytiotrophoblast layer, the virus has access to target cells where it can replicate. While Hofbauer cells were identified over a century ago, very little is known about them. Overall, the Zika epidemic has helped to reveal that the placenta is one of the most understudied human organs.





One interesting observation from the study is that the placental cells from the five donors showed different levels of viral replication over time. "A concept that is emerging is how host genetics or other non-viral factors, including nutrition and microbiota, influence your immune response," Suthar says. "What our study suggests is not everyone is predisposed to having the virus replicate in the placenta, but the full meaning of this needs to be explored further."

This work was funded in part by the National Institutes of Health, Children's Healthcare of Atlanta, Emory Vaccine Center, the Georgia Research Alliance, the Multi-Center NICHD International Maternal Pediatric Adolescent AIDS Clinical Trials Network, and the Center for AIDS Research at Emory University.

*Article: [Zika virus infects human placental macrophages](#), Quicke and Bowen et al., Cell Host & Microbe, doi: 10.1016/j.chom.2016.05.015, published 27 May 2016.*

## The FDA Is Finally Concerned About Terrorist Attacks on Our Food Supply

Source: <https://munchies.vice.com/en/articles/the-fda-is-finally-concerned-about-terrorist-attacks-on-our-food-supply>

### June 01 – Should we be concerned about agricultural bioterrorism?

Since 9/11, Americans have spent a lot of time thinking about terrorist attacks. So much so



that it is quite surprising that the first federal guidelines to protect the US food supply from a wide-scale act of bioterrorism have just been issued by the Food and Drug Administration. Even more surprising, perhaps, is the fact that many of the protections won't go into effect until the year 2021.

It's not that people haven't been worrying about the safety of our food supply; they most certainly have. Back in 2004, Tommy Thompson, then-Secretary of Health and Human Services, [said](#): "I, for the life of me, cannot understand why the terrorists have not attacked our food supply, because it is so easy to do." And, in 2008, food writer Michael Pollan

[wrote](#), "When a single factory is grinding 20 million hamburger patties in a week or washing 25 million servings of salad, a single terrorist armed with a canister of toxins can, at a stroke, poison millions."

The new guidelines are "aimed at preventing intentional adulteration from acts intended to cause wide-scale harm to public health, including acts of terrorism targeting the food supply," the FDA says. "Such acts, while not likely to occur, could cause illness, death, economic disruption of the food supply absent mitigation strategies."

**The guidelines [put the onus](#) of protecting our food supply on large-scale food suppliers themselves—a fact that may or may not give you comfort, given the [past failures](#) of the FDA's hands-off approach.**

The regulations will apply to both domestic and foreign companies that are required to register with the FDA, meaning they are "large companies whose products reach many people." The rules don't apply to farms, restaurants, or small companies, which are exempt.

The FDA says, "Rather than targeting specific foods or hazards, this rule requires



mitigation (risk-reducing) strategies for processes in certain registered food facilities.” The facilities that are covered will have to draft a food defense plan every three years. The FDA will then inspect facilities to see if they are living up to their own initiatives.

Thanks to the new regulations, the FDA will now have—for the very first time ever—mandatory recall power over food products. Believe it or not, until now, the FDA could only strongly suggest that a company issue a recall for tainted products. Still, when the FDA speaks, companies have generally listened.

“FDA expects that it will only need to invoke this [mandatory recall] authority infrequently since the food industry largely honors our requests for voluntary recalls,” the agency says.

The biggest companies required to come up with food defense plans have five years to do so. This means your food will not be fully protected by the new regulations until then.

In the meantime, let’s hope that some Bondian villain hell-bent on destabilizing America’s breadbasket doesn’t appear from the shadows.

## Floridians uncomfortable with use of genetically modified mosquitoes to limit spread of disease

Source: <http://www.homelandsecuritynewswire.com/dr20160607-floridians-uncomfortable-with-use-of-genetically-modified-mosquitoes-to-limit-spread-of-disease>

June 07 – **A small survey of residents of a Florida Keys neighborhood where officials hope to release genetically modified mosquitos to potentially reduce the threat of mosquito-borne illnesses such as Zika finds a lack of support for the control method**, according to new research from former and current students at the Johns Hopkins Bloomberg School of Public Health.

The findings, published last month in *PLOS Currents Outbreaks*, suggest that people’s attitudes toward this new mosquito control method may be tied to pre-existing beliefs about risks of contracting diseases including dengue, chikungunya, and Zika from the insects. The researchers say that people who do not feel that they are at risk from mosquito-borne diseases or who don’t believe that mosquitoes are a nuisance express greater discomfort with the idea of introducing male *Aedes aegypti* mosquitoes which are bred to mate with wild females and produce offspring with a defective gene that kills them, thereby reducing the population of disease-carrying mosquitoes.

**The novel mosquito control method has been tried in Brazil and Panama with some success, and the U.S. Food and Drug Administration is considering a trial in Key Haven, a community in the Florida Keys.**

*Aedes aegypti* carry all three diseases, though no local mosquito-borne cases of Zika virus

have been reported in the United States. Zika has been linked to brain-related birth defects in babies born to pregnant mothers who contract the virus.

Johns Hopkins reports that the scientists, current students and recent graduates of the Bloomberg School, say the research could help public health and community leaders address head-on the objections of residents where such control measures are being contemplated, as the fight against mosquito-borne illnesses heats up. The survey was conducted in the second half of 2015, after locally transmitted dengue and chikungunya cases had been discovered in Florida, but before the Zika epidemic in South and Central America became big news. There is concern that Zika could spread north into the continental United States. The band from southern Florida, including the Keys, to southern Texas, as well as Hawaii, are believed to be part of the region of the United States most at risk.

**A British company, Oxitec, has been trying for years to get approval to test their genetically modified mosquitoes in the Keys.** Some local residents have tried to kill the field trial, concerned about unanticipated consequences of introducing these lab-grown insects into the wild.

“With the start of mosquito season here and all of the media



coverage of Zika, public health officials are going to be faced with important decisions about mosquitoes and how to best protect citizens,” says Meghan McGinty, a recent Ph.D. recipient from the Bloomberg School and one of the researchers. “People will have objections and it is critical for them to be heard. Our research provides a starting point to understand how the community feels and to begin a dialogue about how to address mosquito-borne diseases.”

For the study, the researchers mailed **a survey in July 2015 to all 456 households in the Key Haven community outside Key West; they received 89 responses.** Residents were evenly split over whether they consider mosquitoes a nuisance, but two-thirds agreed there was a need to reduce the mosquito population. Women were more opposed to the genetically modified mosquitoes than men.

The most popular mosquito control method was draining standing water to reduce breeding, followed by treating standing water with larvicides designed to kill new mosquitoes before they hatch and spraying insecticides. The least popular was using genetically modified mosquitoes to reduce the population. Fifty-eight percent of respondents said they either “oppose” or “strongly oppose” the use of genetically modified mosquitoes to combat the risk of disease. The most common objection was a concern over disturbing the local ecosystem by eliminating mosquitoes from the food chain. Respondents were also concerned that using genetically modified mosquitoes

could lead to an increase in the use of other genetically modified products.

Since the survey was conducted before the extent of the Zika epidemic was widely known, respondents were only asked about their concerns about dengue and chikungunya (the area was hit by a dengue outbreak several years ago). **Sixty-three percent** said they were “a little worried” or “very worried” about becoming sick from one of those mosquito-borne illnesses, and most said they or someone they knew would contract one of the diseases.

Researcher Crystal Boddie, MPH, a DrPH candidate in the Bloomberg School’s Department of Health Policy and Management, who is also employed at the University of Pittsburgh Medical Center’s Center for Health Security in Baltimore, says that those who were most concerned about the risk of contracting one of the mosquito-borne illnesses were more likely to support the release of the new mosquitoes.

The researchers recognize that their sample size is small and that with the rising threat of Zika, opinions may have changed about the use of these genetically modified mosquitoes.

Still, Boddie says, “the survey provides a baseline of information about residents’ attitudes and concerns and can help health officials better educate the public about the risks and benefits of these genetically modified mosquitoes. Then we need to have an honest conversation about where this control method does – or does not – fit in.”

— Read more in Amesh Adalja et al., ““Genetically Modified (GM) Mosquito Use to Reduce Mosquito-Transmitted Disease in the US: A Community Opinion Survey,” *PLOS Current Outbreaks* (25 May 2016).

## **44 hospitalized after package with powder opened at Norwegian post office**

Source: <https://www.rt.com/news/345280-norway-mail-suspicious-package-hospital/>

June 03 – **A postal sorting office in southern Norway was evacuated after dozens felt sick after a suspicious package containing “powder” was opened.** More than 40 people sought medical aid as a bomb squad investigated the site in protective hazmat suits.

Norwegian police, two fire trucks, and a bomb and chemical squad were dispatched Thursday to the municipality of Stokke in southern Norway alerted by the local postal service workers. Four of the workers initially reported eye pain after opening a package with unidentified powder, Tønsbergs Blad reported.





Those who were in a direct contact with the substance, along with 10 people present in the room at the time of the package being opened and a further 28 people in other units of the building, were sent for treatment and check-ups at the Vestfold Hospital, VG newspaper said.

The building was cordoned off by police and chemical experts wearing protecting suits and gas masks. No one was allowed to approach the area within 100 meters.

The affected workers and those who might have been exposed to the supposed chemical were kept in isolation at the hospital after being hosed down in the hospital's garage.

Some of the patients had difficulty breathing, but the symptoms were not severe, Aftenposten newspaper reported, citing Merete Lindahl, the hospital's spokeswoman.

## Global Bioterrorism Detection Market to Surge Due to Rising Incidence of Bioterrorism

Source: <http://www.digitaljournal.com/pr/2966082>

June 07 – A new report by Transparency Market Research (TMR), titled "Bioterrorism Detection Market - Global Industry Analysis, Size, Share, Growth, Trends and Forecast, 2013 - 2019," provides a comprehensive study of this market taking its present as well as past performance into consideration. Bioterrorism can be defined as the intentional propagation of biological agents such as viruses, bacteria, or toxins to spread terror in a specified place. The rising number of such incidences is causing immense harm to nature as well as humans. To avoid such situations, early detection of bioterrorism has emerged as the need of the hour.

The research study offers a comprehensive overview of the global market for bioterrorism detection and provides detailed information of the market segmentations. It also discusses the current as well as the imminent trends and the growth rate of this market and provides an insight into its future prospects.

The research report analyzes the worldwide bioterrorism detection market on the basis of its regional spread and the type of biological agents and their mode of delivery. As per the study, the global market is spread across North America, Asia Pacific, Europe, and the Rest of the World.

Based on the type of biological agents, the report segments the market into three categories. The first category consists of agents such as tularemia, anthrax, bubonic plague, smallpox viruses, hemorrhagic fever viruses, and botulinum toxins. These agents pose a high threat to the safety and security of human beings and animals.

The second category comprises toxins such as glanders, typhus, Q fever, and viral encephalitis. These toxins carry a moderate threat to the society and are less harmful than other agents. The third category includes emerging toxins that are specially developed for mass destruction, such as HIV/AIDS, Hantavirus, SARS, Nipah virus, and H1N1 virus. These viruses can be highly fatal and can cause major damage to human health.

These biological agents are released into the environment by food contamination, water contamination, aerosol dissemination, insect vectors, and various other modes of delivery, notes the market study.



The research report also analyzes the global market for bioterrorism detection on the basis of the prevalent competitive landscape. Analysts have reviewed the company profiles of major participants to determine the current hierarchy of this market. According to it, PharmAthene Inc., Human Genome Sciences, Evogen Inc., ICX Technologies Inc., and Acambis Plc. are the leading players functioning in this market, states the research study.

The report attempts to present a clear picture of the global bioterrorism detection market to assist market participants in making important strategies for business expansion.

► **Download report from:** <http://www.transparencymarketresearch.com/sample/sample.php>



## Chasing Ground Zero: Preparing for unpredictable bioterror

Source: <http://wraltechwire.com/chasing-ground-zero-preparing-for-unpredictable-bioterror/15767754/>

June 10 – The threat is silent, almost imperceptible, to those of us who work outside the realm of national security. We don't awaken to the notion that our air could be poisoned, our water contaminated.

Yet every day, we face potential terrorist attacks of the biological kind: anthrax, botulism, plague and smallpox, to name the most likely agents. All are prime weapons because they are cheap, easy to produce, simple to administer and difficult to detect.

**"Today, one man can make war. A lucky bio-buffoon could kill 400,000 people," the oft quoted microbiologist and Nobel laureate Joshua Lederberg famously said.**

With that opening statement, Robert Kadlec, Ph.D., kicked off a day-long symposium exploring the bioterrorism challenges our defense and military agencies are charged with assessing and solving on a daily basis.

The Medical, Biomedical & Biodefense: Support to the Warfighter Symposium drew experts from government, industry and academia to the North Carolina Biotechnology Center on Wednesday, the second day of an event that started on the North Carolina State University campus.

The event brought more than 125 participants together to share their collective expertise and knowledge; to build bridges and break down barriers that separate them from collaborating on this intractable problem. It also helped highlight North Carolina's life science capabilities and interest in participating in the

national effort to avoid harm as much as possible.

### No easy fixes

The bioterrorism risk is of such magnitude that dozens of federal agencies, hundreds of companies, and thousands of scientists focus their collective brainpower and resources on studying potential threats, surveilling the landscape, preventing attacks and planning for response and recovery.

Still, the problem eludes simple fixes. Bioterrorism threats are difficult to prepare for and nearly impossible to predict, and efforts to address them have not been sustained over the long haul.

"The U.S. is not prepared to deal with a biological weapon attack and lacks a centralized leader for biodefense as well as a strategic plan and budget," said Kadlec, a keynote speaker who serves as deputy staff director, U.S. Senate Select Committee on Intelligence. Summarizing a report issued by the Blue Ribbon Study Panel on Biodefense, Kadlec noted that the U.S. has not given biodefense proper attention or resources.

Moreover, the issue should be devoid of political rhetoric and wrangling.

"Biodefense has nothing to do with policy," said Dr. Richard Hatchett, acting director of the federal agency BARDA (Biomedical Advanced Research and Development Authority) and a symposium panelist. "It's not like



Republicans are for Anthrax and Democrats are for Smallpox.

We have to make the case for long-term investment in events whose likelihood we cannot quantify or prepare for. We must maximize our preparedness and respond to threats in perpetuity.”

Hatchett was thrust into the world of biodefense after his experience at ground zero following September 11, which exposed him to the stark realities of a terrorist attack. Now at BARDA, his mission is to partner with private sector companies to advance the development and purchase of vaccines, drugs and diagnostic tools to handle public health crises.

### One mission, many hands

Panelists agreed that collaboration between government, industry and academia is essential to successfully managing the threat of bioterrorism.

Data should be shared more freely, and innovative partnerships must be formed to move ideas from the lab to the front lines to protect warfighters and civilians alike. Conceivably, companies could mix and match their research programs, using antigens from one company and antibodies from another to speed the development of a new vaccine, noted Hatchett.

“Good ideas don’t know national boundaries or corporate charters,” said presenter David Williams, senior medical acquisition/portfolio manager for the Joint Program Executive Office for Chemical and Biological Defense.

Despite the current limitations, noteworthy strides are being made in biodefense, largely

spurred by industry-government collaboration and cross pollination of scientific principles.

At BioCryst, government-sponsored research has yielded a new antiviral drug that shows activity against both Marburg virus and Ebola. By targeting viral RNA polymerase that is common to all RNA viruses, the compound could potentially be applied across a wide range of pathogens instead of requiring targeted vaccines for each respective virus.

At UNC’s Institute for Global Health and Infectious Diseases, scientists have moved two drugs for pox viruses into phase 1 trials. They are also applying the principles learned from the study of Dengue fever to the Zika virus in the hopes of speeding the development of a vaccine.

At Seqirus, scientists are using “synthetic seed technology” to make their own virus in a matter of days instead of waiting weeks or months to retrieve viral particles from remote parts of the world. This new technology will enable unprecedented rapid response to emerging threats.

By the end of the day, nearly two dozen military experts, scientists, industry experts and government officials had shared their perspectives on the growing threat of bioterrorism and how to best address it.

The symposium was co-hosted by Sen. Richard Burr, Sen. Thom Tillis, the North Carolina Biotechnology Center, the North Carolina Military Business Center, the North Carolina Military Foundation and the University of North Carolina.

## Testing NYC subway biodefenses

Source: <http://www.homelandsecuritynewswire.com/dr20160613-testing-nyc-subway-biodefenses>

June 13 – Lawrence Livermore National Lab (LLNL) researchers took to the New York City subway system 9-13 May to study how a surrogate for a biological agent, such as anthrax, might disperse throughout the nation’s largest rapid transit system as a result of a terrorist attack or an accidental release.

LLNL says that as part of a multi-agency test sponsored by the Department of Homeland Security Science and Technology Directorate (S&T), a field team led by LLNL scientist Elizabeth Wheeler supervised the release of a harmless DNA-infused aerosol in Grand Central Terminal and two other major subway hubs, and helped collect environmental samples of the particles.





The data recorded during the study will give scientists a better understanding of the spread of airborne contaminants in the subway system and provide first responders with better pre-planning strategies and risk assessment in the event of an emergency, said LLNL's Associate Program Manager Ellen Raber, who headed the overall effort.



#### The sensors

“The goal is to come up with an operational strategy that allows a rapid return to service for underground transportation systems,” Raber said.

“The transport models being developed will be better informed and we will have predetermined locations in New York where you can quickly optimize sampling locations to understand the extent of contamination. The models will hopefully allow for a better approach to a phased system recovery and limit the time that the whole system would be shut down.”

The odorless aerosol spray used for the tests, called DNATrax, is made of a sugar commonly used as a food additive, and a small amount of synthetic DNA generally regarded as safe by the Food and Drug Administration. It was developed at the Lab for evaluation of biological detectors, and has since been licensed to a company that is using it for food labeling purposes and to trace food back to its place of origin.

After releasing the tracer particles over a 20-minute period each day, researchers took particulate and gas samples from more than fifty subway stations, to determine the amount of materials that settled on the ground, inside subway cars and other surfaces. The



thousands of samples taken during the tests will be analyzed at LLNL by protocols developed at the Lab and used to validate and improve existing bio-attack models.

“It is important to test and hone strategies for recovery as much as possible in the operational environment,” said Don Bansleben, the DHS S&T program manager. “DHS anticipates the information from these tests will be important to local authorities and emergency management personnel to advance preparedness planning.”

The tests — assisted by the DHS Office of Health Affairs, MIT Lincoln Laboratory, Argonne National Laboratory, the Environmental Protection Agency, the Metropolitan Transportation Authority, New York City Transit, and other agencies — was the first comprehensive study of its kind performed on a major subway system during normal operating hours and could have applications to other subways in the future. It also involved input and research from Pacific Northwest, Lawrence Berkeley, and Brookhaven national laboratories.

“It was an amazing collaborative effort because of all the different organizations involved,” Wheeler said. “It’s always great to see technology developed at the Lab used for such important applications.”

LLNL physicist Matthias Frank, who worked with MIT Lincoln Lab on designing and testing the particle release devices and helped characterize the materials used for the study, said he was pleased with the success of the tests and the response by police, government representatives and the general public.

“The local agencies were all happy that we were doing it,” Frank said. “I got the sense that the New York people truly appreciated what we were doing.”

LLNL notes that the study is part of a five-year DHS project called Underground Transport Restoration (UTR) and was conducted in accordance with the National Environmental Policy Act.

► Watch the related video at: <https://www.youtube.com/watch?v=d23amBznoSQ>

## Silent Killer: HIV Spreads Among Daesh Militants in Mosul

Source: <http://sputniknews.com/middleeast/20160614/1041327922/daesh-hiv-mosul.html>

June 14 – In the hospital called “Ibn Sina” located in the city of Mosul in northern Iraq, Daesh members are filling up one quarantined room. These militants are infected with HIV and their numbers are rising, a source in the hospital told Sputnik.

A source in Mosul hospital, who asked



to remain anonymous, said that currently there are **23 people infected with HIV in Daesh's ranks.**

According to the source's data, about a year ago on August 23, 2015, three patients of Asian origin were reported positive with HIV. Today this number has reached 23 people.

Recently, the hospital received six young newcomers, who recently joined Daesh.

“Daesh forbids the hospital staff of Ibn Sina to enter the room where those infected with AIDS are located. Most of these mercenaries are of Asian origin. Only foreign doctors who work for Daesh come to visit these patients,” the source added.

Local media and journalists have repeatedly accused Daesh militants of engaging in same-sex relations and raping teenagers, despite the fact that these terrorists have not once executed people by throwing them from the roof on sodomy charges.

According to the hospital's doctors, that could be a reason why HIV is spreading among the militants.

The source further explained that the militants have taken over a separate medical center in the hospital where they are providing the infected patients

with chemotherapy.

According to another source in Mosul, Daesh used to push prisoners of war from the roof,





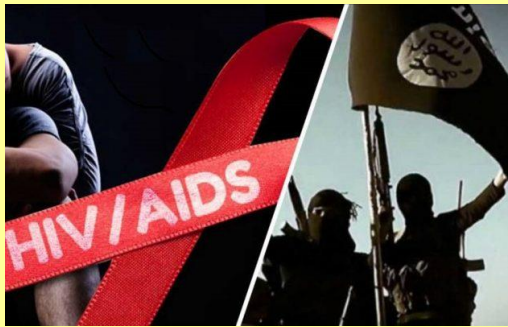
declaring them to be homosexual at a time when it could not find evidence of them being

spies for the security forces and the government

## Islamic State order 16 fighters infected with HIV to become suicide bombers

Source: <http://www.nydailynews.com/news/world/order-hiv-infected-militants-blow-article-1.2332952>

**August 2015** – Islamic State militants infected



with HIV from sex slaves have been ordered to become suicide bombers.

The twisted terrorists contracted the disease from two Moroccan women they had captured. Now at least 16 of the militants have been told they must blow themselves up, reported the Daily Mirror.

"Islamic State leadership is planning to assign suicide attacks for its militants who are tested positive with AIDS," a civil rights activist in the city of al-Mayadeen in east Syria said.

"Most of those infected are foreign militants who had sexual intercourses with two Moroccan women.

"The women passed on the disease to the militants before their infection was revealed."

The men are now being held in quarantine before they are forced to meet their fate.

"We were ordered by the group's local leadership to transfer the infected militants to a quarantine center in the city," said a Syrian doctor.

The leaders of the group ordered screen tests for their troops in the province after discovering the women were infected.

But the women have reportedly fled to Turkey fearing that IS would execute them.

In June, an Indonesian was executed by the terror group after it was revealed he had passed HIV on to his Yezidi sex slave.

The same slave was later sold to other IS members, causing panic among the terrorists that the disease had spread.



**EDITOR'S COMMENT:** It might seem kind of punishment for those affected by HIV but perhaps there is another issue hidden behind this movement. Following the detonation of a suicide vest, contaminated splinters might spread the disease to wounded victims. Israelis and French do have similar experience where hepatitis-B was transmitted to bombing victims. Now it is standard procedure to check for infectious diseases in all victims involved in a suicide incident.

▶ **Read more at:** <http://www.ncbi.nlm.nih.gov/pubmed/26780715> ;

also: <http://www.mci-forum.com/infections-by-tissue-implantation-injuries-and-sexual-violence-in-asymmetric-conflicts/>

and: <http://www.ncbi.nlm.nih.gov/pubmed/15664591>

## Trauma doctors are learning battlefield techniques. And they're saving victims of mass shootings

"The only beneficiary of war is medicine."

Source: <http://www.vox.com/2016/6/14/11931438/battlefield-medicine-mass-shootings>

June 14 – Amid America's grim epidemic of gun violence, doctors are learning new ways to save gunshot victims' lives.

According to the latest reports on the survivors of the mass shooting in Orlando, all of the 44 wounded who made it to the Orlando Regional Medical Center are still alive. Of the 27 who remain in the hospital, six are in critical condition.



"All patients since arrival to the hospital are still with us," Dr. Michael Cheatham, the chief surgical quality officer at Orlando Regional Medical Center, said in a press briefing today. "And they are steadily improving." (Other surviving victims were sent to Florida Hospital in Orlando.)

Doctors who specialize in trauma care say they expect relatively good outcomes for all of these patients. "I am certain those that made it to the hospital [in Orlando], unless they had devastating injuries, will survive," said M. Margaret Knudson, a professor of surgery at the University of California San Francisco.



Dr. Michael Cheatham, chief surgeon of the Orlando Health Regional Medical Center hospital, addresses reporters in Orlando on Sunday, June 12, 2016.

One surprising reason for hope: a new approach to trauma care honed by military

doctors on the battlefields of Iraq and Afghanistan that's been translated for wounded civilians here.

"During the height of the wars, we were treating injury patterns at a rate that was 10 to 100 times [that which] you would treat in any given city," said Col. Todd Rasmussen, a medical doctor and professor of surgery who served in both wars.

That unprecedented burden of injury and the instructive medical research it generated, researchers say, may even be helping gun fatalities stabilize in this country — while the rate of gunshot injuries has increased.

Rasmussen calls this "once-in-a-generation burden of injury" on the battlefields one of the few "silver linings of the wars."

**Or, as he put it in a recent paper, "the only beneficiary of war is medicine."**

Here are a few of the recent advances learned on battlefields for responding to life-threatening violence that are helping victims like those in Orlando.

### 1) Stop the bleeding

The most common reason people die at the scene of a mass casualty event like Orlando is bleeding. (The second most common cause of death at these events is massive brain injury.)

Before the Iraq and Afghanistan wars, the use of tourniquets in medicine had fallen out of favor. "Tourniquets to control extremity bleeding were not used, and best practice was that they shouldn't be used," said Rasmussen. But new [evidence](#) changed the practice: Military health professionals saw early on that patients on whom tourniquets were used were more likely to survive their injuries.

This change in practice is why the Department



of Homeland Security launched the [Stop the Bleed campaign](#) in 2015, encouraging

bystanders in violent attacks to compress the wounds of victims if health professionals haven't yet arrived at the scene.

"In the last 15 years of war," Knudson added, "those techniques have saved many lives on the battlefield." They also may have saved lives in Orlando, where some of the nightclub goers and bystanders [made makeshift tourniquets](#) out of [T-shirts, bandanas, or belts](#) to stop the bleeding from the injured around them, according to news reports.

### 2) Small, stopgap surgeries

Some gunshot victims need immediate surgery.

But doing all the necessary surgeries immediately in a mass casualty event is usually impossible. So doctors now do smaller and quicker surgeries first, with one key goal: saving lives. This type of care was perfected in Iraq and Afghanistan, and it's called "damage control surgery."



For example, for a patient with a more minor blood vessel injury on the leg, doctors may put a small piece of plastic in place (called a "shunt") to keep the blood flowing. That can allow them to move on to do other, more critical surgeries on the same patient or help other patients in a more critical state. Later, the doctors can go back and do a more definitive surgery to repair the broken blood vessel.

"We do these abbreviated surgeries whenever we can," and they help save lives, said Knudson.

### 3) Help clotting by giving blood plasma and platelets first

Patients wounded by gunshot typically have lost a lot of blood. If they need surgery, they'll also probably need blood transfusions.

Blood transfusions oftentimes involve supplementing patients with specific blood components (also known as products) — like blood plasma, including red blood cells, which carry oxygen, or platelets, which are essential for making blood clot.

In the past, doctors would first respond by giving patients saline solutions (mixtures of sodium chloride in water) in addition to or followed by blood products. But in the recent wars, military doctors started to notice that



patients actually fared better when they got the blood products immediately.

**"When someone loses 20 to 30 percent of their blood volume from a gunshot wound," said Rasmussen, "we don't give them ... saline solutions. We try to give plasma, platelets, and packed red blood cells right away."**

Studies conducted during the wars also helped doctors refine the ratios and amounts of blood products to give to the injured. "We learned from military experience that it's really

important to give clotting factors almost first, and in a better ratio," Knudson said.

That definitely [decreased mortality](#) in military wounds, and it's dramatically changing the way we care for patients in the civilian world. "Not only does it save some of the blood by using products judiciously but it also allows you to [better] direct what you give," said Knudson.

### Despite these advancements in trauma care, there's still a lot to learn

As part of their preparedness plans, all trauma centers have been trained to handle terror attacks and mass shootings. Yet the mass tragedies in the US in recent years still present these facilities with unforeseen hurdles.

The tragedy in Orlando — the largest mass shooting in recent US history — turned the hospital there into "a war scene" where "patient after patient after patient" overwhelmed the hospital's capacity, doctors said at a Tuesday press briefing.

The doctors also were faced with less familiar injuries that are challenging to treat. Joseph Ibrahim, the trauma medical director at Orlando Regional Medical Center, told reporters, "We saw the gamut of wounds — from wounds to the extremities, the chest, abdomen, and pelvis area — as if they were shot from below ... something we're not used to seeing." ([Recent evidence](#) from at least one hospital suggests the types of injuries doctors have seen in recent years are indeed more severe and potentially deadly.)

These moments remind us of the urgent need to translate even more lessons from the battlefields back home, said Boston Medical Center vascular surgeon Jeffrey Kalish, who treated victims of the Boston Marathon bombings.

At that time in 2013, Kalish said he looked to the military for expertise about how to care for the victims "from day one," applying their experience on treating wounds from an improvised explosive device and related complications — such as ear trauma from the blast and infection.

"We have an amazing wealth of knowledge with the military," he said, "I'm trying to bridge the gap between military and civilian worlds."



Others in the scientific community see the opportunity, too. The National Academies of Sciences will release a [report](#) on Friday detailing "how military advances can be sustained and translated to the civilian sector."

Kalish added: "Something like Boston or Orlando, I can almost guarantee it's going to happen again." Applying the best evidence from war can save lives when the battlefield moves closer to home.

## Zika threatens world's blood supply: Experts

Source: <http://www.homelandsecuritynewswire.com/dr20160620-zika-threatens-worlds-blood-supply-experts>



June 20 – **Blood safety researchers say it is highly likely that the mosquito-borne Zika virus can be transmitted through blood transfusions** and are calling for an evidence-based approach to protecting the blood supply from the threat of Zika virus, according to a commentary in the journal *Transfusion*. NIH says that the researchers say among several possible steps that could be taken to mitigate safety concerns: deferring blood donors who have symptoms of the infection, developing better blood screening tests, and finding ways to reduce the pathogen.

Based on the growing concern over Zika and the blood supply, the National Institutes of Health in February announced interest in supporting research that examines the risk of Zika transmission through transfusion and the potential clinical impact of Zika that might be passed along through blood. In addition the NIH's National Heart, Lung, and Blood Institute (NHLBI) has made Zika research part of the existing Recipient Epidemiology and Donor Evaluation Study-III (REDS-III) blood safety research program.

Zika virus, once mainly seen in parts of Asia and Africa, has spread through the Americas and is now transmitted by mosquitoes in Puerto Rico. Mosquito-related transmission has not been reported yet in the continental United States, but people who have travelled to areas where active transmission by mosquitoes occurred have developed the infection upon their return to the United States. The virus has been linked to birth defects and neurological disease, with thousands of cases being reported in Brazil. W. Keith Hoots, director, Division of Blood Diseases and Resources, NHLBI, NIH, and Simone Glynn, Branch Chief, Blood Epidemiology and Clinical Therapeutics Branch, NHLBI, NIH, are co-authors of [the commentary](#) and are available to comment on Zika and the threat to blood transfusion.



— Read more in Marion C. Lanteri et al., “Zika virus: a new threat to the safety of the blood supply with worldwide impact and implications,” [Transfusion](#) (9 June 2016).



## Anthrax mystery in Greek medical lab

Source: Local media

Seven months ago anthrax bacillus identified in a lab at University of Athens, Medical School. The deadly pathogen was safely removed by the Joint CBRN Platoon of the Hellenic Armed Forces. Anthrax was in possession of a Professor of Epidemiology and Preventive Medicine but nobody knows the exact quantity available and possible dissemination in the last 15 years. Hellenic Counter-Terrorism Service is exploring professor's connection with Middle East and tries to synthesize the history of the pathogen that is connected with a strange operation involving a military aircraft sent to Cyprus – but no official documents or protocols are available. The story was published in the latest issue of the HotDoc journal.(vol 103 – June 2016).

## Dr. Leslie Norins, MD, Ph.D. “Deadly Pages” – Bioterrorism Fiction

Source: <http://www.wrhi.com/2016/06/62116-dr-leslie-norins-md-ph-d-deadly-pages-bioterrorism-fiction-126145>

June 21 – Bioterrorism is a terrifying threat, especially if we're attacked with smallpox, because **no one** has been vaccinated for smallpox since the 1950s, and no stockpiles of smallpox vaccine exist anywhere in the world. **Could a terrorist plot to infect up to 5 million people in the U.S. with smallpox actually be successful?**

Medical expert Dr. Leslie Norins imagines this frightening scenario in the new novel, *Deadly Pages* (Medvostat, June 2016), where terrorists scheme to infect millions of Americans with smallpox. In the book, middle eastern radicals plan to obtain the disease, produce it in massive quantities, and then ship it to the U.S., where a nefarious plan has been hatched to spread it to millions of Americans. Meanwhile, American doctor Martin Riker treats a man infected with smallpox who gives the first hint of a potential threat. Only Dr. Riker can stop this scheme by going undercover as a sympathizer who offers his expertise and wants to help with the attack. Up to the very last moment, readers will be on the edge of their seats as he tries to stop the worst terrorist attack America has ever faced.



## Potential drug target identified for Zika, similar viruses

Source: <http://www.medicalnewstoday.com/releases/311072.php>

June 20 – Scientists potentially have found a way to disrupt Zika and similar viruses from spreading in the body.

**A team at Washington University School of Medicine in St. Louis has identified a single gene pathway that is vital for Zika and other flaviviruses to spread infection between cells. Further, they showed that shutting down a single gene in this pathway - in both human and insect cells - does not negatively affect the cells themselves and renders flaviviruses unable to leave the infected cell, curbing the spread of infection.**

The study, published in *Nature*, points to a potential drug target for Zika and other flaviviruses such as dengue and West Nile that have major impacts on public health.

"We wanted to find out if we could identify genes present in the host cells that are absolutely required by the virus for infection," said senior author Michael Diamond, MD, PhD, the Herbert S. Gasser Professor of Medicine. "Out of about 19,000 genes that we looked at, we only found nine key genes that the virus relies on for infection or to spread. All of them are associated with an important part of the cell that processes viral particles, which is essential to spreading the infection."

To identify genes that flaviviruses rely on, Diamond and his colleagues utilized a gene editing technology called CRISPR that is capable of selectively shutting down individual genes. Viruses must hijack host cells to

replicate and spread, making them dependent upon the genetic material of the organisms they infect. If a cell lacks a gene that the virus requires for infection, the virus will be stopped in its tracks, and the cell will survive. Such evidence indicates that the missing gene is vital to viral spread and should be studied further.

Of the nine key genes Diamond and his colleagues identified, one called **SPCS1, when disabled, not only reduces viral infection but appears to have no adverse effects on the cells** the scientists studied. The researchers performed the first experiments on West Nile virus and then showed that the same results held true for other Flaviviridae family members, including Zika, dengue, yellow fever, Japanese encephalitis and hepatitis C viruses. While the absence of this gene shut down the spread of flaviviruses, the researchers found that eliminating the gene had no detrimental effect on other types of viruses, including alphaviruses, bunyaviruses and rhabdoviruses. "Flaviviruses appear to be uniquely dependent on this particular gene to release the viral particle," Diamond said. "In these viruses, this gene sets off a domino effect that is required to assemble and release the viral particle. Without it, the chain reaction doesn't happen and the virus can't spread. So we are interested in this gene as a potential drug target because it disrupts the virus and does not disrupt the host."

*Article: [A CRISPR screen defines a signal peptide processing pathway required by flaviviruses](#), Rong Zhang, Jonathan J. Miner, Matthew J. Gorman, Keiko Rausch, Holly Ramage, James P. White, Adam Zuiani, Ping Zhang, Estefania Fernandez, Qiang Zhang, Kimberly A. Dowd, Theodore C. Pierson, Sara Cherry & Michael S. Diamond, doi:10.1038/nature18625, Nature, published 17 June 2016.*

