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NEWSLETTER **TERRORISM**

E-Journal for CBRNE & CT First Responders

CBRNE



Sex Terrorism



Europe's Shame

Failing to Protect its Female Citizens



PART A

CBRNE-Terrorism Newsletter – 2016©

January 2016

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Editorial

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

Editor-in-Chief
CBRNE-Terrorism Newsletter

Dear Colleagues,

Happy New Year to all our readers!

What a silly wish it became! How can wish happiness and prosperity in a flamed world ruled by ruthless governorns not caring for tomorrow – only for their own today! January followed the pattern of last months of 2015 – violence, terrorism, civilians, bloodshed and alike...

The 2015 Global Terrorism Index has rated countries around the world based on the prevailing trends of peace and terror within these countries. For residents there, one alarming generality that jumps about the Global Terrorism Index results is that it outlines concentrated areas of terror within the Middle East, Asian, and Africa as being most affected by terrorist attacks. The top 5 from among the list are Iraq, Afghanistan, Nigeria, Pakistan, and Syria. It is believed that nearly 78 percent of global terrorism-related deaths occurred in these five countries alone, further emphasizing the alarming domestic situations in these places. Research suggests that nearly 32,600 people died last year due to acts of terror. This accounts for a marked 80% increase from 2013, with numbers remaining on the rise yet still.

From the Charlie Hebdo killing in January to the Friday the 13th attacks in November, France and its capital Paris have become the epicenter of a growing terrorist threat in Europe. The tremors were felt in Copenhagen, Brussels and even the meeting rooms of EU institutions where the fundamental European principle of free movement has come under pressure.

The first attack hit Paris on 7 January when two gunmen burst into the Charlie Hebdo magazine newsroom, killing ten people and injuring 11 before killing a policeman on their way out. Most of the victims were cartoonists for Charlie Hebdo, an extreme satirical weekly whose offices had already been the subject of an arson attack in 2011. Islamist radicals targeted the magazine because of cartoons depicting Muhammad. The attack hit a nerve in France, where some of those murdered were popular figures and where people felt it was an attack on freedom of expression and the country's deep-rooted secular values. The killers, brothers Cherif and Said Kouachi were tracked down by police and killed two days later in a printing company office near Paris. Meanwhile, a third man attacked a Jewish supermarket in Vincennes. Amedy Coulibaly killed 4 people and took 17 hostages for several hours before being killed during a police raid. It later transpired that he had killed a policewoman the day before near a Jewish school he may have intended to attack.

About a month later, cartoonists and freedom of expression were once again under fire. This time in Copenhagen, where on 14 February, a gunman shot one person dead and injured 3 policemen at a debate on "Art, Blasphemy and Freedom of Expression". One of the participants in this event organized as a reflection on the Charlie Hebdo massacre was Swedish artist Lars Vilks. Vilks was the author of drawings of Prophet Muhammad in 2007. Later that day the gunman, a 22-year old Danish resident of Jordanian-Palestinian origin, killed a security guard and injured two policemen at the Copenhagen Great Synagogue. He was found and killed by police the following day.

The next alert came in late August and heralded a new era for Europe. On 21 August, a man boarded a Thalys' high-speed train in Brussels and started to open fire on passengers with automatic weapons on the way to Paris. He was tackled and disarmed by several passengers including two off-duty US soldiers. The attack prompted calls for security gates in train stations, as well as an initial debate over more checks on



passengers travelling from one country to another inside the Schengen area. The failed Thalys attack was also a first indication of a new tactic by Islamist terrorists, aimed at killing as many people as possible going about their daily occupations.

Contrary to the Madrid and London attacks in 2004 and 2005, when bombs were planted in public transportation, the latest attacks involve automatic weapons and terrorists ready to die in action. The ultimate expression of this was the November Paris attacks when terrorists shot people before blowing themselves up. On 13 November, eight men carried out a series of three coordinated attacks in Paris. They shot at people in restaurants and bars, they attacked the Bataclan concert hall and detonated three bombs next to the Stade de France. The attacks left 130 people dead and 352 injured and prompted French president Francois Hollande to declare a state of emergency that was later extended for three months.

EU member states granted France the first activation of the EU's mutual defense clause to help in operations against militant Islamic groups in Africa and the Middle East. They also decided to step up their security cooperation. The attacks showed that countries do not share enough information about potential terrorists travelling from one country to another in the Schengen free-movement area. The Paris attackers, though the majority were French, came from Belgium and had travelled to and from Syria without being checked or put under surveillance. Belgium and Europe discovered that Molenbeek, a part of the Brussels region, was apparently a safe haven for terrorists. At an emergency meeting after the Paris attacks, EU justice and interior ministers agreed to make more use of the Schengen and Interpol databases to track identified radicals and criminals.

Ministers also decided to introduce systematic checks on EU citizens at Schengen external borders, in order to spot the so-called foreign fighters - EU nationals going to Syria and Iraq to train and fight with the Islamic State group - who could commit attacks in Europe. The measure was also considered as a way to protect the Schengen area from the risk of controls at internal borders. Such controls were reintroduced by some countries, including Germany, in response to the migrant crisis and there were calls for more controls. Ministers put pressure on the European Parliament to adopt the Passenger Name Record (PNR) legislation before the end of the year. They said this EU database would allow police and intelligence services to spot suspect travelers. But despite these efforts, as well as measures to stem the funding of terrorism and radicalization, the Europol chief warned that they might not be enough.

During the first month of 2016 three prominent terrorist attacks stroke Istanbul (Turkey), Jakarta (Indonesia) and Ouagadougou (Burkina Faso) killing and injuring tens of civilians. Of equal importance is the new form of terrorism now called “sex terrorism” – more than 650 sex attacks – that spread and became viral during the first days of the New Year affecting many European countries. It was a coordinated widespread plan that need to be addressed vigorously and with proper determination – although Eurabia has lost its own confidence as a result of previously highly promoted multiculturalism that dearly failed.

In the Islamic State's front in Syria and Iraq five issues need to be mentioned: (1) the active involvement of Russian Armed Forces; (2) the lack of cooperation between Western Alliance and Russia; (3) the strange role of Turkey on what is happening out there; (4) the change of IS's modus operandi from local to international terrorism operations; and (5) it seems that IS has CBRE capabilities and if cornered enough they might use them against international targets. 2016 will be a key-year for Syria, Iraq and IS but it will take time to eradicate the deadly virus once and for good – mainly due to the many mutations the virus uses to survive.

In Greece the situation remains fragile (as always). Looking the abyss for real, governance is still playing games – different at the inside and other at the outside. The bottom line is that “progress” immigrated elsewhere along with the continuing “brain export” that bleeds Greece the most. Current situation confirms the rule that “citizens have the governance they deserve”. Massive illegal immigration is the hot potato and the immigration tsunami is getting bigger and bigger despite the winter weather that all hoped to alt the human inflow. European big mouths continue to criticize Greece for not doing enough but without providing concrete solutions that might work.



CBRNE-TERRORISM NEWSLETTER – January 2016

What to expect for 2016. According to January 2016 Global Financial Forum estimate many threat will be prominent this year (read more in the related title at Part C):

	2012	2013	2014	2015	2016
1st	Major systemic financial failure	Major systemic financial failure	Fiscal crises	Water crises	Failure of climate-change mitigation and adaptation
2nd	Water supply crises	Water supply crises	Climate change	Rapid and massive spread of infectious diseases	Weapons of mass destruction
3rd	Food shortage crises	Chronic fiscal imbalances	Water crises	Weapons of mass destruction	Water crises
4th	Chronic fiscal imbalances	Diffusion of weapons of mass destruction	Unemployment and underemployment	Interstate conflict with regional consequences	Large-scale involuntary migration
5th	Extreme volatility in energy and agriculture prices	Failure of climate-change mitigation and adaptation	Critical information infrastructure breakdown	Failure of climate-change mitigation and adaptation	Severe energy price shock

■ Economic
 ■ Environmental
 ■ Geopolitical
 ■ Societal
 ■ Technological

CBRNE-Terrorism Newsletter will continue to provide the best articles on CBRNE and counter-terrorism incidents worldwide since knowledge is our own defense to what is happening or it is going to happen around us. We sincerely believe that the unexpected always happens and thus we have no excuse not to be prepared as efficiently as possible.

Be alert First Responders because you are the shield protecting our values and core survival in an ugly world! Just remember that:

**When danger comes,
some men cry, scream,
cower or run. We are
not those men.**

The Editor-in-Chief



These Are the Top 10 Risks to the World in 2016

By Ian Bremmer

Source: <http://time.com/4165973/ian-bremmer-risk-report-global/>

Jan 04 – At the beginning of each year Eurasia Group, the political risk consultancy I founded and oversee, publishes a list of the top 10 political risk stories for the 12 months ahead. These are the risks and trends we believe are most likely to move markets in 2016. We've opened the year with a serious spat between Saudi Arabia and Iran, and a horrible day for markets in China. But our #1 risk centers on erosion of the partnership that has provided a lot of global stability over many years.

1. The Hollow Alliance

The trans-Atlantic partnership has been the world's most important alliance for nearly seventy years, but it's now weaker and less relevant than at any point in decades. The U.S. no longer plays a decisive role in addressing any of Europe's top priorities. Russia's intervention in Ukraine and the conflict in Syria will expose U.S.-European divisions. As U.S. and European paths diverge, there will be no one to play international fireman—and conflicts particularly in the Middle East will be left to rage.

2. Closed Europe

In 2016, divisions in Europe will reach a critical point as a core conflict emerges between Open Europe and Closed Europe—and a combination of inequality, refugees, terrorism, and grassroots political pressures pose an unprecedented challenge to the principles on which the European Union was founded. Europe's open borders will face particular pressure. The risk of Britain's exit from the E.U. is underestimated. Europe's economics will hold together in 2016, but its broader meaning and its social fabric will not.

3. The China Footprint

Never has a country at China's modest level of economic and political development produced such a powerful global footprint. China is the only country of scale today with a global economic strategy. The recognition in 2016 that China is both the most important and most uncertain driver of a series of global outcomes will increasingly unnerve other international players who aren't ready for it, don't understand or agree with Chinese priorities, and won't know how to respond to it.

4. ISIS and "Friends"

The Islamic State of Iraq and Greater Syria is the world's most powerful terrorist organization, having attracted followers and imitators from Nigeria to the Philippines. But the international response to its rise is inadequate, misdirected, and at cross purposes. For 2016, this problem will prove unfixable, and ISIS and other terrorist organizations friendly to its aims will take advantage of that. The most vulnerable states will remain those with explicit reasons for ISIS to target them (France, Russia, Turkey, Saudi Arabia, and the United States), and those with the largest numbers of unintegrated Sunni Muslims (Iraq, Lebanon, Jordan, Egypt, and across Europe).

5. Saudi Arabia's Rifts

The Saudi Kingdom faces a growing risk of instability this year, and its increasingly isolated status will lead it to act more aggressively across the Middle East. The threat of intra-royal family discord is on the rise, and a scenario of open conflict — unimaginable prior to King Salman's January 2015 ascension — has now become entirely realistic. The key source of



external Saudi anxiety is Iran, soon to be free of sanctions. Now that the Saudis have executed the kingdom's top Shia cleric and Iran has responded with open hostility, we can expect an intensification of their proxy conflicts in Syria, Yemen, and elsewhere in the region.

6. The Rise of Technologists

A variety of highly influential non-state actors from the world of technology are entering the realm of politics with unprecedented assertiveness. These newly politically ambitious technologists are numerous and diverse, with profiles ranging from Silicon Valley corporations to hacker groups and retired philanthropists. The political rise of these actors will generate pushback from governments and citizens, generating both policy and market volatility.

7. Unpredictable Leaders

An unusually wide constellation of leaders known for their erratic behavior will make international politics exceptionally volatile this year. Russia's Vladimir Putin and Turkey's Recep Tayyip Erdogan are leaders of an unruly pack that includes Saudi Arabia's Deputy Crown Prince Mohammed bin Salman and – to a lesser but important extent – Ukraine's Petro Poroshenko. These unpredictable leaders make our list for 2016 because their interventions overlap and conflict. One powerful, erratic leader spells trouble; four spell volatility with major international implications.

8. The Fate of Brazil's President

President Dilma Rousseff is fighting for her political survival with impeachment proceedings in the offing, and the country's political and economic crisis is set to worsen in 2016. Contrary to hopes among pundits and many market players, the battle over Rousseff is unlikely to end the current political stalemate. Should the president survive, her government won't gain the political boost necessary to move on the economic reforms needed to tackle the country's growing fiscal deficit. If Rousseff is ousted, an administration led by Vice President Michel Temer won't fare much better.

9. Not Enough Elections

Emerging markets underwent a historic cycle of national elections in 2014-2015, but this year there are relatively few opportunities for EM voters to make themselves heard at the ballot box. As slower growth and stagnating living standards stoke popular discontent, governance and stability will suffer. Historically, markets have been less volatile in non-election years, but this time will be different. By raising popular expectations, the massive income growth that most EMs enjoyed over the past 10 years has created conditions for a rude awakening.

10. Turkey Moves towards Autocracy

After a decisive victory for his AK party in late-2015, President Erdogan will now push to replace the country's parliamentary system with a presidential one. He's unlikely to reach his goal in 2016, but his aggressive electioneering will further damage an already battered Turkish business and investment climate. On the security front, there is little prospect of an imminent end to PKK violence, and unrelenting U.S. pressure on Ankara to clamp down on ISIS will produce only modest results while making Turkey more vulnerable to new attacks.

We'll begin the year with a focus on how far Saudi-Iranian hostility will grow before leaders in both countries try to limit the direct fallout. We'll certainly be watching the international jitters provoked by China's unsteady market performance. But it's the inability and unwillingness of the U.S. and Europe to offer global leadership in 2016 that ensures that the world's wildfires will burn hotter and longer in 2016.

Ian Bremmer is a foreign affairs columnist and editor-at-large at TIME. He is the president of Eurasia Group, a political-risk consultancy, and a Global Research Professor at New York University. His most recent book is "Superpower: Three Choices for America's Role in the World".



Norway Offers Migrants a Lesson in How to Treat Women

Source: <http://www.nytimes.com/2015/12/20/world/europe/norway-offers-migrants-a-lesson-in-how-to-treat-women.html>



Refugees from Sudan took part in a class dealing with violence against women, at a refugee center in Lunde, Norway. Credit Andrew Testa for The New York Times

Dec 19 – When he first arrived in Europe, Abdu Osman Kelifa, a Muslim asylum seeker from the Horn of Africa, was shocked to see women in skimpy clothes drinking alcohol and kissing in public. Back home, he said, only prostitutes do that, and in locally made movies couples “only hug but never kiss.”

Confused, Mr. Kelifa volunteered to take part in a pioneering and, in some quarters, controversial program that seeks to prevent sexual and other violence by helping male immigrants from societies that are largely segregated or in which women show neither flesh nor public affection to adapt to more open European societies.

Fearful of stigmatizing migrants as potential rapists and playing into the hands of anti-immigrant politicians, most European countries have avoided addressing the question of whether men arriving from more conservative societies might get the wrong idea once they

move to places where it can seem as if anything goes.

But, with more than a million asylum seekers arriving in Europe this year, an increasing number of politicians and also some migrant activists now favor offering coaching in European sexual norms and social codes.

Mr. Kelifa, 33, attended the education program at an asylum center in this town near the western Norwegian city of Stavanger. Like similar courses now underway in the village of Lunde and elsewhere in Norway, it was voluntary and was organized around weekly group discussions of rape and other violence. The goal is that participants will “at least know the difference between right and wrong,” said Nina Machibya, the Sandnes center’s manager.

A course manual sets out a simple rule that all asylum seekers need to learn and follow: “To force someone into sex is not permitted



in Norway, even when you are married to that person.”

It skirts the issue of religious differences, noting that while Norway has long been largely Christian, it is “not religion that sets the laws” and that, whatever a person’s faith, “the rules and laws nevertheless have to be followed.”

In Denmark, lawmakers are pushing to have such sex education included in mandatory language classes for refugees. The German region of Bavaria, the main entry point to Germany for asylum seekers, is already experimenting with such classes at a shelter for teenage migrants in the town of Passau.

Norway, however, has been leading the way. Its immigration department mandated that such programs be offered nationwide in 2013, and hired a nonprofit foundation, Alternative to Violence, to train refugee center workers in how to organize and conduct classes on sexual and other forms of violence. The government provided funding for two years to pay for interpreters for the classes and is now reviewing the results and whether to extend its support.

“The biggest danger for everyone is silence,” said Per Isdal, a clinical psychologist in Stavanger who works with the foundation, which developed the program Mr. Kelifa attended in Sandes.

Many refugees “come from cultures that are not gender equal and where women are the property of men,” Mr. Isdal said. “We have to help them adapt to their new culture.”

The first such program to teach immigrants about local norms and how to avoid misreading social signals was initiated in Stavanger, the center of Norway’s oil industry and a magnet for migrants, after a series of rapes from 2009 to 2011.

Henry Ove Berg, who was Stavanger’s police chief during the spike in rape cases, said he supported providing migrants’ sex education because **“people from some parts of the world have never seen a girl in a miniskirt, only in a burqa.” When they get to Norway, he added, “something happens in their heads.”**

He said, “there was a link but not a very clear link” between the rape cases and the city’s immigrant community. According to the state

broadcaster, NRK, which reviewed court documents, only three of 20 men found guilty in those cases were native Norwegians, the rest immigrants.

The claim that refugees and immigrants in general are prone to commit rape has become a main rallying cry of anti-migrant activists across Europe, with each case of sexual violence by a newcomer presented as evidence of an imported scourge.

Hege Storhaug, a former Norwegian journalist who runs Human Rights Service, an organization fiercely critical of Islam, has seized on the issue to rally public opposition to refugees, asserting on her group’s website that Chancellor Angela Merkel of Germany had opened the way to an “epidemic of rape” with her welcoming approach to migrants.

Norway, like most European countries, does not break down crime statistics by ethnicity or religion. A 2011 report by Norway’s state statistical bureau noted that “immigrants are overrepresented in the crime statistics” but suggested that this was not due to cultural differences but because many of the immigrants were young men.

“It should not be surprising if groups with large proportions of young males have higher crime rates than groups with large proportions elderly women,” the report said.

Hanne Kristin Rohde, a former head of the violent crime section of the Oslo Police Department, said she ran into a wall of hostility when, in 2011 while still in the police force, she blamed sexual violence by foreign men on cultural factors and went public with data suggesting that immigrants committed a hugely disproportionate number of rapes.

“This was a big problem but it was difficult to talk about it,” Ms. Rohde said recently, asserting that there was “a clear statistical connection” between sexual violence and male migrants from countries where “women have no value of their own.” The taboo, she added, has since eased somewhat.

“There are lots of men who haven’t learned that women have value,” said Ms. Rohde, who wants mandatory sexual conduct classes for all new male migrants.

“This is the biggest problem, and it is a cultural problem.”



But many question whether there is a clear link between migrants and crime. Last month, the German interior minister, Thomas de Maizière, said that asylum seekers were no more prone to crime, including sexual violence, than Germans.

"In general, the available recent trend findings show that refugees commit just as few or as many crimes as groups of the local population," he said.

Mr. Kelifa, the African asylum seeker, said he still had a hard time accepting that a wife could accuse her husband of sexual assault. But he added that he had learned how to read previously baffling signals from women who wear short skirts, smile or simply walk alone at night without an escort.

"Men have weaknesses and when they see someone smiling it is difficult to control," Mr. Kelifa said, explaining that in his own country, Eritrea, "if someone wants a lady he can just take her and he will not be punished," at least not by the police.

Norway, he said, treats women differently. "They can do any job from prime minister to truck driver and have the right to relax" in bars or on the street without being bothered, he added.

Mr. Isdal, the Stavanger psychologist, said refugees, particularly those traumatized by war, represent a "risk group" that is not predestined to violent crime but that does need help to cope with a new and alien environment.

The program he helped design focuses on getting newly arrived refugees to open up about their attitudes toward sex, through discussions in small groups supervised by a monitor, usually a native Norwegian. A manual prepared for the course includes sections on "Norwegian laws and values," as well as violence against children and women.

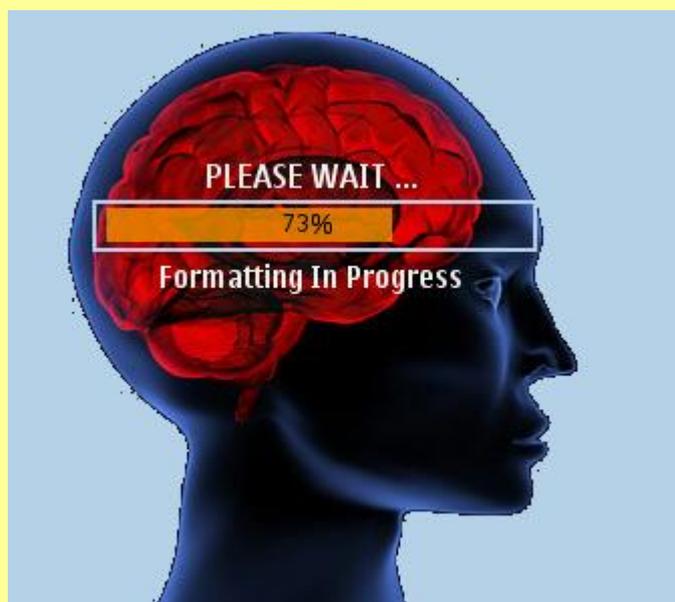
A class held on Wednesday in Lunde, a village southwest of Oslo, focused on differing perceptions of "honor" and how violence that might be seen as honorable in some cultures is shameful and also illegal in Norway.

A rival program, developed by a private company called Hero Norge, which runs asylum centers under a contract with the government, also promotes discussion as the

best way to expose and break down views that can lead to trouble.

Hero Norge's teaching material studiously avoids casting migrants in a bad light and instead presents a fictional character called Arne, a native Norwegian, as a model of predatory behavior. The main immigrant character, a 27-year-old called Hassan, is, by contrast, introduced as a "good man" who is "honest and well liked."

In one episode, Arne, the Norwegian, tells Hassan he plans to ply a young woman with alcoholic drinks "to soften her up." People taking the course are asked questions such as:



"How should Hassan react?" "What do you think Arne means when he says he wants to 'soften her up?'" "Is it O.K. to 'soften someone up' with alcohol?"

Berit Harr, a course monitor at a refugee center in Ha, a coastal village south of Stavanger, said it was important to avoid making migrants feel as if they were under suspicion while getting them to talk about their own views on relations between the sexes.

"It is difficult to talk about sex," she said. But, she added, doing so can help refugees navigate potentially dangerous situations in a strange land.

"It is normal here for boys and girls to be friends," she said. "Smiling and flirting are normal. It doesn't mean anything. If a girl is



drunk it does not mean she is willing to do anything.”

EDITOR’S COMMENT: Can just a course reboot human brain? Can extreme survival instincts settle down in societies that have already solve their main daily problems? Is Norwegian prosperity enough to motivate them to educate and work hard to achieve similar benefits and to be incorporated in the social web of the host country? Can advanced societies effectively fight the “I want sex and I want it right here right now? I do not think so! The problems of mixing different civilizations are just the tip of the social iceberg especially when we consider the tip as only a small piece of ice while the tip is based on the strength of the icy part being underwater.

The last important thing that happened to Greece before 2016

On Dec 23, 2015 the same-sex partnership bill approved in Greek Parliament by 194 MPs. The new law promotes LGBT rights as it offers same-sex couples the same legal partnership union as heterosexuals.



LGBT community members celebrate inside the Parliament



MPs applaud the public “kissing”

EDITOR’S COMMENT: After solving all the problems that make Greeks suffer on daily basis for the last 5 years, Left government voted the new bill. Do not take my irony wrong! As a person I have nothing against the specific community and in many instances I have worked together with homosexual people or colleagues in arms. No problem at all! It seems that I was lucky since both parts followed certain rules – not written or agreed rules but a mutual understanding that will not put one side in a difficult position. What I do not like is the “promotion” campaign to implement their way of life on our way of life. I do not like the global pansexualism promotion and what might be hidden behind that. Since there is no concrete scientific evidence proving the determining factor that shifts people from traditional interrelationships, the specific different orientation is just a sexual preference that should be kept private.

Brunei and Tajikistan ban Christmas

Source: <http://www.sbs.com.au/news/article/2015/12/23/brunei-tajikistan-ban-christmas>

Dec 23 – They may be 6000 kilometers apart, but both Brunei and Tajikistan have put a halt to widespread Christmas festivities this year.

The small country of Brunei, located on the island of Borneo in Southeast Asia, has

banned public celebrations of the Christian holiday. Festive greetings, decorations, and even Santa hats are not allowed in public.

Anyone who breaches the ban could face up to five years in jail.



"These enforcement measures are...intended



to control the act of celebrating Christmas excessively and openly, which could damage the aqidah (beliefs) of the Muslim community," Brunei's Ministry of Religious Affairs released in a statement.

The statement also added any public celebrations could "affect" the "Islamic faith" of Muslims in Brunei.

However non-Muslims, who make up almost a third of the 420,000 population, are allowed to celebrate in their own communities – so long as the details are not disclosed to Muslims. Meanwhile, Tajikistan has also tightened restrictions around the religious holiday, which have been in place in some forms since the Soviet Union era.

Christmas trees, decorations in schools and universities, and "the use of fireworks, festive

meals, gift-giving and raising money" have



been scrapped.

While elaborately designed trees have been roped up on the main squares of the major cities of other ex-Soviet states, a tree will only appear fleetingly before New Year's in Tajikistan's capital, Dushanbe. It is expected to be removed early in

2016.

Tajikistan is a majority-Muslim, but secular country, which is divided over the benefits of Soviet and Russian influences on daily life.

A man dressed as the Russian equivalent to Santa Claus, "Father Frost", was stabbed to death three years ago outside his Dushanbe home.

"Father Frost" was also banned from appearing on television screens in 2013.

EDITOR'S COMMENT: Imagine the opposite reactions if a European nation, US, Canada or Australia decided a similar restriction! There is something wrong either to them or to the rest of us!

Popular Theme Parks Install Metal Detectors to Enhance Security

Source: <http://www.emergencymgmt.com/safety/Popular-theme-parks-install-metal-detectors-to-enhance-security.html>

In a sign of how jittery the nation has become about terrorism and gun violence, major theme

parks on Thursday installed metal detectors at the front of their attractions.



In Orlando, Walt Disney World would not say how long its metal detectors would be in place. SeaWorld said it had installed the devices as



part of enhanced security for the holidays. Universal Orlando said it was testing using them as guests approach the theme parks.

The changes extend outside Orlando. Disneyland and Universal Studios in Hollywood are also installing the detectors.

Security in general has been a big concern following recent attacks in Paris and San Bernardino, Calif. On Wednesday, the federal Department of Homeland Security issued a bulletin saying it was “especially concerned that terrorist-inspired individuals and homegrown violent extremists may be encouraged or inspired to target public events or places.” It said the public should expect to see more police and more stringent security at public places and events.

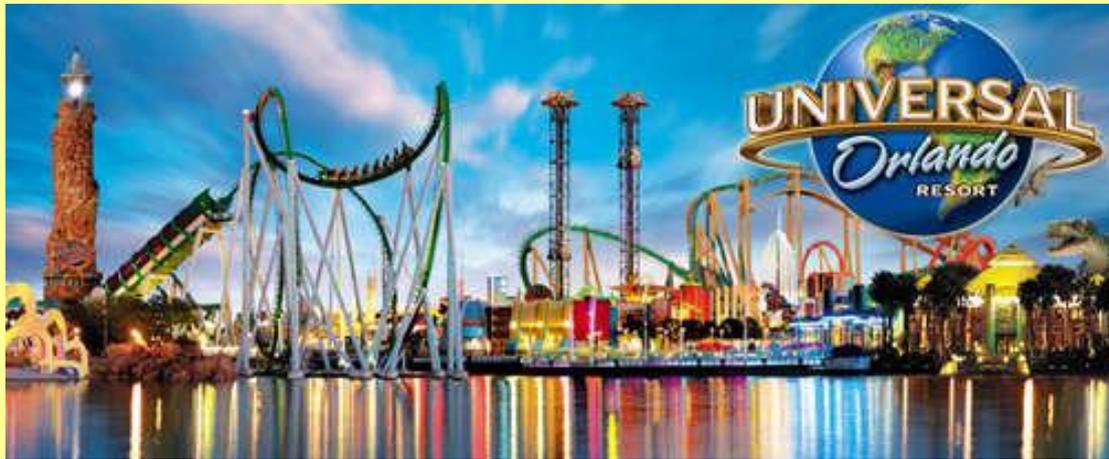
Disney World — where a man was arrested last weekend after trying to enter the Magic Kingdom with a gun — is now discontinuing the sale of toy guns. It is also banning people 14 and older from wearing costumes — even at Halloween parties. More deputies and security guards have been visible at the resort lately, and specially trained dogs have been patrolling key areas. The movie theater at Disney

Springs where tonight’s high profile premiere of the new “Star Wars” movie takes place will also have at least one metal detector.

“We continually review our comprehensive approach to security and are implementing additional security measures, as appropriate,” Disney said in a statement.

Universal spokesman Tom Schroder said the decision to test metal detectors was not driven by a specific threat. He said in an email: “We want our guests to feel safe when they come here. We’ve long used metal detection for special events, such as Halloween Horror Nights. This test is a natural progression for us as we study best practices for security in today’s world.”

SeaWorld said in an email it would be “enhancing security measures for the busy



holiday season, including increased security presence both inside and outside the parks.”

On social media, many theme park fans welcomed the changes and called them long overdue.

Metal detectors have become more common for general security reasons. Travelers have walked through them at airports for years. Fans attending NBA games go through them. Major League Baseball has begun requiring them for its teams’ games.

Six Flags theme parks put up metal detectors, most of them after the Sept. 11, 2001, terrorist attacks, at the main gates. In 2004, Disney World experimented with metal detectors at its entrance but did not make them permanent.

Earlier this year, Universal put up metal detectors in front of some



rides to make sure that people don't bring on

items such as cell phones.

EDITOR'S COMMENT: Always keep in mind that strengthening the door usually weakens the windows. Measures such as metal detectors should always be accompanied by a detailed risk analysis with special focus on low technology items that can be used as weapons – same for high tech weapons (i.e. 3-D printed items). Thinking as terrorists is the only antidote for effective protection of mass gathering places.

Over the weekend, the number of refugees arriving in Europe crossed 1 million mark

Source: <http://www.homelandsecuritynewswire.com/dr20151222-over-the-weekend-the-number-of-refugees-arriving-in-europe-crossed-1-million-mark>



Dec 22 – The International Organization for Migration (IOM) said on Monday that over a million irregular migrants and refugees arrived in Europe in 2015, mostly from Syria, Africa, and South Asia.

last Friday. This year's total of migrant/refugee deaths now stands at 3,692 — over 400 more than in 2014 — plus at least thirty more deaths reported by African migrants



seeking to enter Europe through Spain's Canary Islands.

IOM Greece continues to monitor fatalities in the Greek islands, where a growing number of victims are young children. On 19 December a wooden boat carrying sixty-two migrants capsized off Chios Island and a 2-year old Iraqi boy drowned. According to the Greek Coast Guard, six of the fifteen bodies of migrants and refugees to wash up on Greek islands this month have been infants or children.

"We know migration is inevitable, necessary and desirable," said IOM director General William Lacy Swing.

"But it's not enough to count the number of those arriving — or the nearly 4,000 this year reported missing or drowned. We must also act. Migration must be legal, safe and secure for all — both for the migrants themselves and the countries that will become their new homes."

In December alone, IOM estimates that 67,700 or more migrants have crossed into Greece through the country's maritime borders. During the same period, some 52,500 people crossed from Greece into the Former Yugoslav Republic of Macedonia. This means that roughly 77 percent of all migrant

Through the weekend, IOM's Displacement Tracking Matrix - Flow Monitoring System counted 999,745 irregular arrivals across the Mediterranean, including migrants journeying by both land and sea to Greece, as well as to Bulgaria, Spain, Italy, Malta, and Cyprus.

With arrivals of 4,141 migrants or refugees landing in Greece on Monday, IOM reports total arrivals to Europe at roughly 1,005,504, with just 3 percent coming by land. The total is the highest migration flow since the Second World War.

The IOM says that the tally of fatalities also continues to rise, with twenty new deaths recorded in the Eastern Mediterranean since



arrivals in December already have passed through Greece and into FYROM and other points further north.

Since the beginning of the year, IOM estimates that over 810,000 migrants and refugees have crossed into Greece by sea. Only about 5,000 migrants have crossed into Greece by land.

According to IOM's monitoring system between 9-20 December 45.6 percent of migrants crossing Greece-FYROM border were male adults; 21.9 percent were female adults; 35

percent were accompanied children, and 1.5 percent unaccompanied minors. The vast majority are Syrians, followed by Iraqi and Afghans, as no other nationalities are now allowed to cross.

IOM notes that it is offering assisted voluntary return to their country of origin for migrants who have been turned back from the border. An increasing number of migrants, notably Moroccans, are expressing an interest, given the lack of other options to return home safely.

Muslim Migration into Europe: Eurabia Come True?

Source: <http://www.meforum.org/5723/daniel-pipes-migration-panel>

Nov 06 – Middle East Forum President Daniel Pipes took part in the panel discussion "Muslim Migration into Europe: Eurabia come True?" at the David Horowitz Freedom Center's 2015 Restoration Weekend, held November 5-8 at the Belmond Charleston Place Hotel in Charleston, South Carolina. The transcript below has been lightly edited.

Introductory Statement

Erick Stakelbeck: Our next speaker is, to my mind, one of the most brilliant voices of thinkers, analysts on all of these issues we're talking about, and he has been before anyone else was doing it. Dr. Daniel Pipes is president of the Middle East Forum and a columnist at *National Review*, *The Jerusalem Post*. You read his stuff everywhere and many other publications. He's the author of several books on the Middle East and Islam. He is a true authority. Dr. Daniel Pipes.

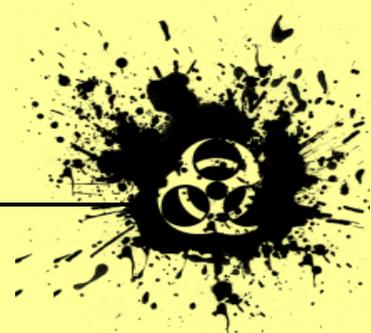
Daniel Pipes: Thank you, Erick, and good morning, ladies and gentlemen. My topic is the

"The recent surge of migration is having an impact on European attitudes ... we've just begun to see the implications."

European response to the wave of migration that took place, which is still taking place. Indeed, the largest number of migrants to Europe was in October; far more than September or July or August. And the number this October was nine times more than last October.



My assumption is that people respond to realities on the ground and that the recent surge of migration is having an impact on European attitudes. I expect that this will have a profound impact that we've just begun to see the implications. The first significant implication is the election in Poland, which was directly influenced by fear of large numbers of migrants coming into the country. I expect the impact will be especially acute in countries like Austria, Germany and Sweden, where the governments have been the most enthusiastic about bringing in large numbers of migrants. The question I cannot answer for you is how quickly this is going to take place but it's clearly under way. One important factor in this context is the existing institutions. In some countries, there are political parties, intellectual associations, and volunteer organizations which are available to be joined by someone concerned with immigration. In



particular, there are political parties, most especially, for example, the PVV of Geert Wilders in the Netherlands. But in other countries, such as Germany, there's no such party. There are possibilities. Maybe in the future, they will take up this issue, but they have not yet.

The ruling ideas of these institutions are very important. At one extreme stands the neo-Nazi movement in Greece, the Golden Dawn. At the other extreme stands a very acceptable party such as the United Kingdom Independence Party, or UKIP, which consists up of people you'd be happy to invite to dinner. There's also a range in between.

These parties have a range of commonalities. They're all worried about Islam, immigration, they tend to be populist, and, to a certain extent, nativist. They are not generally right-wing parties. They usually combine a strong sense of nationalism and a left-wing economic program. Wilders is a perfect example of that mix, as is Marine Le Pen in France.



The Sweden Democrats logo reads "Security & Tradition"

Marine Le Pen is also very important in another



way. Her father, Jean-Marie Le Pen, founded the National Front Party in 1972; he is a very cranky man full of Holocaust denial theories, bizarre economic notions and the like. His daughter has recently thrown him out of the party because he's baggage she doesn't need as she moves to the center to be electable. I see this and its equivalent in other countries as a positive step. In other words, if you want to grow your party, if you want to get to 50 percent, then you have to slough off all those eccentric, nasty habits and attitudes that many parties once indulged in. If you're serious about dealing with this penumbra of issues concerning Islam and immigration, you have to do so in a moderate and serious way, without strange and ugly theories. This shift is taking place in country after country.

I often focus on Sweden because it offers a most dramatic case of change. The Sweden Democrats (SD) got started in 1988 and has enjoyed a remarkable rise. It received 0.4 percent of the vote in the 1998 elections -

which are every 4 years, like in the United States. That then tripled to 1.3 percent in 2002. It then more than doubled to 2.9 percent in 2006. It then almost exactly doubled to 5.7 percent in 2010, which was a critical achievement because a

party needs 5 percent to get into Sweden's parliament. SD more than doubled again to 12.9 percent in 2014. Current polls show it at 23-24 percent, almost double again. You see here how Swedes are awakening to the issues of immigration and Islam in a way unimaginable in 1998, going from one half of 1 percent to nearly a quarter of the electorate.

You'll be hearing a lot more about the Sweden Democrats. Speaking of which, we have with us here in the room Kent Ekeröth (please stand, Kent), international secretary of the Sweden Democrats. He'll tell you more about the situation in Sweden later in the conference.

Finally, some observations about Eastern Europe, that part of Europe formerly part of the Soviet bloc. It experienced, to refer back to Mr. Greenfield's presentation, true and full socialism, indeed communism. Inoculated by that experience, its



residents are not interested in trying socialism again. One consequence of this is that they speak frankly, in ways unheard of in Western Europe. Viktor Orban of Hungary talks about the Christian civilization of Europe. The Slovak and Polish governments say sure, we'll take Syrian refugees, but only the Christians among them.

That their elected leaders, people in positions of power, such as the prime minister of Hungary, say things unimaginable in Western Europe is important, not just because suddenly Eastern Europe is in play as the pathway to Western Europe, but also because they articulate ideas their counterparts in Western Europe dare not express. This is a new element that suddenly came into the equation

Excerpt from the Question & Answer Period

Daniel Pipes: I'd like to add a word of caution [to the prior conversation celebrating the West and denigrating Muslims]. I'm a historian, and the role of a historian is to understand how things change over time. In this context, I'd like to interject two words: communism and Nazism. The Muslim world has never developed anything remotely as evil as what we in the West have developed. Let's not get too high on our horses. We Westerners have a lot in our history to be very ashamed of.

Yes, the Muslim world is at a low point today, going through a crisis, and the West is not going through a comparable crisis. But this is but a brief moment in time. In 1943, where



only in the last half year, one that possibly has serious implications for an alternate way of understanding the immigration and Islam issues throughout the whole of Europe.

In brief, my message is: Don't give up on Europe. It's not yet Eurabia. Positive responses to the crisis now underway do exist. It's by no means certain the Europeans will respond constructively, but it's a real possibility. We Americans, in our various ways, can help guide them in the right direction. Thank you.

would you have rather been living? In Germany or in Iraq? In Italy or in Senegal? Let's not say that the Judeo-Christian world is so wonderful on the one side, while the Islamic world is so horrible on the other.

"Let's not get too high on our horses. We Westerners have a lot in our history to be very ashamed of."

Let me put it differently, as you [the questioner] attend a Jewish school. In the long history of Jews



living in predominantly Christian and Muslim lands, it is striking to note that from the origins of Islam until the close of World War II, that is to say from 622 until 1945, a very, very long period of time, Jews almost always fled from Christian-majority countries to Muslim-majority countries. They voted with their feet because they rightly expected to be better off in Muslim countries. It's only the last 70 years, since 1945, a moment in time, that Jews have fled Muslim-majority countries for predominantly Christian countries.

So let's keep some perspective. Yes, I agree with all the specifics that have been mentioned - that the current immigration is only one way and not the other way, that there's only one civilization where girls are being genitally

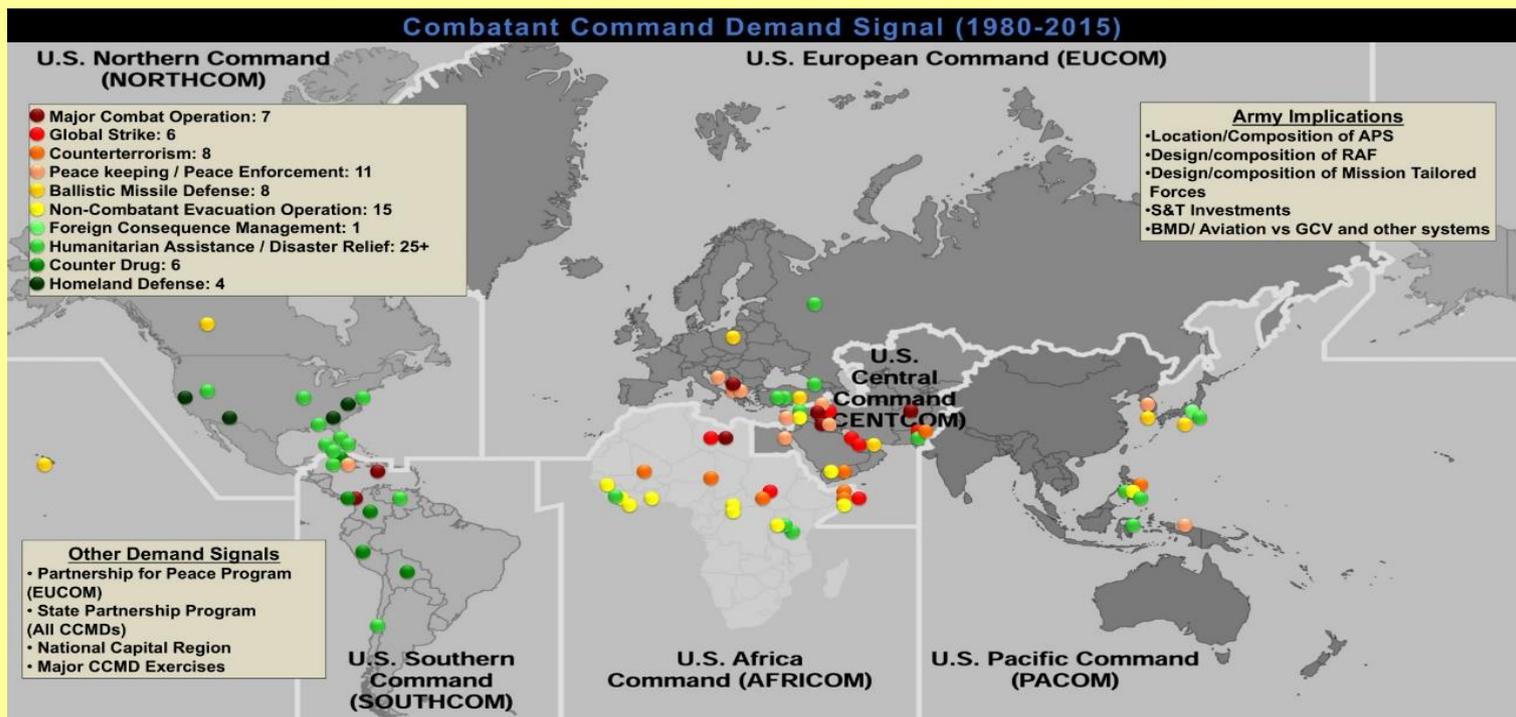
mutilated, and so on; all true. But things change over time. We were not always who we are today and Muslims were not always who they are today. Do keep this in perspective.

This observation offers grounds for hope that the Muslim situation can get better. In my career, starting in 1969, it's been almost nothing but getting worse but that has the positive implication that things could get better. It also implies we Westerners should not be too proud of ourselves and assume that nothing can go wrong for us, because we too can make monumental mistakes, too. Note the rise of the Golden Dawn movement, an atrocity, in Greece, the home of Western civilization. Please, let's not be too proud of ourselves and not too condemnatory of Muslims.

Where America Fights Next Is VERY Predictable

By Daniel Sukman

Source: <http://nationalinterest.org/blog/where-america-fights-next-very-predictable-14716?page=show>



Dec 23 – Recently, Aaron Bazin published [seven charts that explain the American way of war](#). Expanding on his work, I offer the single graphic that displays the United States military's activities over the past thirty-five years, a chart that suggests some insights for how the United States might re-organize its forces and capabilities. Importantly, this analysis moves beyond major combat operations such as those in Iraq and Afghanistan, and includes others in the range of military operations, including actions as diverse as non-combatant evacuation missions in Africa and firefighting relief in the homeland.



Since 1980, the United States has fought in seven major combat operations: Desert Storm, Iraqi Freedom/Inherent Resolve, Enduring Freedom, Odyssey Dawn/Unified Protector, Allied Force, Urgent Fury and Just Cause. Further, major peacekeeping operations occurred in Kosovo and Bosnia, requiring significant forces to conduct said missions. Beyond these combat and peacekeeping missions, the overwhelming majority of U.S. military operations since 1980 have been humanitarian assistance or disaster relief operations, to include those conducted in the homeland. In addition to humanitarian assistance missions, the United States executed multiple non-combatant evacuation missions as well as punitive and global strike missions.

Other continuing efforts include theater security cooperation missions conducted by the combatant commands. Further, the U.S. military conducts continuous strategic deterrence missions with its nuclear capabilities. And intelligence, surveillance and reconnaissance (ISR) missions in support of these operations and other persistent requirements are a constant requirement for national and military leadership. These mission sets, although paramount to U.S. and global security, are outside the realm of contingency operations. It is on these contingency operations, and how the U.S. military can best posture itself to meet the associated demand, which this analysis is focused.

Missions and Regions

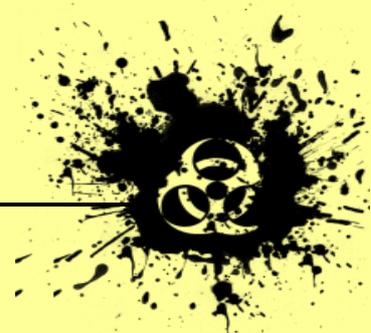
If recent history is a guide to the future, the next major combat operation will likely occur in either the Middle East or the Balkans. Indeed, the current crisis in Syria and Iraq lend a degree of confirmation to this prediction. However, the United States military, as it looks to establish its capabilities for the mid- to long-term future should seek to find a balance between the most dangerous and the most likely missions. This requires balancing risk associated with major combat missions and humanitarian assistance. There is, of course, risk in using this model, since a major change in the focus of U.S. foreign policy would invalidate its assumptions. Prior to the outset of World War I, for example, an analysis of the previous fifty years of U.S. military experience would have focused efforts on operations within North America, and occasionally in the Pacific, missing entirely the European focus that would emerge. With this caution in mind, however, we can perhaps learn something by treating the past as prologue.

CENTCOM: The Middle East remains the most likely location for major military operations. Since 1980, operations in the CENTCOM area of operations (AOR) include the Tanker Wars, Lebanon peacekeeping, Desert Storm and Iraqi Freedom (with associated persistent obligations such as Northern and Southern Watch), Enduring Freedom and the Multinational Force Observer mission in the Sinai. Today's ongoing missions also include support to nations who seek protection from

adversaries such as Iran. There is no shortage of demand for missile defense capacity in this environment, and investment in and forward presence of missile defense capabilities at the expense of ground combat vehicles can serve to both assure allies and dissuade adversaries. Other missions in the CENTCOM AOR include global strike or punitive strike operations. These missions range from El Dorado Canyon to the continuing drone strikes in Pakistan and Yemen since 9/11. Further, counter-terrorism missions remain a paramount concern throughout the Middle East.

AFRICOM: Non-combatant evacuation (NEO) remains a serious concern in areas of the globe where governments are historically weak. Over time, NEO operations have frequently occurred in the unstable West Coast of Africa. In the design of regionally aligned forces, the Army should consider what specific capabilities each region traditionally requires. Forces aligned to AFRICOM should be focused on the execution of a NEO, in lieu of major combat operations on the continent. This does not lend itself to forces optimized for building partnership capacity, but could include forces required to occupy ports and airfields to move citizens off the continent.

PACOM: The necessity for strategic lift in the PACOM area of responsibility is paramount. As in the AFRICOM AOR, the demands of NEO often require aircraft to travel great distances over the Pacific Ocean.



Further, the ability to deliver humanitarian assistance to nations in the Pacific such as the Philippines and Indonesia require aircraft that can deliver supplies and equipment over long distances into remote areas. Moreover, from an interagency perspective, aligning USAID stockpiles with the modes of transport in these regions could enhance the immediate effectiveness of HADR operations.

The absence of major combat for the past thirty years, however, does not negate the conventional threats presented by North Korea and China, for example, and the potential for major combat operations in this AOR. The Asia Pacific region will likely require a continued commitment of U.S. forces. This commitment is evident in the stationing of forces on the Korean Peninsula and in Japan. Further, to ensure global reach, the U.S. military positions forces on its island territory of Guam. Finally, to support the pivot to the Pacific policy, increased levels of partnership and forward forces in Australia and the Philippines will likely increase.

NORTHCOM: The most likely missions in the NORTHCOM AOR include defense support to civil authorities (DSCA) and humanitarian assistance operations. Often, the National Guard retains the responsibility for actions in the homeland, including wildfire response and disaster relief following events like Hurricanes Andrew, Sandy and Katrina. In addition to DSCA, homeland defense is central to NORTHCOM's purpose. Missile defense is also paramount to homeland defense. Indeed, when considering the employment of missile defense systems such as the Patriot, Terminal High Altitude Area Defense (THAAD) and their respective ISR and communications enablers, NORTHCOM competes for the same assets as PACOM, EUCOM and CENTCOM but with an imperative to protect the homeland. Based on the high demand for missile defense, the U.S. military should consider increased investment in missile defense, perhaps even at the expense of the conventional force.

EUCOM: The European theater of operations is an unusual case study. Throughout the Cold War, forces in Europe served as a conventional deterrent to the Soviet Union. Since 1989, and

the fall of the Berlin Wall, the number of missions has expanded, albeit without the necessity of multiple tank divisions. Indeed, over the past thirty-five years, major combat operations and peacekeeping operations took place in the Balkans with a heavy emphasis on both air power and ground forces. The U.S. military also continues to provide both the backbone and muscle of NATO, having contributed air power over Kosovo and major logistical support to NATO allies. This includes air-to-air refueling and strategic lift to the French to support their operations in Mali. Other operations in Europe included multiple humanitarian assistance operations to relieve earthquake victims in Turkey in addition to assistance for Russia and Israel in combating wildfires. Moreover, in lieu of confronting Russian forces following the invasion of Georgia in 2008, EUCOM provided humanitarian assistance to rebuild parts of that nation's infrastructure. The inter-theater lift aspects of the European theater bring to light the aspect of Europe as a bridge to the Middle East. The United States should continue to invest in en-route infrastructure within Europe to ensure forces destined for major combat operations can make it to the fight. Further, any analysis of forces destined for permanent stationing in Europe should consider how they would contribute to major combat operations in other AORs. This holds true for all elements of the joint force, from Army brigades to Air Force air-to-air refueling aircraft.

SOUTHCOM: Multiple missions continue to occur throughout Latin America. The past 35 years has seen major combat operations occur in Grenada and Panama, counter-drug operations throughout South America, and Humanitarian Assistance Operations in Haiti and elsewhere in South America. Other missions include assistance to Cuban refugees as well as detainee operations at Guantanamo Bay.

So What?

Commanders in the joint force prepare for two scenarios: the most likely and most dangerous. Combatant Commanders in the SOUTHCOM and PACOM areas



of responsibility should each count on executing at least one major humanitarian relief mission during their respective tenures. Further, any AFRICOM commander should be ready for a NEO mission in support of the Department of State. And the services should be prepared to provide the capabilities necessary to support these most-likely scenarios to the various combatant commands. This is one lens that allows the services to focus their capabilities in a resource-constrained environment.

Analyzing the composition and location of Army (and other) pre-positioned stocks is a good place to begin. In both the Pacific and Caribbean regions, the past would suggest these should focus on humanitarian assistance capabilities, and these capabilities should tie directly into USAID's pre-positioned humanitarian stocks. Examples include intra-theater lift capabilities, engineering, medical, and logistical support capabilities. On the other hand, pre-positioned stocks in the Middle East should naturally focus on major combat operations, and in the Pacific and Asian regions, major combat operations continue to be a concern due to the ever-persistent threat of North Korea.

Consistent humanitarian assistance and disaster relief in the homeland reiterates the need for greater lift and logistical capacity in the National Guard. The ability for state governors to react to a crisis with adequate means is paramount to the well-being of their citizens. Missions such as firefighting support in the Western forest fires, flood relief along the Mississippi, and hurricane relief along the East and Southeast coasts demand attention from the U.S. military on an annual basis. Although recent attempts to move Apache helicopters from the Guard to the active force have met with resistance, the wisdom behind this proposal is on solid historical ground.

Critical to the capacity of the U.S. military to sustain operations in Iraq and Afghanistan over the past two decades are the contributions of the National Guard. Contributions of the Guard and Reserve forces range from sustainment and military police to infantry and Special Forces. However, throughout the global war on terror, and continuing into 2016, the

preponderance of missions for the National Guard occur in the homeland.

As the manning and funding of the force decreases, how the military invests in future capabilities becomes a critical question. The demand history of capabilities shows a trend toward humanitarian assistance and ballistic missile defense. Further, trends in current policy favor air and naval power to deter and contain geopolitical threats. The United States has largely relied on air power to strike enemies such as ISIS, relying on partner nations to provide supporting or supported the ground forces. Recent events in Paris and Lebanon might call into question the effectiveness of this strategy. The use of air power over Syria fails to defeat terrorist cells in European cities. Further, air power alone may not defeat ISIS ground forces in Syria and Iraq. However, an armored invasion in Syria with U.S. ground forces is about as likely (and intelligent) as a ground invasion of Russia.

The risks in focusing investments in HADR and BMD capabilities include the possibility of the need for ground forces for a major combat operation. Had the United States military focused its capacity on counterinsurgency in 2003, or other missions outside of major combat operations, a resulting failure to reach Baghdad, or worse a defeat by an opposing Army would have been catastrophic for the nation.

Interestingly, this review of operations since 1980 confirms the Non-Integrating Gap theory proposed by Thomas Barnett in his seminal book, [The Pentagon's New Map](#). According to Barnett, areas of lesser development—Latin America, the Middle East and areas of the Pacific—constitute this gap. Moreover, use of the military element of national power tends to occur in these areas. Nations outside of the gap tend to resolve conflict without outside intervention.

To address global requirements, Barnett introduced the concept of the Leviathan and Sysadmin force. In Barnett's paradigm, the focus of the Leviathan force is major combat operations. The focus of the Sysadmin force is other missions ranging from humanitarian assistance to "Phase 4" nation building activities.



The creation of the Sysadmin and Leviathan force as envisioned by Barnett may not be achievable in an era of fiscal constraints. However, the joint force should prioritize the

ten missions outlined in the 2014 Quadrennial Defense Review per geographic area of responsibility. Using the past as a prologue indicates the feasibility of this approach.

Daniel Sukman is a strategist in the U.S. Army and a member of the Military Writers Guild. The views expressed in this article are those of the author and do not reflect the official policy or position of the U.S. Army, the DoD or the U.S. Government.

EDITOR'S COMMENT: Just a short question: How comes a US strategist to have different viewing of geopolitics and geostrategics than those of the organization he is working in?

Turkey's Dangerous Ambitions

By Burak Bekdil

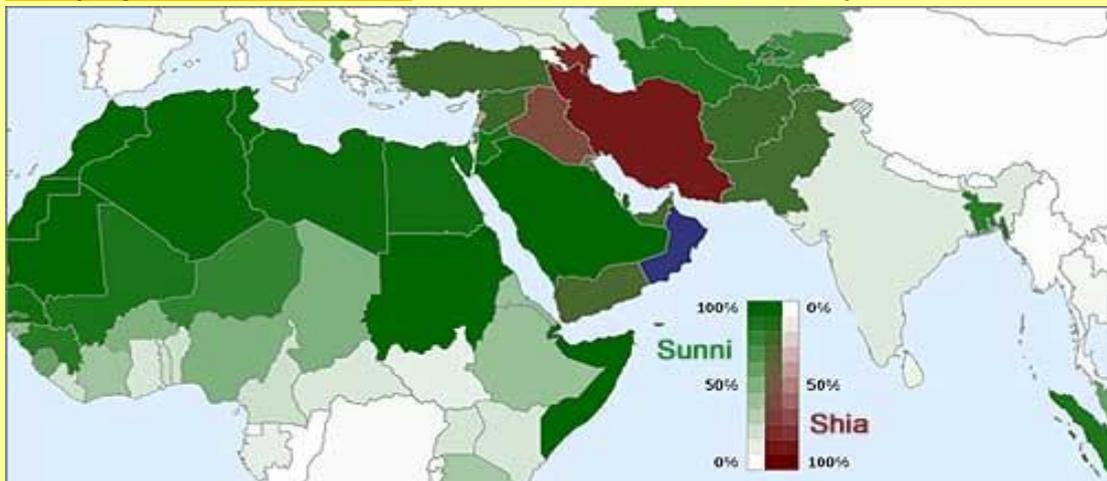
Source: <http://www.meforum.org/5732/turkey-dangerous-ambitions>

Dec 24 – It is the same old Middle East story: **The Shiites accuse Sunnis of passionately following sectarian policies; Sunnis accuse the Shiites of passionately following sectarian policies; and they are both right. Except that Turkey's pro-Sunni sectarian policies are taking an increasingly perilous turn as they push Turkey into new confrontations, adding newcomers to an already big list of hostile countries.**

president of one sectarian country (Sunni Turkey) is accusing other countries (Shiite Iran and Shiite-dominated Iraq) of being sectarian.

Erdogan went on: "What about the Sunnis? There are Sunni Arabs, Sunni Turkmen and Sunni Kurds [in Iraq and Syria]. What will happen to their security? They want to feel safe."

Never realizing that its ambitions to spread Sunni Islam over large swaths of the Middle



Take President Recep Tayyip Erdogan's recent remarks on the centuries-old Shiite-Sunni conflict: they amusingly looked more like a confession than an accusation: "Today we are faced with an absolute sectarianism. Who is doing it? Who are they? Iran and Iraq," Erdogan said. This is the same Erdogan who once said, "The mosques are our barracks, the domes our helmets, the minarets our bayonets and the faithful our soldiers...." Is that *not* sectarian? So, with a straight face, the

East, especially Syria and Iraq, were bigger than its ability to do so, Turkey now finds itself confronting a formidable bloc of pro-Shiite countries: Russia, Iran, Syria, and Iraq, plus the much smaller Lebanon.

Even before the crisis with Russia that began on November 24 -- over Turkey's shooting down a Russian SU-24 along the Turkish-Syrian border -- has shown any sign of de-escalation, another Turkish move



had sparked a major dispute with neighboring Iraq.

Just when Turkey moved to reinforce its hundreds of troops at a military camp in Iraq, the Baghdad government gave an ultimatum to Ankara for the removal of all Turkish soldiers stationed in Iraq since last year. Turkey responded by halting its reinforcements. Not enough, the Iraqis apparently think. Iraq's prime minister, Haider al-Abadi, said on December 7 that his country might turn to the UN Security Council if Turkish troops in northern Iraq were not withdrawn within 48 hours. Hadi al-Ameri, the head of the militant Shiite Badr Organization, threatened that his group would fight Turkish forces if Ankara continued its troop deployment.

Badr Brigade spokesman Karim al-Nuri put the Turkish ambitions in quite a realistic way: "We have the right to respond and we do not exclude any type of response until the Turks have learned their lesson ... Do they have a dream of restoring Ottoman greatness? This is a great delusion and they will pay dearly for Turkish arrogance."

Inevitably, Russia came into the picture. Russia's UN ambassador, Vitaly Churkin, said he told the Security Council that Turkey was acting "recklessly and inexplicably" by sending troops across the border into Iraq without the consent of the Iraqi government. According to Russia, the Turkish move "lacks legality."

All that fell on deaf ears in Ankara, as Erdogan repeated on Dec. 11 that Turkey would not pull out its troops from Iraq. In response, Iraq appealed to the UN Security Council to demand an immediate and unconditional withdrawal of all Turkish troops from northern Iraq, calling Turkey's military incursion a "flagrant violation" of international law.

The next day, Shiite militia members gathered in Baghdad's Tahrir Square to protest against Turkey. Crowds of young men in military fatigues, as well as some Shiite politicians, chanted against Turkish "occupation," vowing they would fight the Turkish troops themselves

if they do not withdraw. Angry protesters also burned Turkish flags.

Through its efforts to oust Syria's non-Sunni president, Bashar al-Assad, and build a Muslim Brotherhood-type of Sunni Islamist regime in Damascus, Turkey has become everyone's foe over its eastern and southern borders -- in addition to having to wait anxiously for the next Russian move to hit it -- not knowing where the blow will come from.

The confrontation with Russia has given Moscow an excuse to augment its military deployment in Syria and the eastern Mediterranean and weaken allied air strikes against Islamic State (IS).

Russia has increased its military assets in the region, including deploying S-400 air and anti-missile defense systems, probably ready to shoot down the first Turkish fighter jet flying over Syrian skies.

Waiting for Turkish-Russian tensions to ease, and trying to avoid a clash between NATO member Turkey and Russia, U.S. officials have quietly put on hold a request for Turkey to more actively to join the allied air missions in Syria against IS. After having lost its access to Syrian soil, Turkey also has been declared militarily *non grata* in Iraq.

As Professor Norman Stone, a prominent expert on Turkish politics, explained in a recent article:

Erdogan's adventurism has been quite successful so far, but it amounts to an extraordinary departure for Turkish foreign policy, and maybe even risks the destruction of the country. How on earth could this happen? The background is an inferiority complex, and megalomania. For centuries, and even since the Mongols, sensible Islam has asked: 'What went wrong? Why has God forsaken us, and allowed others to reach the moon?'

With the inferiority complex and megalomania still gripping the country's Islamist polity, Erdogan's Islam is not sensible; it is perilous. Russian conflict is weakening the fight.

Burak Bekdil is an Ankara-based columnist for the Turkish newspaper Hürriyet Daily News and a fellow at the Middle East Forum.



UNHCR: Over 1 million refugees arrived in Europe by sea

Source: <http://www.oneindia.com/international/over-1-million-arrivals-europe-sea-unhcr-1969690.html>



Dec 30 – **Over a million refugees and migrants have reached Europe by dangerously crossing the Mediterranean Sea in 2015, nearly half of them from Syria**, the UN Refugee Agency said today.

"We crossed the threshold overnight of a million arrivals in Europe by sea in 2015," said Adrian Edwards, spokesperson of the UN Refugee Agency (UNHCR).

"The vast majority of those attempting this dangerous crossing are in need of international protection," the UN agency said.

There were 1,000,573 arrivals by perilous sea in 2015 with 84% of the arrivals coming from ten countries only. The one-million milestone also marks an almost five-fold increase over the number of migrants who came to Europe in 2014, when the UN recorded 216,000 arrivals.

2015 also registered a whopping 3,735 missing persons and deaths of people trying to cross into Europe on unseaworthy boats and dinghies in a desperate bid to escape the prolonged violent conflicts and economic crises at home.

The top ten nations which account for 90 per cent of the sea arrivals in 2015 were: Syria (49%), Afghanistan (21%), Iraq (8%), Eritrea (4%), Pakistan, Nigeria and Somalia (2%), Sudan, Gambia and Mali (1%).

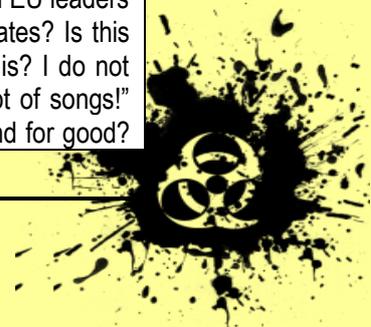
Of the total sea arrivals in 2015, 58% were men, 25% were children and 17% were women. The monthly Mediterranean sea arrivals gradually picked up from January onwards and reached a peak in October 2015 which saw more than 2,00,000 arrivals to gradually taper down with the onset of the winter season.

Greece had 844,176 arrivals by sea and Italy had 152,700 arrivals by sea in 2015. However, while Syrians, Afghans and Iraqis were the top three nationalities arriving in Greece, Eritreans, Nigerians and Somalis crossed the Ionian Sea to reach Italy this year.

The present migrant crisis is considered to be the Europe's worst since World War II.

The number of sea arrivals has increased significantly from 2014 - the year recorded about 216,000 arrivals by sea. On December 22, the International Organization for Migration (IOM) and UNHCR had jointly announced the arrival of million plus migrants and refugees into Europe both by land and sea.

EDITOR'S COMMENT: Although numbers speak the truth, there are people behind numbers! It would be easy for Greece to apply force and stop this human tsunami but is this the solution EU leaders is looking for when accusing Greece for not doing what is needed to secure European gates? Is this what European big mouths would have done if their country was in the situation Greece is? I do not think so! In Greece we have a saying: "Those who are away from dancing they sing a lot of songs!" Instead why all the big powers do not collaborate to solve the ISIS-Syria problem once and for good?



2015 left leaving the shadow of terrorism all over Europe; massive population movement is becoming problematic in the host countries; European citizens start reacting in a negative way; funds provided is not a solution and bloodshed is continuing in the hot zones. Perhaps we need two millions to wake up? Most possible, if current “do nothing” situation continues and Kurds’ refugees are about to add themselves in the human tsunami as well.

Will Dubai's Good Times Last?

By Daniel Pipes

Source: <http://www.meforum.org/5750/dubai-good-times>

Dec 31 – **At a time of civil war, anarchy, extremism, and impoverishment in the Middle East, the city-states of Dubai and Abu Dhabi stand out as the places where Arabic speakers are flourishing, innovating, and offering a model for moving forward.**

But can it last? I recently visited the United Arab Emirates to seek answers.

To begin with, some basic facts: Once called the Trucial States by British imperialists, the UAE consists of seven small monarchies bordering the Persian Gulf. They banded together in 1971, as the British retreated, to form a single federation.



Once you can find it, this Abu Dhabi liquor store, High Spirits, is well stocked.

The country has been doubly blessed: oil and gas abundance along with a smart and commercially-minded group of leaders. The former gives the country immense resources, the latter keeps it out of harm's way, free of ideological extremism, with a focus on the economy. The result looks and feels like a

basically happy place, especially as the lot of immigrant laborers is improving.

To me, **perhaps the UAE's most noteworthy feature is the entrepôt quality of Dubai, which resembles a Middle Eastern version of Hong Kong.** I was also impressed by the innovative religious spirit (where else does one find prayer rooms separated by gender?) and the cultural playfulness (building condos that resemble Yemeni-style high-rises, wearing traditional clothing one day and Western style the next).

But count the ways the country stands vulnerable:

Demographics: Due to phenomenal growth in immigration, the UAE population has doubled to nearly 10 million in about nine years, making it much larger than neighboring states such as Oman and Kuwait. **Only about one of nine residents are nationals;** the other eight are expatriates, with 55% coming from South Asia.

While currently quiescent, one can imagine their discontent and rebelliousness should the good times end.

Economy: Thanks to fracking, the Chinese economic slow-down, and other factors, UAE oil revenue has gone down from US\$75 billion to \$48 billion since 2010. Even in a country with about a trillion U.S. dollars of reserves, this trend causes pain, especially if it continues for many years.



Gulf Oil Revenues, 2010-2015 (\$ billions)

	2010	2011	2012	2013	2014	2015
Saudi Arabia	215	318	338	322	285	184
Kuwait	62	97	113	109	98	84
Qatar	43	63	65	63	57	36
UAE	75	112	120	123	107	48
Total	395	590	636	617	547	352

Sources: Saudi Arabia: IMF. Other countries: 2010-2014 OPEC and 2015 extrapolation based on EIA

Environmental: Dubai has the amazing statistic of desalinating 98.8% of its water even as the UAE has the highest per-capita consumption of water in the world. Obviously, this makes the country extraordinarily susceptible to hydrological crisis.

Regional: Nestled about 400 miles from Iraq, 100 miles from Iran, and sharing a border with Saudi Arabia, UAE could be invaded, occupied, and annexed as readily as Kuwait was by Saddam Hussein's Iraq 25 years ago. Not to be forgotten: on the eve of independence in 1971, the shah of Iran seized three UAE islands.

Sunni Islamism: Although the authorities have firmly kept domestic extremists under control, they remain in place, biding their time, waiting for an opportunity to lash out.

Intensely aware of these dangers, the rulers have adopted two intelligent strategies. One links the country to the outside world via sports events (I was in town during a Formula 1 car race), cultural connections (I attended a talk at New York University's Abu Dhabi campus), tourism and international organizations (the International Renewable Energy Agency, or IRENA, recently opened its doors in Abu Dhabi). In combination, these activities send a signal that the UAE is not just a spoiled, self-indulgent artifice but a place with aspirations to

contribute as well as consume, that it deserves support.

The **second** is to master the fine art of compromise. In foreign policy, this means not adopting the Saudis' total anti-Iran focus or the Egyptians' total anti-Muslim Brotherhood focus, but balancing the two. It also means accepting an Israeli mission to IRENA (International Renewable Energy Agency) but insisting on it not having a larger significance.

In domestic policy, compromise means allowing liquor stores to function but hiding them away under false names and requiring a permit from the police to purchase booze. It also means signs in hotels that permit bikinis but prohibit public displays of affection.

At a time of civil wars in Libya, Yemen, Syria, and Iraq, of Islamist rule in Turkey and Iran, and of looming catastrophe in Egypt, Jordan, and Pakistan, **the small, privileged emirates offer a way forward based on globalization and compromise. Will others pay them heed? Will they survive the many dangers ahead?**

I hope so, for the UAE offers a path ahead to a region badly needing just that.



Daniel Pipes is president of the Middle East Forum.

The Danger of Partial No-go Zones to Europe

By Daniel Pipes

Source: <http://www.meforum.org/5742/danger-of-partial-no-go-zones>

Dec 29 – Partial no-go zones in majority-Muslim areas are a part of the urban landscape from the Mediterranean to the Baltic, with the French government alone counting [751](#) of



them. This shirking of responsibility foreshadows catastrophe and calls for immediate reversal. I call the bad parts of Europe's cities *partial no-go zones* because ordinary people in ordinary clothing at ordinary times can enter and leave them without trouble. **But they are no-go zones in the sense that representatives of the state – police especially but also firefighters, meter-readers, ambulance attendants, and social workers – can only enter with massed power for temporary periods of time.** If they disobey this basic rule (as I learned first-hand in Marseille), they are likely to be swarmed, insulted, threatened, and even attacked.

This situation needs not exist. Host societies can say no to the poor, crime-ridden, violent,



and rebellious areas emerging in their midst. **But, if governments need not abdicate control, why do they do so?** Because of a fervent, slightly desperate hope to avoid confrontation. Multicultural policies offer the illusion of sidestepping anything that might be construed as "racist" or "Islamophobic."

This abandonment is no minor aberration but a decision with grave consequences – consequences far deeper than, say, not controlling a crime-ridden American city like East St. Louis. That's because Muslim quasi-no-go zones fit into a far larger political context, with dual Western and Islamic dimensions.

Western: Avoiding confrontation reflects a deep-seated ambivalence about the value of one's own civilization and even self-hatred of the white race. The French intellectual Pascal Bruckner noted in his 2006 book *La tyrannie de la pénitence* (English: *The Tyranny of Guilt: An Essay on Western Masochism*) that leftist thinking "can be reduced to mechanical denunciations of the West, emphasizing the latter's hypocrisy, violence, and abomination." Europeans preen as "the sick man of the planet" whose greed and false notions of superiority causes every problem in the non-Western world: "The white man has sown grief and ruin wherever he has gone."

If the deadly triad of imperialism, fascism, and racism represent all that the West has to offer,

no wonder immigrants to Europe, including Islamists, are treated as superior beings due supine deference. They exploit this by acting badly – drug dealers ruling the roost, a gang raping 1,400 children over a period of 16 years, and promoting violent ideologies – with near-impunity because, after all, the Europeans have only themselves to blame.



A sign prohibiting non-Muslims from entering Mecca

Muslim: Partial no-go zones also result from an Islamic drive for exclusion and domination. Mecca and Medina constitute the official, sovereign, and eternal Muslim-only zones. For nearly fourteen centuries, these two Arabian cities have been formally off-limits to *kafirs*, who trespass at their peril; a lively literature of non-Muslims who penetrated their holy precincts and lived to tell the tale goes back centuries and continues still today.

Other Islamic no-go zones also exist. Before losing power in 1887, the Muslim rulers of Harar, Somalia, for centuries insisted (in the words of a British officer) on the "the exclusion of all travellers not of the Moslem faith." In like spirit, women in hijabs scream at non-Muslim visitors to the Temple Mount in Jerusalem to make them feel unwelcome and so stay away. In the West, lawful Muslim-



only enclaves represent one drive for Muslim autonomy and sovereignty; the Muslims of America organization, with its 15 or so no-go compounds bristling with arms and hostility on private property dotted around the United States, represents another.

Unlike places like East St. Louis, Muslim-majority partial no-go zones have a deeply political and highly ambitious quality to them. Indeed, it is not far-fetched to foresee them turning into Muslim autonomous zones applying Islamic law and challenging the authorities. The mix of feeble European governments and a strong Islamic drive for

power points to future unrest, crises, breakdown, and even civil war.

Some believe it is already too late to avoid this fate. I disagree, but if catastrophe is to be avoided, the job to dismantle all partial no-go zones must be started soon and executed with a swift determination based on a renewed sense of self-worth. **Two universal principles should guide European governments: attaining a monopoly of force and applying the same code of law to all citizens.**

Domestic peace in Europe and perhaps other regions, including Australia, New Zealand, Canada, and the United States, demands nothing less.

Daniel Pipes is president of the Middle East Forum.

Why Western Civilization Has Lost Its Self-Confidence

Source: <http://www.breitbart.com/big-government/2015/12/31/western-civilization-lost-self-confidence/>



Jan 02 – **When did we give up? And can we reenergize Western society?**

As we approach 2016, the West is experiencing a civilizational loss of self-confidence, arising from a narcissistic fatalism and cataclysmic failure of institutional leadership.

At every turn, it seems, the weak and uncertain leadership of the West is submitting to the strength and evil certainty of radical Islam, of which Winston Churchill [warned](#) more than a century ago “no stronger retrograde force exists in the world.”

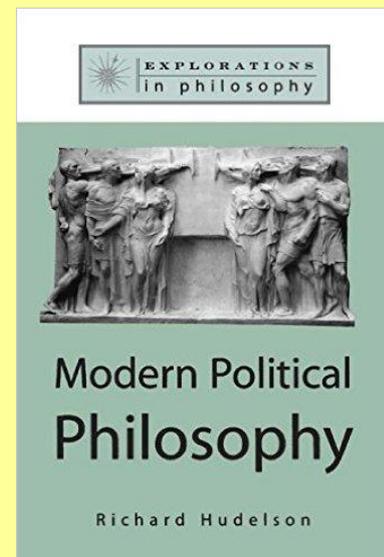
We began giving up our self-confidence a century ago when the Western governments who fought on both sides of World War I abandoned classical liberalism and its associated political philosophy of constitutional liberty and replaced it with autocratic top-down, state controlled central planning.

Modern liberalism, as practiced by the Democratic Party in the United States in 2015 and 2016 and its state-centric counterparts in Europe, bears little resemblance to classical liberalism.

“The ideology of classical liberalism is closer to what today is a current of conservatism in the United States,” Richard Huddleson [wrote](#) in his 1999 book, *Modern Political Philosophy*.

Central to the classical liberalism of the nineteenth century is a commitment to the liberty of individual citizens. Freedom of religion, freedom of speech, freedom of the press, and freedom of assembly were core commitments of classic liberalism, as was the underlying conception of just government as the protection of the liberties of individual citizens. Also central to classical liberalism was a commitment to a system of free markets as the best way to organize economic life.

There is little wonder that progressivism reached its early zenith under the direction of Democratic President Woodrow Wilson, the same commander-in-chief who supervised the collective resource management imposed upon the American people throughout World War I.



The constitutionally destructive consequence of World War I was noted by Leonard Liggio, who [wrote](#) recently at the Acton Institute:

Classical liberalism was the dominant philosophy in the United States and England, really, until about the First World War. The war, unfortunately, was a disaster for liberalism, because it disrupted constitutional order. All the countries at war used extreme measures of repression. Even England and America created police states on the model of Germany or their Czarist allies and trampled liberty underfoot. At the same time, they trampled economic liberty by allocating resources through central planning, again modeled on the German desperation as they were cut off by the wartime blockade. In fact, Lenin viewed the German wartime operations of centralization as the model for his Bolshevik regime. It gave him what he felt were practical models for creating centralized direction of the economy once the Bolshevik revolution occurred.

So the First World War was this great watershed, a great tragedy for all who were killed or wounded on the battlefield, for the many who died or were disabled by the epidemics that followed, and for the economic waste that prevented investment in the postwar period and led to the great depression and to movements toward greater government control. So, everywhere, liberalism was put on the defensive by this catastrophe.

The bulwark of classical liberalism is constitutional liberty, which is [defined](#) as “such freedom as is enjoyed by the citizens of a country or state under the protection of its constitution; the aggregate of those personal, civil, and political rights of the individual which are guaranteed by the constitution and secured against invasion by the government or any of its agencies.”

“I hold that governments are meant to be, and must remain, the servants of the citizens; that states and federations only come into existence and can only be justified by preserving the ‘life, liberty and the pursuit of happiness’ in the homes and families of individuals. The true right and power rest in the individual. He gives of his right and power to the State, expecting and requiring thereby in return to receive certain advantages and guarantees,” Winston Churchill [wrote](#) in his classic 1936 essay, “*What Good’s a Constitution?*”, a definitive description of constitutional liberty.

“The 19th century was the century of classical liberalism. Partly for that reason it was also the century of ever-increasing economic and political liberty, relative international peace, relative price stability and unprecedented economic growth,” John Goodman, founder of the National Center for Policy Analysis and its president for 31 years, now head of the Goodman Institute, wrote recently.

“By contrast, the 20th century was the century that rejected classical liberalism. Partly for that reason, it was the century of dictatorship, depression and war. Nearly 265 million people were killed by their own governments (in addition to all the deaths from wars!) in the 20th century – more than in any previous century and possibly more than in all previous centuries combined,” Goodman noted.

The 21st century, unfortunately, has seen an accelerating decline in Western self-confidence, one seen in the cringe inducing weakness of its political leaders. They respond to the challenge of radical Islam with the same type of appeasement shown by British Prime Minister Neville Chamberlain to Hitler in the 1930s, rather than the strength and moral certitude of his successor, Churchill, who ultimately helped lead the West to victory in World War II.

History shows that strength attracts followers. The latest example that confirms this maxim is the [recent report](#) that the Islamic terrorists at ISIS are actively planning to increase their attacks on innocent civilians in the West, in an attempt to provoke one final, huge decisive battle.

“Where is our modern Churchill to exercise the strength of the West to resist this terroristic swagger?” every day citizens in the United States and Europe wonder aloud.

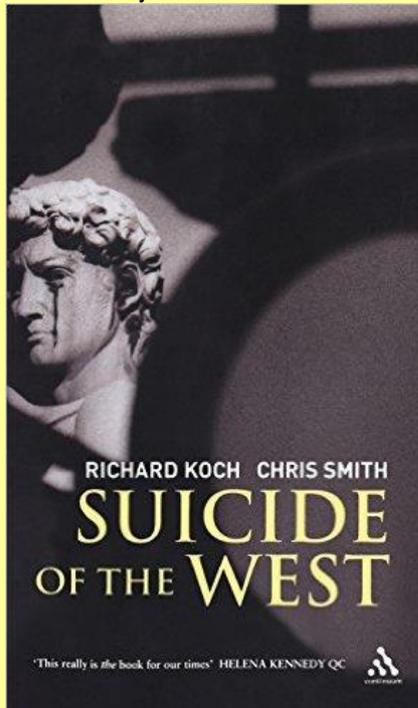
More importantly, “Why have our political institutions produced such weak and feckless leaders?”

A recent Rasmussen Reports Poll [indicates](#) that dissatisfaction with President Obama’s leadership-or lack thereof- is at record levels and is on the rise. Dissatisfaction with European leaders is also high.

Several conservative authors in America, among them Mark Steyn, have observed this decline in the West, but none have offered a specific solution to reverse this trend.



A hint at the direction in which the resurrection of the West may be found comes, surprisingly, from two British authors, one of whom is a former cabinet minister in the government of British Labour Prime Minister Tony Blair.



Almost a decade ago British entrepreneur Richard Koch (no relation to the American Koch Brothers) and former United Kingdom cabinet member Chris Smith wrote a prescient book called ***Suicide of the West***. In it they [argued](#):

One hundred years ago, most Westerners felt tremendous pride and confidence in their civilization. They knew what it stood for, and they believed in it. Today that sense has gone.

That is largely because the six principal ideas which underpinned Western confidence – those of Christianity, optimism, science, economic growth, [classical] liberalism and individualism – have suffered a century of sustained attack. These ideas no longer inspire or unite the West as they once did.

In an exclusive email interview with Breitbart News, Koch, who is also a Huffington Post contributor, offers a surprisingly upbeat view of the future of Western Civilization as we close out 2015.

Restoring the self-confidence of the West, Koch says, is something that must originate with the individual, not the group.

“This is not a battle of empires or wars, which are no longer effective at winning hearts and minds,” Koch tells Breitbart News. “It is a matter of inculcating calm self-confidence, individual and collective, and refusing to be drawn into all the sound and fury that can dismay and distract us,” Koch adds.

Radical Islam poses a threat to the West, Koch argues, but it has not yet reached the power of Nazism or communism in the 1930s. Koch tells Breitbart News:

I see radical Islam as a particularly nasty little virus, comparable to Nazism or communism in the 1920s (before they became really powerful). We can't be complacent but we have to be careful in how we respond. We have a civilization and they don't; we have the moral high ground. Their ideology is particularly repugnant and it will have very limited appeal in the West, if we maintain our values. There will always be a few people who want the excitement of an extreme cause and licence to kill, but terrorism is nothing new and it can be largely defeated, if not eliminated. But of course we have to deal with Isil – and cutting off their huge flow of money should be the top priority.

Koch argues a combination of individualism and “maintaining our values” will, in the long run, redeem the West.

While Koch excels at diagnosing the problems of the West, he understates the existential threat posed by radical Islam and offers an insufficient, passive prescription to remedy the West’s decline.

Koch views Western Civilization as something of a “self-correcting system.” But now, as its very existence is threatened by radical Islam, a more pro-active solution is demanded.

This is particularly true since, as Koch and Smith point out in *Suicide of the West*, the attacks on the principal ideas that brought the West to dominance come primarily from within—from individuals who have benefited financially from the very culture upon which their wealth was created. (Mark Zuckerberg at Facebook and other Silicon Valley technology oligarchs, as well as atheist progressive George Soros immediately come to mind as examples of this group.)

What is needed to reverse that decline is a very focused “back to basics” movement to restore belief in these six principal ideas – Christianity, optimism, science, economic growth, classical liberalism (in its political expression of constitutional liberty and its



economic expression of free markets) and individualism – and more importantly, the transfer of belief in these seven principal ideas to subsequent generations.

Therein lies the rub.

In a popular culture subsumed by triviality – where most know a great deal about current entertainment trends and how to use their smartphones – but little else, “back to basics” is easier said than done.

Here’s one look at what “back to basics” means for the six principal ideas that built the West.

“Back to basics” in classical liberalism and constitutional liberty means the [re-assertion](#) of state sovereignty and individual rights in the face of increasing constitutional usurpations by the executive branch, statutorily unauthorized regulations, and a spineless and ineffective federal legislative branch.

“Back to basics” in Christianity translates into encouraging the growth and flourishing of Christianity in the West by removing the State’s power to exercise control over the operation of Christian churches and organizations and the conduct of individual Christians who are acting within the law.

It does not mean government approved enforcement of Christian belief on other citizens.

It also means a complete separation of church and state when it comes to the delivery of government sanctioned “social justice” programs. “Public private partnerships” where church organizations are paid lucratively to carry out liberal government policies, such as the Unholy Alliance between Christian “non-profits” and the Department of Health and Human Services Office of Refugee Resettlement, must come to an end.

In addition, it means ending the government persecution of Christians in business matters large and small, the most egregious of which is the recent actions by the State of Oregon forcing Christian bakers to pay an estimated \$135,000 fine to a gay couple who demanded they bake a wedding cake for them, a demand they refused.

History shows that Christianity thrives when it is completely independent of government. When it becomes the “official” state religion, or “partners” with the state, it becomes corrupt, weak, and devoid of intellectual vigor.

Richard Koch and Leonard Liggio agree on the critical role played by Christianity in the rise of the West. “Of all the civilizations around the world, why did only the Christian West become both free and prosperous?” Leonard Liggio [asked](#) at the Acton Institute.

“Many scholars have studied this and have come to the conclusion that this is due to the fact that the religious institutions were totally separate from, and often in conflict with, political institutions only in the Christian West. This created the space in which free institutions could emerge. The idea of independent religious institutions is absent even in Eastern Christianity; their religious institutions are part of the bureaucracy of the state,” Liggio wrote.

“In Western Europe, though, the religious institutions were autonomous among themselves, and totally independent from and often in opposition to state power. The result was the creation of a polycentric system. And whenever this system was threatened by claims of total empire by the political rulers, Christian philosophy was utilized as part of its defense,” Liggio added.

“So within that space, the economic institutions—often modeled on the religious institutions as autonomous entities—could flourish and survive,” Liggio concluded.

Coincident to the decline of Christianity is a rise of triviality in the West.

“There is a frivolity and lack of moral seriousness afflicting the West, but this too is not unprecedented or wholly bad. The Nazis, the communists, and radical Islamists were or are terribly serious,” Koch says.

“Modern Western liberal society is probably the most humane and decent ever seen on the face of the earth. I would like to see more moral seriousness, but of the right kind. Establishing this is like walking through a minefield,” Koch adds.

“Back to basics” in optimism requires a return to the American “can-do” spirit and the western values of the enlightenment.

Simply put, the easiest way to return optimism to America and the West is to take a blow torch to the regulatory state and dismantle the vast majority of paralyzing regulations that afflict businesses and individuals.

Throughout our history, we Americans have been renowned for our ability for getting things done. But when government tells us how we can and cannot live, that optimism



turns to pessimism and fatalism, when every positive action is held back by paralyzing regulations. Coincident with the rise of big government has been the growing cult of “victimhood,” the antithesis of optimism.

Similarly, “back to basics” in economic growth requires the application of an even bigger blow torch to the regulatory state.

“The strange thing is that the underlying reality of the world and especially the West is better than ever. Most people in the world now live in some kind of market system that is working slowly but remorselessly to eliminate the bulk of poverty and deprivation” Koch notes.

“Things are getting better, but it doesn’t feel that way,” Koch adds.

A more limited government with dramatically diminished regulatory powers would unleash the entrepreneurial explosion, which in turn will turn the sluggish 2 percent economic growth experienced under the Obama administration into real economic growth that reinvigorates the diminishing middle class, that broad portion of the population that currently knows why “things getting better” don’t feel that way.

“Back to basics” in individualism requires an end to penalizing students and workers who actually exhibit individual thinking. Our schools, both at the elementary, high school, and collegiate level, need to return to the values of the enlightenment, where free and open inquiry are encouraged and allowed. They must cease acting as the propaganda enforcement arms of the social welfare state.

“Back to basics” in science is perhaps the trickiest of all, Science and technology are advancing at a breathtaking pace and such success does not immediately suggest a need for change.

As Richard Koch accurately notes, “the world’s top universities, science, and technology have never been more vibrant or productive. Business is more creative than ever, producing miracles from the internet to the iPod and smartphone.”

While this is true, it is also the case that what Churchill observed in 1899 about the role of science in Western society is no longer true.

“Were it not that Christianity is sheltered in the strong arms of science—the science against which it had vainly struggled—the civilization of modern Europe might fall [to radical Islam], as fell the civilization of ancient Rome,” Churchill [wrote](#) in his second book, *The River War*.

Capital, technological skill, and effective organizations will continue to combine in such a way as to drive the frontiers of applied science further and faster than we can currently imagine.

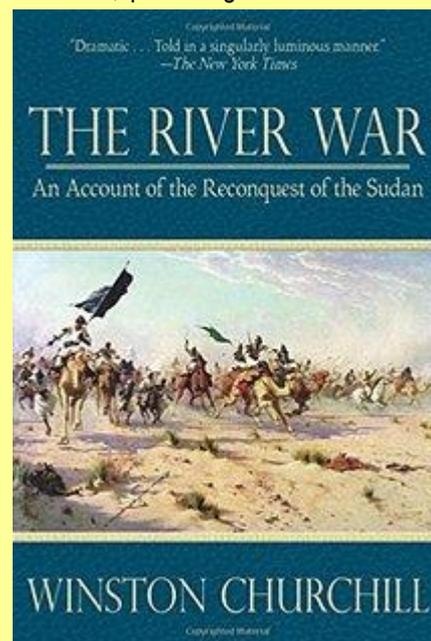
Yet many of those who control those forces currently have little loyalty to constitutional liberty, and are guided more by their personal desires to shape the world to their own peculiar political and social justice philosophies through the exercise of their own wealth and power.

It is unclear whether Western Civilization in 2016 and beyond will be “sheltered in the strong arms of science.”

A movement to go “back to basics” in these six principal ideas that brought the West to dominance, while ambitious, is completely consistent with the grassroots energy that brought the Tea Party movement to prominence in 2009.

It has the added advantage that it is not dependent upon a collectivist effort, but rather on millions of individual efforts.

If you want to know why the West is losing its self-confidence, look in the mirror. If you’re not working ceaselessly to return yourself, your family and your immediate sphere of influence back to the basics of these six principal ideas that brought the West to the top, you’re responsible, in your own small way, for its continued



decline. If leaders are weak and feckless, replace them. If institutions are failing, reform and reinvigorate them. Don't rail at the moon. Lasso it.

Local Public Health's Role in Large-Scale Chemical Incidents

By Rachel Schulman

Source:http://www.domesticpreparedness.com/Medical_Response/Public_Health/Local_Public_Health%60s_Role_in_Large-Scale_Chemical_Incidents/

Public health departments play, or have the ability to play, a key role in large-scale incidents caused by hazardous materials. By clearly defining their roles and collaborating with local partners, health departments have the ability to help emergency planners and responders prevent, mitigate, plan for, and respond to chemical hazards and incidents.

July 22 – Large-scale chemical incidents – such as the West, Texas, fertilizer plant explosion in 2013, the Graniteville, South Carolina, train crash chlorine release in 2005, and the Tokyo, Japan, sarin gas release in 1995 – pose unique threats to human health that warrant specialized planning by first responders. Chemical incidents often unfold quickly, and serious exposure symptoms develop equally fast. Although these circumstances necessitate quick action by first responders, the information that responders need to make decisions may not be readily available. Chemical agents may take time to identify and, in the case of a surreptitious release, it may not be immediately evident that a chemical event has occurred. Responders may find themselves in the position of making high-consequence decisions that are not fully informed.

Defining the Roles of Local Health Departments

In collaboration with the Department of Homeland Security Office of Health Affairs, the National Association of County and City Health Officials (NACCHO) sought to determine how local health departments (LHDs) could best contribute to a large-scale chemical event response. After a research review, NACCHO conducted a multidisciplinary focus group of 33 local, state, federal, and nonprofit agency representatives in the National Capital Region. Key research objectives were to understand the roles that LHDs currently play in response to a large-scale chemical incident, to pinpoint challenges that limit the LHD role in these responses, and to identify additional roles for LHDs that capitalize on their unique capabilities and resources.

The overwhelming message of the National Capital Region focus group was that the role of LHDs in a chemical response is not well defined. Though LHDs have responsibility for protecting human health in all hazards, the role of LHDs is often perceived to be limited to disease prevention and control. The perception of chemical incidents as hazardous material (hazmat) events, and not public health events, may result in LHDs being left out of the loop,

even after the incident transitions to a mass casualty or mass fatality event.

As long as hazmat responders are unaware of LHDs' chemical event response capabilities, LHDs likely will find that they continue to be left out of chemical event planning and response, to the detriment of communities and their response partners. To facilitate conversations on this important topic, NACCHO's research highlighted the many roles that LHDs can play in a chemical incident. Even though all localities operate differently, the roles described below should be considered when planning with public health partners.

Prevention & Mitigation of Chemical Incidents

LHDs offer unique perspectives on chemical threats to the community through their intimate knowledge of community vulnerabilities. LHDs regularly conduct surveillance activities – for example, community health assessments and geographic information system mapping of at-risk populations – that inform them of the locations and needs of different community groups. This knowledge can be used to inform decisions about local-level chemical storage, use, and



disposal practices, and to assess risks to nearby populations.

By participating in the inspection and regulation of chemical facilities, LHDs gain a better understanding of the nature of the greatest chemical threat facing jurisdictions. This understanding allows LHDs to better prepare the community for potential health and environmental impacts. Precedents exist for the involvement of LHDs in the inspection and regulation of chemical facilities. For example, the Town of Acton, Massachusetts, enacted local bylaws that provide the health department with the authority to permit and inspect commercial facilities' manufacturing, use, and storage of chemicals in quantities of 25 gallons/pounds or greater. The health department routinely inspects permitted chemical facilities within the community and coordinates monitoring and response with other government agencies.

Thorough knowledge of the chemical threats facing the community also allows LHDs to educate community members. LHDs tailor outreach activities for groups living near chemical facilities, teaching community members critical preparedness information including how to recognize the effects of chemical exposure, how to avoid exposure, and where to obtain information during an emergency.

Planning & Response

In the case of a surreptitious chemical release, public health surveillance activities are crucial to determining that an event has happened, as well as the nature of the event. Routine passive surveillance results can be monitored for unusual symptoms associated with chemical exposures. LHDs also collaborate with poison centers, healthcare systems, and clinical laboratories on protocols for chemical exposure symptom recognition and reporting protocols.

Once it is known that an event has occurred, LHDs' preexisting community relationships position them to be a trusted source of risk communications. While other responders handle the hazardous materials, LHDs have the ability to calm and inform the populace. By synthesizing knowledge of the chemical's properties and the parts of the community affected, LHDs identify at-risk populations and

share information on health concerns and protective measures, such as evacuation routes, shelter-in-place guidance, and instructions for decontamination and obtaining medical care. Health messages and templates for the most likely chemical threats can be drafted in advance, along with messaging for events when the chemical released is not immediately known.

Response partners also turn to LHDs for expertise on potential human health and environmental impacts of chemical agents. LHDs provide subject matter expertise to healthcare partners on matters such as the toxicity of chemical agents and sampling and screening approaches. If the agent is unknown, LHDs could use epidemiologic investigation methods to help identify it. LHDs engage in active surveillance of cases through coordination with hospitals, emergency medical services, urgent care, and poison control centers, as well as coordination with sheltering partners to support the assessment, referral, and decontamination of exposed persons presenting at shelters. Other potential roles based on LHD expertise include: (a) coordinating the provision of mental and behavioral health services to affected communities; and (b) providing guidance to ensure the safety and health of on-the-ground responders.

Public health expertise on the impacts of chemical agents also provides extensive opportunities to support and collaborate with healthcare and environmental health partners. With large numbers of people (both injured and worried well) potentially reporting to hospitals, LHDs could assist with surge management by supporting triage and patient tracking efforts, or by monitoring bed status and other issues across multiple affected facilities and serve as a liaison between hospitals and response partners. Depending on how environmental health is handled in the jurisdictions, LHDs may play a role assessing and monitoring the environment impact of the agent and the pathways by which it travels. With their knowledge of environmental health impacts, LHDs define exclusionary zones and evacuation areas to ensure public safety, as well as to issue



advisories related to drinking water and food safety.

LHDs also may be responsible for distribution and dispensing of medical countermeasures. Many LHDs are the lead agencies for CHEMPACK distribution. The rapid onset of chemical exposure symptoms means that medical countermeasures must be deployed quickly, but uncertain diagnoses can make the determination to dispense difficult. Public health understanding of chemical exposure symptoms and experience with medical countermeasure dispensing well positions LHDs to develop CHEMPACK deployment triggers and effective distribution protocols.

Once a response reaches the recovery phase, LHDs may be responsible for long-term monitoring of exposed individuals and environmental health impacts, as well as continued risk communication should environmental contamination linger. Their training and expertise again position them well to take on this role, although many LHDs lack the capacity to carry out these activities long-term without external support.

Challenges to Implementation

The roles described above provide numerous entry points for public health participation in a large-scale chemical event response, but identifying roles is only the first step. NACCHO's research revealed challenges to LHD involvement that also must be addressed. The first few are more easily addressed locally, but some require more systematic efforts at the state and federal levels to eliminate barriers.

- **Written plans.** The process of developing written plans or annexes for chemical incident response helps LHDs more clearly define their response roles. By working with partners to develop written plans, LHDs set up protocols to ensure that the resources and capabilities they offer are available and utilized during a chemical response. Local best practices, such as chemical response annexes and decision trees, must be more widely shared to aid in written plan development.
- **Notification.** The perception that chemical events only require a hazmat response interferes with the rapid involvement of LHD responders. It can be difficult to identify

when an average hazmat incident crosses the line into an event with larger community consequences requiring public health involvement. Clear delineation of public health response roles and notification triggers are needed to ensure that LHDs are at the table when they need to be.

- **Information sharing.** Once roles are defined, LHDs need to determine and share their data and communication needs. It may not be clear to partners which information LHDs need in order to make decisions and carry out their assigned responsibilities. For example, LHDs need a certain level of situational awareness to accomplish any public messaging roles and may require the collection of certain data to support long-term monitoring of health outcomes of those exposed.
- **Baseline data.** Many communities do not know the top chemical vulnerabilities and threats to their jurisdictions. Some of these can be determined through direct planning with local facilities (per the Chemical Facilities Anti-Terrorism Act) and participation on Local Emergency Planning Committees. Others are more difficult or potentially impossible to determine – for example, it is hard to assess chemicals passing through a jurisdiction by road or railway. Baseline data on current levels of contamination also is lacking, making it difficult to assess environmental health and safety in the long term for areas affected by chemical events.
- **Training and educational resources.** As other responders look to public health for expertise on chemical health threats, LHDs need regular training and education in this area, but budget limitations and conflicting priorities pose obstacles. Although LHDs may be well versed in the most likely chemical threats to their jurisdictions, it is impossible for them to maintain expertise in the thousands of chemical threats that exist. As such, LHDs must maintain an understanding of which questions to ask and who to contact to source information – for example, poison centers are a critical partner that LHDs help integrate into chemical



response planning. LHDs have access to many resources of the Centers for Disease Control and Prevention as well as other federal resources used to support chemical incident response. However, different guidance from different federal agencies may be confusing, and certain resources, like plume modeling, may be unknown or unavailable to LHDs, especially ones that are smaller or underfunded.

LHDs have much to offer their response partners and communities with regard to

preventing, responding to, and recovering from large-scale chemical incidents. However, more planning and partnership-building must take place before public health's unique knowledge, skills, and resources can be effectively utilized in these scenarios. Further research may illuminate strategies for better integration of public health into chemical response activities. In the meantime, collaboration and communication to plan for the unique challenges posed by chemical incidents are the best way for communities to prepare.

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Brazil and Rio Betting on the Year That Will Be Here to Stay: 2016

Source: <http://www.brazzil.com/23925-brazil-and-rio-betting-on-the-year-that-will-be-here-to-stay-2016>

Dec 30 – The New Year celebrations in Rio de Janeiro, Brazil, should draw more than two million people to Copacabana Beach, the local government estimates. The theme of the festival is "Olympic



City", a reference to the Olympic and Paralympic Games which will take place between August and September 2016 in the city. The centenary of the samba will also be celebrated.

The year 2016 is referred to as the year that will be "here to

stay", local government banners and posters in the decorations around the city read.

"We're sure this time will mark the beginning of a very special stage for our city," said mayor Eduardo Paes, who inspected the setup work on the main stage for the festival in front of Copacabana Palace Hotel.

The coming year will be greeted with green, purple, and orange fireworks, a display that is expected to last 16 minutes. Designed by Pirotecnia Igual Brasil, the show will pay a



spectacular tribute to race mingling and the Olympic spirit. At the end, the Copacabana sky will be lit in white at the beat of 2,000 drums as a message of peace.

For the singer-songwriter Gabriel Moura, who will open the concert program on the main stage, being in the show is a tremendous responsibility. "People from all over the world will be here on the 31st expecting us artists to raise the vibe with them - conveying happiness, love, joy. I've prepared a concert with songs that talk about Rio de Janeiro," he told reporters.

The Local Tourist Board (RIOTUR) expects 857,000 visitors to flock to the city for the New Year celebrations and contribute nearly US\$ 700 million into the local economy.

Visa Waiver

Tourists from Australia, Canada, the United States, and Japan who come to Brazil between June 1st and September 18, 2016 will not be required to hold visas. The waiver will be valid for 90 days, counted as of the date of entry in Brazil.

The Ministry of Tourism reported that the choice of countries that would benefit from visa exemptions in the context of the Olympic and Paralympic Games was based on such factors as the high outbound international flow and positive experience with visitors to Brazil, traveler spending in Brazil, Olympic tradition, and low migration and security risk.

Brazil expects to welcome 20% more nationals from these countries in the period.

In November, President Dilma Rousseff had sanctioned a law exempting foreign tourists who visit Brazil during the Rio 2016 Olympics and Paralympics from holding visas. The decree published December 30 outlines the details of the exemption. Brazil has mutual visa waiver agreements in place with more than 70 countries.

Security

Brazil's Foreign Minister Mauro Vieira welcomed a cooperation proposal from the Minister of Foreign Affairs and International Development of France, Laurent Fabius, ahead of the Rio 2016 Olympics. During a visit to Brazil, he offered support to ensure security and prevent terrorist attacks in the Olympics.

Fabius said France offered to cooperate through the French intelligence service, by sharing both the outcome of the measures enforced by France and exchanging information with a view to mitigating the risk of attacks in Brazil during the Games.

"I told President Dilma Rousseff we are ready to help. Unfortunately what happened in Paris could happen in other countries as well, because of the terrorist groups' global connections," the French minister noted.

Some 38.000 military personnel from Brazil's Army, Navy, and Air Force are expected to tighten up security for the Rio 2016 Olympics and Paralympics. In the host city of Rio de Janeiro, 20.000 men will be deployed, in addition to another 18.000 in Brasilia, Belo Horizonte, Manaus, Salvador, and São Paulo, where football matches are scheduled to take place.

Overall, the operation is estimated to cost approximately US\$ 165 million - lower than the 2014 World Cup's US\$ 201 million as some of the structures built for the latter will be reused.

Over 15.000 athletes from 205 countries are expected to participate in the Games, slated to begin in August 2016. Close to 100 foreign authorities should pay the country a visit during the sporting event.

"The Ministry of Defense is in charge of the security of the air and sea space, as well as anti-terrorist plans and the control of strategic structures, such as energy, transmission towers, and cyber security," explained the head of the Joint Staff of the Armed Forces, General José Carlos De Nardi. Patrolling the streets falls under the responsibility of the Military Police.

The Armed Forces will be engaged in the security scheme for 65 disciplines, 44 test events, and four ceremonies.

Also expected is the surveillance of the Olympic torch through 300 Brazilian cities, starting on May 3, 2016, and scheduled to last 100 days.

General De Nardi says he does not rule out the possibility of a terrorist attack during the Games. "My biggest concern is lone-wolf strikes [individual action]. Not even the United



States can intercept those," he argued, and went on to describe the need for collaboration between the Federal Police, Interpol, and the security forces from other countries as key to the success of the Games.



Rio ICU: at least seven hospitals undergo problems

Rio na UTI: pelo menos 7 hospitais passam por problemas

Source: <http://noticias.r7.com/rio-de-janeiro/balanco-geral-rj/videos/rio-na-uti-pelo-menos-7-hospitais-passam-por-problemas-22122015>



Watch the video at source's URL

Jan 06 – A maioria dos servidores do Hospital Getúlio Vargas está arcando com os custos de ir trabalhar. Com os salários atrasados há dois meses, médicos e enfermeiros foram às ruas. Pelo menos sete hospitais no Rio passam por problemas. (Most of the Getulio Vargas Hospital servers is bearing the costs of going to work. With salaries attracted two months ago, doctors and nurses took to the streets. At least seven hospitals in Rio experience problems.)

Study links insurgency phase of Iraq War to higher PTSD rates

Source: <http://www.homelandsecuritynewswire.com/dr20151231-study-links-insurgency-phase-of-iraq-war-to-higher-ptsd-rates>

Dec 31 – **Guerilla tactics such as suicide attacks and roadside bombs may trigger more posttraumatic stress than conventional warfare, suggests a Veterans Affairs study of 738 men and women who served in Iraq.**

The findings appeared online 14 December 2015, in the journal *Psychological Trauma: Theory, Research, Practice, and Policy*.

The study authors are with the Behavioral Science Division of the National Center for PTSD, based at the VA Boston Healthcare System, and with Boston University School of Medicine.

They identified three distinct phases of the Iraq War, based on previous reports. Then they analyzed whether veterans who fought during the insurgency phase, during which more guerilla-style tactics were used, were more likely to develop PTSD than those who deployed during the initial invasion phase of the war, or the more recent surge phase.

Veterans Affairs Research Communications reports **that the study found that among the men — about half the overall group — the insurgency-phase veterans were more**



than twice as likely to have a diagnosis of PTSD, compared with those who served in either of the other two phases.

The finding held true even after the researchers adjusted for a range of other demographic and deployment-related risk factors.



The trend was not seen among the women in the sample, although the authors aren't sure why. Citing other research, they say there may be a somewhat different mix of factors that influence PTSD among women service members and veterans.

The team, led by Dr. Jonathan Green, writes that on the whole, the study suggests that enemy combat tactics may be under-appreciated in understanding what drives PTSD. They note that “assessment of the nature of combat may be useful in research and in clinical settings.”

They write, also, that the relatively high rates of PTSD among Vietnam War veterans may be explained, at least in part, by looking at the type of enemy tactics those troops faced. The researchers compare that war, on the whole, to the insurgency phase of the Iraq conflict.

Previous studies that aimed to compare PTSD rates between wars — say, Iraq and Vietnam — didn't allow researchers to control for shifting generational norms and differing social and political climates. As such, Green's team focused their analysis only on the Iraq War.

Still, they acknowledge there were factors they didn't control for that could affect PTSD rates, such as the intensity of combat or social or political factors that changed even during the course of the Iraq War.

The men and women who took part in the study were part of the Veterans After-Discharge Longitudinal Registry (VALOR), a collaboration between VA's National Center for PTSD and the New England Research Institutes, with funding from the Department of Defense.

Majority of Americans believe it is sometimes necessary for govt. to sacrifice freedoms

Source: <http://www.homelandsecuritynewswire.com/dr20151231-majority-of-americans-believe-it-is-sometimes-necessary-for-govt-to-sacrifice-freedoms>

Dec 31 – **A majority of Americans say it can be necessary for the government to sacrifice freedoms to fight terrorism, according to a new national survey conducted by The Associated Press-NORC Center for Public Affairs Research. Fifty-four percent of Americans say it can be necessary, 45 percent disagree.** And about half of Americans think it is acceptable to allow warrantless government analysis of internet activities and communications — even of American citizens — in order to keep an eye out for suspicious activity, but about 3 in 10 are against this type of government investigation.

“In the aftermath of the attacks in Paris and California, we are seeing the public's concern about being personally affected by terrorism evolve. For instance, 20 percent of Americans are very concerned that they or a family member could be a victim of a terrorist attack, up from 10 percent in 2013,” said Trevor Tompson, director of The AP-NORC Center. “The survey also found that respondents are just as concerned about attacks by Islamic extremists as they are about home-grown terrorists.”

NORC at the University of Chicago reports that key findings from the survey include:



- Only about a quarter of Americans say protecting their rights and freedoms as citizens is more critical than being kept secure. Four in ten say safety is more important than civil liberties. Three in ten say both are equally important.
- Two-thirds of Republicans favor the analysis of internet activity and communication by the government without a warrant. Fifty-five percent of Democrats and only 40 percent of independents agree.
- A majority of the public say the government is doing a good job protecting the right to vote, freedom of speech, freedom of religion, and freedom of the press. But they are less positive about government efforts to protect the right to bear arms, equal protection under the law, and unreasonable search and seizure.
- While Republicans and Democrats are equally anxious about the possibility of being personally affected by domestic terrorism, two-thirds of Republicans and half of Democrats are greatly or somewhat concerned about becoming a victim of Islamic extremism in the United States.

The nationwide poll was conducted 10-13 December 2015, using the AmeriSpeak Panel, the probability-based panel of NORC at the University of Chicago. Online and telephone interviews using landlines and cell phones were conducted with 1,042 adults.

EDITOR'S COMMENT: It would be really helpful if some definitions of "rights", "privacy" and "freedom" were included in this article because there is kind of confusion about what we really mean when using these words and to whom we are referring to.



Professor fired for saying Muslims and Christians worship same God

Source: <http://www.homelandsecuritynewswire.com/dr20160107-professor-fired-for-saying-muslims-and-christians-worship-same-god>



Jan 07 – Dr. Larycia Hawkins, a teacher of political science at Wheaton College in Illinois who has lost her job after claiming that Muslims and Christians worshipped the same God, has responded to her dismissal, saying she was "flummoxed and flabbergasted" by the decision to fire her. The college initiated termination proceedings, saying Hawkins had refused to take part in "clarifying conversations" about the theological issues raised by her comments.

Cologne Assaults: Police Report Outlines 'Chaotic and Shameful' New Year's Eve

Source: <http://www.spiegel.de/international/germany/cologne-attacks-on-new-years-produced-chaos-say-police-a-1070894.html>

Jan 07 – **An internal police protocol has revealed the full extent of the violence in Cologne on New Year's Eve. According to the report, which SPIEGEL has seen, officials were overwhelmed and powerless to help some people calling for help.**

Law enforcement officials lost control of the situation in Cologne on New Year's Eve, according to an internal report by Germany's national police, the Bundespolizei, obtained by DER SPIEGEL. The author of the report, dated Jan. 4, is a senior official. He writes: "Women, accompanied or not, literally ran a 'gauntlet' through masses of heavily intoxicated men that words cannot describe." The horde in front of and inside the train station was unmoved by the presence of police.

According to the report, officers encountered many distraught, crying, frightened pedestrians, particularly women and girls. They reported "fights, thefts, sexual assaults against women, etc." Groups of male migrants were repeatedly named as perpetrators.



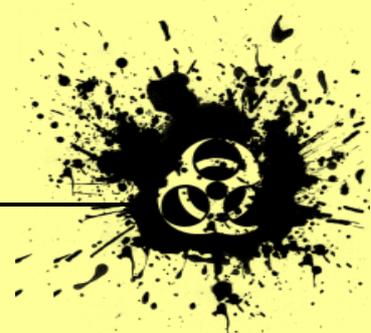
Identifying those responsible -- especially the perpetrators of sexual assaults -- "was unfortunately no longer possible." The reason: "Security forces were unable to get all of the incidents, assaults, crimes, etc. under control. There were simply too many happening at the same time." Police were frustrated at their inability to help each victim. At times, it wasn't even possible to record all of the complaints that were being lodged.



The report lists several examples of police officers' experiences:

- Officers were hindered from pushing their way through to people calling for help by tight clusters of men.
- A man is quoted as saying: "I'm a Syrian! You have to treat me kindly! Mrs. Merkel invited me."
- Witnesses were threatened when they provided the names of perpetrators.
- People reportedly demonstratively tore up residence permits in front of the police, grinned and said: "You can't touch me. I'll just go back tomorrow and get a new one." The report did not, however, confirm the authenticity of the documents.
- Orders for people to leave the premises were ignored; taking repeat offenders into custody was not possible due to lack of resources.
- After track closures due to overcrowding, people simply forced their way over adjacent platforms and train tracks back to the closed platform.
- Physical fights broke out as trains were being boarded; it was "every man for himself."

The situation, which was described in the report as "chaos," was so out of control that there were concerns about serious injuries or even deaths, according to the author. That is why the operation leader decided to clear the square. The report notes that police officers were "bombarded with fireworks and pelted with glass bottles." Even after the square was cleared, there were "repeatedly multiple physical confrontations between people as well as groups of people, thefts and robberies in several places at the same time."



The author of the report draws a grim conclusion: The actions of the police officers was met with a level of disrespect "like I have never experienced in my 29 years of public service." Because too few officers were on the scene, the ones that were present "reached the limits of their abilities pretty quickly" -- their deployment lasted from 9:45 p.m. until 7:30 a.m. As central problems facing law enforcement, the report cites overwhelmed police officers, insufficient personnel and weaknesses in equipment, which were "not to be expected." The author describes the entire situation on New Years' Eve as "chaotic and shameful."

In the days since the New Year's Eve attacks, Cologne police have received more than 100 complaints. In an initial statement on the morning of Jan. 1, the police press department noted that the situation on the prior evening had been "relaxed." Cologne Police President Wolfgang Albers later admitted that "this initial statement was incorrect."

Zurich police investigate New Year sexual assaults, no link to German cases

Source: <http://vladtepesblog.com/2016/01/07/zurich-police-investigate-new-year-sexual-assaults-no-link-to-german-cases/comment-page-1/>

Jan 07 – **About six women in Zurich have reported being sexually molested and robbed during New Year's Eve celebrations after being surrounded by groups of men, police said in a statement on Thursday.**

Zurich police said the attacks resembled incidents in Germany on the same evening but that they did not know of any concrete links between the cases.

About 90 women reported being robbed, threatened or sexually molested at New Year celebrations outside Cologne's cathedral by young, mostly drunk men, police there said.

Additional incidents, but on a lesser scale, have been reported in Hamburg.

Zurich police said initially there were about 24 separate reports of theft at celebrations along the city's lakefront. Follow-up investigations showed several cases involved women being fondled on top of their clothing, they said.

Why are feminists refusing to discuss the Cologne sex attacks?

Source: <http://blogs.spectator.co.uk/2016/01/why-are-feminists-refusing-to-discuss-the-cologne-sex-attacks/>



'One doesn't beat women - not even with flowers'. A message in front of Cologne cathedral, near where the attacks took place (Photo: Getty)

Jan 07 – Regardless of the background of the men who carried out the attacks in Cologne on New Year's Eve, it is a pretty horrific story. A series of sexual attacks took place in the city

center by a group of around 1,000 men. More than 150 women have filed criminal complaints, three-quarters of them for sexual assault. Two cases of rape have been reported. It is the kind of story that should make headlines – and should provide ample



fodder for writers who like to tackle feminist topics head on. After all, surely this is the very definition of ‘rape culture’? And if the actual attacks aren’t enough to merit a reaction, then how about the suggestion by Cologne’s female mayor that women should adopt a “code of conduct” to prevent future assault. Is that not the very definition of ‘victim blaming’?

But the headlines have been conspicuous by their absence. So far this year, the main ‘feminist’ topic covered by *Guardian* comment writers is Chris Gayle’s cricket sexism row, which involves the sportsman chatting up a female journalist. **There is not one mention of the Cologne attacks, aside from in news reports. Why is that?** Is it because they are not deemed important? Perhaps we don’t care about vicious attacks against German *frauen*? Or is it because the details of the story – that the men appear to have been of ‘Arab or North African origin’ who did not seem to speak German or English, and that there is a possibility they are some of the 1.1 million migrants to have entered Germany last year – make it too controversial to touch? Feminist writers are not famed for holding their tongues – as individuals who have been hanged, drawn and quartered by them can attest. But in an article for *Prospect*, Jessica Abrahams offers this measly explanation for the silence:

Feminists are necessarily concerned with the protection of minorities and marginalized groups. If some of them are finding it difficult to speak up about the event because of concerns it might be used to encourage aggression against refugees, I can’t say I blame them. The fault lies not with the feminists but with those making them nervous to speak—the very same people, often, who are expressing outrage that they aren’t.

It is usually the task of feminists to make enough noise about incidents of sexual assault that they can no longer be ignored; the Cologne attack was big enough that it received a huge amount of attention across Europe and further afield. We can only hope now that the police are successful in bringing those responsible to the courtroom and preventing further attacks, and that the women involved are given enough support.

I do not wish to get into a debate about migration, but it seems fair to suggest we face facts: many North African and Arab countries are not famed for their exemplary treatment of women. And many of the people entering Europe are young men from these countries, who may well have never come across the concept that women are equal to men, and do not deserve to be threatened, molested or raped. If we are too scared to say this, for fear that it might look uncharitable towards migrants, then we land ourselves in all kinds of trouble. Eventually we will have to say it though, so we might as well start now.

EDITOR’S COMMENT: Germany, Finland, Switzerland, Greece – was it a coincidence?

It looks like an organized expression of “power” following the illegal immigration tsunami pathways. To that add the burning of a Christmas tree in Brussels downtown and pushing a car into an underground station’s stairs. Not to mention Stockholm as the rape capital of Europe! And all that in a Europe being on the highest security alert ever! Perhaps we need more solid evidence to wake up – like day-time public raping and a few deaths to dictate us that it is time to confine the beast. Instead of trying to teach them our way of life (i.e. in Norway, Denmark etc.) why don’t we say loud and clear that either you stop or die? Too much civilization is bad for European citizens’ lives!



Europe’s Shame: Failing to Protect its Female Citizens

By Dr. Nancy Hartevelt Kobrin

Source: <http://acdemocracy.org/europes-shame-failing-to-protect-its-female-citizens/>

Jan 10 – Videos of hundreds of “North African or Arabic” looking men molesting women, firing guns and hurling fireworks towards crowds celebrating New Year’s Eve in Berlin, Cologne, Stuttgart, Hamburg, Helsinki, Vienna, and Zurich, pressured some European politicians to condemn such behavior. However, the mayor

of Cologne, Henriette Reker, proposed a “code of conduct” for young women and girls, “so that such things do not happen to them.”

Cologne struck home because in 1984 I was invited to lecture at the University of Siegen on the



Moriscos, the last enclave of Muslims in the west during the 16th century. Ironically my work was profiled in a German magazine because the editors were concerned about Muslim immigrant populations not integrating into German life. They spoke candidly about sexual abuse, rape and honor killing. What they didn't understand was that these Muslim "parallel" communities were intentionally set up to control their females by perpetuating their shame honor religio-cultures predicated on the effacement of the female. That was over thirty years ago. Little has changed. Denial runs deep as a feeble attempt to push away terror.

Power-Control-Submission is the "triumvirate" of these Muslim shame honor religio-cultures. Empathy and morality are completely lacking because the child never learns them. As youth they may appear as *if* they are empathic but only to their group; this is pseudo-empathy. The abused female is at the eye of the storm as the group object of rage. She gains honor only when she has her first-born male. However, that baby is treated as an object wedded to his mother. People are objects, not people in their right with feelings and needs in shame honor religio-cultures. Needs are dirty and toxic which must be projected on to the Other who is scapegoated by the group. The group identity overrides an individual identity.

There are those scholars like the Tunisian sociologist Abdelwahhab Bouhdiba author of *Sexuality in Islam* [1975] who argues that Islam is a shame honor religion on account of the effacement of female, especially the mother. Sura 4 advocates wife beating. In addition, the very name "Islam" means submission – one of the prongs of the triumvirate. Hence, the religion fits snugly within a shame honor culture. This tight fit compounds shaming practices used to keep group members in line. Shaming destroys the soul of a young child. He or she is never able to acquire a solid sense of individual identity. Bullying is the norm. Therefore, it is easy to hook into and recruit such youth, male and female years later as a psychological IED has been buried deep within their soul. As for the devalued female, she has merely internalized male rage as self-hatred and as a jihadi, she comes to out "French the French".

The New Year Eve's rampage has cast a shadow over Europe. Its citizens, political analysts, law enforcement and military must give due pause to the enormous influx of young male Muslim refugees/migrants grafted on top of the preexisting Muslim parallel communities from thirty years ago. These new youth come with virtually no western sense of interpersonal skills and no understanding of boundaries as their grandiosity and omnipotence rules. Bullying is their modus operandi. All of this translates into sexual harassment, rape, aggression, and violence, especially of the female. The Other is also feminized, so the *kufars* and especially the Jews are targeted as well.

These criminal acts are jihad's weapon to manipulate and cow native Europeans into the submission of political correctness. Where you find these Muslim sexual rampages-and as any criminologist worth his or her salt can tell you that rape often escalates to murder – you will also find Islamists and jihadis willing to carry out terrorist attacks. The behavior fits like a hand in glove.

Consider the following in 2008 a little-known report was issued by the called "Crimes of the community: Honor-based Violence". Nazir Afzal, British Police Officer and Director of the Division for Honor Killing, revealed that where they found jihadis, they found domestic violence. I quote:

If you had a map of the UK showing the location of Islamist groups—or terrorist cells—and you had another map of honor-based violence, and you overlaid them you would find that they were a mirror image; they would be almost identical. It could be that this is simply where the South Asians [nonArab Muslims] live—or it could be something else—it could suggest that there is a strong link between these two attitudes.

I followed up by email and asked Officer Afzal if he saw any relation or connection between honor killing and suicide bombing as I have long proposed a link between the two phenomena. He emailed me back: "I recognize the links myself but am wary of discussing them further without hard evidence."



Unremarkably a Norwegian Chief of Police named Berg said nearly the same thing about recent sexual assaults: “. . . there was a link but not a very clear link” between the rape cases in Norway and immigrants. Hanne Kristin Rohde, former head of the violent crime section of the Oslo Police Department, was criticized in 2011 when she went public with data suggesting that immigrants committed a hugely disproportionate number of rapes. “This was a big problem... but it was difficult to talk about,” she remarked. There was “a clear statistical connection between sexual violence and male migrants.”

The political violence of Islamic terrorist attacks forms interlocking links with domestic violence and sexual rampages. Political violence finds its roots in the psychosexual dynamics of Muslim shame/honor families. As I have argued in all of my books, violence does not care how we humans label it. The definition of political violence continues to have its limitations working against experts being able to connect the dots from early childhood development to the mind and body language of the jihadi. The shared commonality of being murdered by one of your own or by someone who robs and rapes you as in the New Year Eve’s assaults or by an Islamic suicide bombing is among the deepest of human terrors. When you are sexually harassed or raped, you are terrified that you will be murdered.

Thus underlying the psychosexual dynamics of these rampages is a direct link to Islamic terrorism. So far vetting this enormous population has essentially failed. Although, as Stephen Bryen’s excellent article at ACD points out, proper vetting of migrants and refugees is possible.

We should be very concerned about what is going on behind closed doors in these immigrant communities. Our western world is very different from the one the jihadis are being raised in. Yet, that upbringing greatly affects us. Terror pulses through these shame-

honor religio-cultures, projecting outwards on to us in a lethal manner.

The European Muslim “parallel” communities are rife with passive aggressive behavior. This is the hallmark of a shame-honor bullying group. Tawfik Hamid, a former jihadi, has rightfully called this particular behavior that plagues Muslim communities — **passive terrorism**. No one will intervene to rescue someone from the abuse or murder. They will stand by and vicariously “enjoy” the sadomasochism of the scapegoating moment. “À la there go I with the grace of Allah.”

Surely you might rightfully say that not all young male Muslims are perpetrators, and “we [in the west] do it too.” However, this ignores the high rate of frequency of attacks and the significant number of its perpetrators who carry out the dirty work of the ummah. While the radical ideologies are important, they merely function as a girdle for very fragile hostile dependent personality one that has never gone through an individuation-separation stage of development. These males have never gained a sense of self that involves empathy, morality, and critical thinking. It is the Muslim shame blame game. On a much smaller scale, we encounter the converts to Islam who often become radicalized jihadis. Elsewhere I have argued that they too came from abuse shaming home environments.

Do we have to have dead bodies in order to “prove” a link between honor killing, gang rapes, sexual rampages and suicide bombing? Such is the frightening nature of the phenomena of violence that even law enforcement and the public struggle to consider the similarities in unconscious yet highly concrete lethal behavior.

We must begin to discuss early childhood development in these shame- honor Islamic communities even though it is excruciatingly painful for Muslims to do so because it is like washing their dirty linen in public – a matter of shame. But remember, “The hand that rocks the cradle, rules the world.”

Dr. Nancy Hartevelt Kobrin, a Fellow at ACD, just completed her fourth book concerning these psychodynamics, The Jihadi Dictionary. She is a frequent lecturer to military, police and governmental agencies.



Iran reveals huge underground missile base with broadcast on state TV

Source: <http://www.theguardian.com/world/2015/oct/15/iran-reveals-huge-underground-missile-base-with-broadcast-on-state-tv>



Oct 2015 – Iranian state television broadcast unprecedented footage on Wednesday of an underground tunnel packed with missiles and launcher units, which officials said could be used if “enemies make a mistake”.



The pictures were released just three days after Iran tested a new long-range missile that the US said may have breached a UN Security Council resolution.

The footage also came a day after Iran's parliament approved the country's 14 July nuclear deal with six world powers.

Iranian officials have said the nuclear agreement will not affect its military forces, particularly its ballistic missile programme.

The missile launch and underground footage followed pressure from lawmakers to prove the military had not been weakened by the deal.

The tunnel, hundreds of meters long and about 10 meters high, was filled with missiles and hardware. Brigadier General Amir Ali Hajizadeh, commander of the Islamic Republic's Revolutionary Guards' aerospace division, said numerous such tunnels existed across the country at a depth of 500 meters.



"The Islamic republic's long-range missile bases are stationed and ready under the high mountains in all the country's provinces and cities," he said, according to the division's website.

The commander said the missiles were ready to be launched from all over Iran, on the order of "the supreme commander-in-chief", Ayatollah Ali Khamenei.



"This is a sample of our massive missile bases," he said, adding that "a new and advanced generation of long-range liquid- and solid-fuel missiles" would start to replace existing weapons next year.

The commander seemed to suggest the show of strength was in response to western powers, especially the US, which despite the nuclear deal, have said options against Iran, including a military one, remained on the table.

"Those who pin hope on options on the table, should only have a look at the Islamic republic's army options under the table."



Hajizadeh said Iran would not start any war but “if enemies make a mistake, missile bases will erupt like a volcano from the depth of earth”.

The US on Tuesday said Tehran may have breached a Security Council resolution during Sunday's test of the new **Emad missile** (bottom p.46).

White House spokesman Josh Earnest said there were “strong indications” that Tehran “did violate UN Security Council resolutions that pertain to Iran’s ballistic missile activities”.

Under a resolution passed days after the nuclear deal was reached, Iran was barred by the Security Council from developing missiles “designed to carry nuclear warheads”.

However the White House insisted the launch would have no impact on the nuclear agreement which is due to be formally implemented by the end of this year.

UK Police to Deploy Drone-Jamming Tech at Major Events

Source: <http://i-hls.com/2016/01/uk-police-deploy-drone-jamming-tech-major-events/>



Jan 08 – British police is planning to use sophisticated unmanned aerial vehicle (UAV) detection and jamming technology at major public events at risk of terrorist attack.



The **Anti-UAV Defense System (AUDS)** was trailed in London during the Remembrance Day ceremonies on 11 November 2015. The London Metropolitan Police reportedly “really liked” the performance of the system.

The AUDS uses cameras to track UAVs, and if the need arises, can

within 15 seconds jam the radio signals used to control them.



“What is reassuring is that this is the security forces getting ahead of the game, so they have defensive measures in place before something actually happens,” said Elizabeth Quintana, a senior research fellow at the Royal United Services Institute (RUSI), a British defense and security think-tank.

Over the last few months, concerns have been raised by security specialists that terrorists could employ explosive laden UAVs to attack crowds. ISIS is likely to have already tested the carrying capacity of several drones to find out how much explosives they can carry, and even experimented with detonation devices.

“There is a genuine threat from Islamists wishing to deliver high explosives by drone to crowded areas – the effects could be devastating,” Col Richard Kemp, who has advised the UK Government on terrorism, told The Mirror.

While promising, this solution is not foolproof. Advanced UAVs, of the sort terrorists are likely trying to acquire, can fly and perform missions’ semi- and fully-autonomously. Further, with some modification UAVs can be made to communicate on frequencies not targeted by the jammer. To properly ensure that no radio communication with drones is taking place, police would have to jam communications across all radio frequencies. This could have far-reaching unintended consequences, with large masses of people losing all ability to use phones and communicate.

The Israeli Army Unit That Recruits Teens with Autism

Source: <http://www.theatlantic.com/health/archive/2016/01/israeli-army-autism/422850/>

Jan 06 – **Many autistic soldiers who would otherwise be exempt from military service have found a place in Unit 9900, a selective intelligence squad where their heightened perceptual skills are an asset.**

For eight hours a day, E., 21, sits in front of multiple computer screens, scanning high-resolution satellite images for suspicious objects or movements. As a decoder of Israel’s complex and often heavily civilian battlegrounds, he’s been critical in preventing the loss of life of soldiers on the ground in several different situations, his officers say.

For many people, combing through each millimeter of the same location from various angles would be tedious work—but E., who is on the autism spectrum, describes the job as relaxing, “like a hobby.”

E. (he requested his full name be withheld to comply with army protocol) is a corporal in the Israel Defense Force’s “Visual Intelligence Division,” otherwise known as Unit 9900, which counts dozens of Israelis on the autism spectrum among its members.

The relationship is a mutually beneficial one. For these young people, the unit is an opportunity to participate in a part of Israeli life that might otherwise be closed to them. And for the military, it’s an opportunity to harness the unique skill sets that often come with autism: extraordinary capacities for visual thinking and

attention to detail, both of which lend themselves well to the highly specialized task of aerial analysis.

Geraldine

Dawson, the director of the Duke Center for Autism and Brain Development, says that beginning early in life, autistic children may compensate for lagging social development by developing stronger-than-average perceptual skills, excelling in visually- and systematically-oriented activities like puzzles or drawings.

“People with autism often talk about thinking in pictures, rather than categorizing information according to language,” she explains. “They tend to think less in a holistic form, they’re integrating lots of pieces into a whole, and they’re much more likely to see the finer details of something.”

Those finer details are the nuts and bolts of the elite Unit 9900, whose soldiers act as eyes on the ground for highly sensitive operations, analyzing complex



images delivered in real time from military satellites around the world.

But for many of the unit's autistic soldiers, the more daunting challenge is learning to communicate and socialize with their peers.

E.—who, like many of the autistic soldiers in the unit, is considered “high functioning” and attended special-education program within a mainstream high school—says his adolescence was characterized by a general sense of “floating around,” both socially and academically. He had a hard time listening in class, though he performed well on tests. His sense of isolation was exacerbated by the special aide who accompanied him during the school day.

“It's not fun at that age to have someone always watching over you, when you just want to hang out with the guys,” he said. But his biggest setback came in 12th grade, when he received an exemption letter from the army. In Israel, military service is compulsory for all 18-year-olds following high school, though exemptions are issued on a number of grounds, including residence abroad, religious reasons, or physical or mental disability. In 2008, the country ended the practice of issuing blanket exemption notices for autistic Israelis and instead began accepting them on a case-by-case basis, typically for secretarial roles or voluntary civil-service positions in hospitals and schools. None of these options interested E., who had decided he would enlist only if he could have a more typical experience.

“They're integrating lots of pieces into a whole, and they're much more likely to see the finer details of something.”

But later that year, his school was visited by representatives from Ro'im Rachok (Hebrew for “seeing into the future”), a program that helps students with autism prepare for enlistment in the IDF. When they mentioned the two previous cohorts of autistic Israelis who had successfully served as image analysts, E. recalls, he became convinced that he could find a meaningful position as a soldier.

The pre-army course consists of three phases, beginning with a rigorous selection process: Students undergo tests and interviews to ensure that they have the skills to successfully analyze images, that they can adjust to the army's rigid structure, and that they pose no

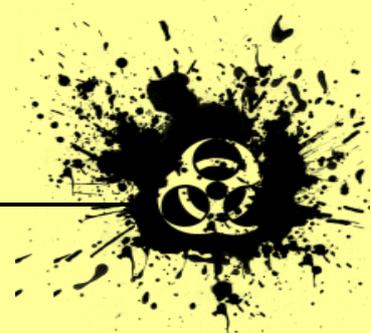
risk to themselves or to their operations. Of the dozens of applicants this year, 12 candidates made the cut. (They can also choose to withdraw if the process proves too onerous.)

The second phase is carried out in conjunction with the health-profession department at Ono Academic College, which hosts the satellite-image analysis course at its campus in central Israel. During the three-month course, which runs three times a year, Unit 9900 commanders train the applicants using non-classified aerial maps. The students also meet frequently with a team of therapists who help them learn to adjust to new trials and stresses, from the responsibility of the work itself to figuring out how to take the bus from home to the army base.

These three months are considered the program's “honeymoon phase,” when the candidates are full of excitement and motivation to learn. The organizers also encourage candidates to use the time for introspection, helping to foster discussions on the students' futures as independent adults and their moral positions regarding the military, says Tal Vardy, a co-founder of Ro'im Rachok.

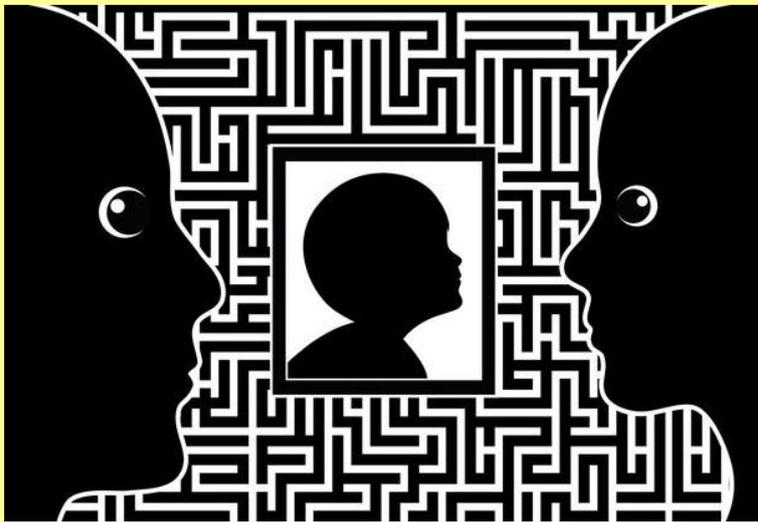
In the final three-month phase, Vardy says, the applicants continue their professional training and therapy sessions on an army base in Tel Aviv, and decide if they are ready for enlistment. Those that do enlist have the choice to opt out after the end of each year, or complete the typical required term of service. In Israel, men serve three years and women serve two; although Unit 9900 is coed, Ro'im Rachok has had just one female soldier to date (researchers estimate that there are up to three times as many men on the autism spectrum as women).

E., who connects strongly with the army's structured atmosphere, says he plans to apply to stay on permanently. But regardless of how long they stay, many of Ro'im Rachok's graduates depend on the connections and skills they build in the army to help them achieve independence once they leave it. Especially in the intelligence fields, military service is often a pathway to jobs in Israel's booming tech sector. This is particularly advantageous for



young people with autism as they approach the so-called “bloody 21,” the age at which almost all government-funded programs for autistic Israelis, like subsidized transportation and assisted-living services, are cut off.

Some research suggests that the rare visual capabilities required for Unit 9900 may come more easily to the autistic brain. A 2011 study, for example, found that childhood autism was two to four times more prevalent in the Dutch technology hub of Eindhoven as in other Dutch cities of similar size, support for a possible link between autism and scientific ability. Other people have observed a similar phenomenon in Silicon Valley.



“A growing body of research is showing that autistics outperform neurologically typical children and adults in a wide range of perception tasks, such as spotting a pattern in a distracting environment,” Laurent Mottron, a psychiatry professor at the University of Montreal, wrote in a 2011 column in *Nature* magazine. He added that most people with autism “outperform in auditory tasks (such as discriminating sound pitches), detecting visual structures, and mentally manipulating complex three-dimensional shapes.”

Israel, like many developed countries, has experienced a continuous uptick in autism cases over the past decade and a half. Between 2004 and 2011, the number of Israelis on the autism spectrum increased fivefold, with 1,000 new diagnoses per year, according to a

survey released by the country’s Social Affairs Ministry.

But autism still carries a heavy stigma among Israelis. Autistic children are frequently suspended from schools for misbehavior, and the Knesset Education Committee has found that because there are no official special-education guidelines for autistic students, some teachers have requested that they receive stronger medication before they’re readmitted into class.

Partly as a means of reducing this stigma, Ro’im Rachok points to its soldiers as examples of what young people on the spectrum are capable of when they have the appropriate support systems. Efrat Selanikyo, an occupational therapist at Ono, says that she

and her colleagues help to create one such support system by implementing strict and clear guidelines for the training phase of the program.

“For their [own] good, we maintain a strong sense of discipline, but we also need to prepare them for a reality in which things change very drastically,” she says.

At first, some have trouble following the rule that forbids them from discussing the unit’s activities with outsiders. But Selanikyo has also seen

participants take the rules so seriously that they refuse to tell their parents anything about their experiences, their new friends, or their work. In response to calls from anxious parents suddenly in the dark about their children’s lives, Selanikyo now sends weekly emails with updates on the participants’ progress and wellbeing.

But she and her colleagues also help the participants take steps towards self-sufficiency and independence, one of the most important being their mastery of Israel’s public-transportation system. Selanikyo and the occupational therapists use the bus system as a lesson for other potential small crises: When a bus is off schedule, for example, they teach students to defer to an alternative plan rather than descend into



panic. Several Israeli transportation companies have partnered with Roiim Rachok, and allow the participants to ride for free, despite the fact that they are not yet soldiers (active members of the military are eligible for free trips).

The organizers of Ro'im Rachok are currently working on plans to expand beyond Unit 9900. Future applicants will be able to train for additional intelligence units of the IDF, in roles like quality assurance, programming, and

information sorting. This growth, they believe, will help the program continue its secondary mission of integrating people with autism into mainstream Israeli society.

"When the whole neighborhood suddenly sees their neighbor, a boy on the autism spectrum, coming home on Friday in uniform," Selanikyo says, "and hears that they can also continue in these fields into civilian work—it naturally has an enormous influence."



"Artistic" vandalism of the Parthenon Sculptures

Source: <http://en.unescopireas.gr/2015/12/30/artistic-vandalism-of-the-parthenon-marbles/>



Reconstruction of the west pediment of the Parthenon (Acropolis Museum, Athens, Greece)

Dec 30 – Attending the childbirth of the goddess Athena, Dionysus, wearing colorful shorts, holding a ladies bag and having a flower on his ear, enjoys himself taking selfie



photos with his mobile. Cecrops, dressed like hippies, Ilissos wearing women's accessories and next Kalliroi with her iphone, are watching the dispute between Poseidon and Athena for the Athens city.

These images were published, a few days ago, by the well-known company GUCCI in its official profile on instagram (<https://www.instagram.com/gucci/>) aiming to advertise a new collection.

The "Gucci party" of the ancient Greek gods is held in the Western and Eastern Parthenon

Pediments, challenging every notion of respect to the one of the most memorable sights of the UNESCO World Heritage. Humiliating symbols that for centuries was inspiring world's greatest minds and artists.



Mocking the "tears of Caryatid" and fooling with the struggle of the Greeks for the return of the Parthenon Sculptures from the British Museum – "unimportant details" in comparison to the "important" sales profits – the Company has chosen this way to promote the work of Derya Çakırsoy as "creative". Specifically, it is about an "artistic intervention" on photos taken from the reconstructed West and East Parthenon Pediments,



located in the Acropolis Museum, while major original parts are in the British Museum.



The miserable intervention, promotes the GUCCI designs, with complete apathy on the cultural and symbolic value of the sculptures. It must be noted that according to the Greek legislation and Regulation of the Acropolis Museum, professional photography and / or the use of photos for commercial – marketing purposes, of the exhibits found in the Acropolis

Museum is allowed only upon written approval from the Museum.

In this context, Club for UNESCO of Piraeus & Islands, whose aims and activities are significantly linked with the emergence – promotion and protection of World Heritage and is an active part of the collective effort for the return of the Parthenon Sculptures from the British Museum, is making a public accusation against the Company regarding the publication of these photos and demanding their immediate unpublishing.

The above commercial advertisement, under the occasion of the “freedom of expression”, essentially derogates the classic beauty and unique aesthetics of the ancient Greek sculptures, denying them the “freedom” to exist unaffected even from “gentle vandalism”.

Below we present the photos published by GUCCI, in correspondence with the sculptures from the East and West Parthenon Pediments.

EDITOR’S COMMENT: Everything for publicity and profit from historically ignorant people...

K9 Officer Jethro succumbs to his shooting injuries

Source: <http://fox8.com/2016/01/10/update-k9-officer-jethro-rested-through-the-night/>



taken to the hospital with a non-life-threatening injury. He has been identified as Kelontre D. Barefield, 22.

Jan 10 – Fox 8 has a very sad update for everyone on Jethro. Our Peggy Gallek was contacted by Jethro’s handler a short while ago to tell us that Jethro passed away just after 10 a.m. Sunday morning.

The Police K9 Association said funeral details would be released Sunday night or Monday morning.

Jethro and a suspect were shot early Saturday morning, after officers were responding to an alarm at Fisher Foods on Harrison Avenue. Officers were searching the area when the suspect fired several shots. The department’s K-9 Jethro was struck 3 times in the face, shoulder, and neck area. Officers did return fire. The suspect was shot one time in the leg and

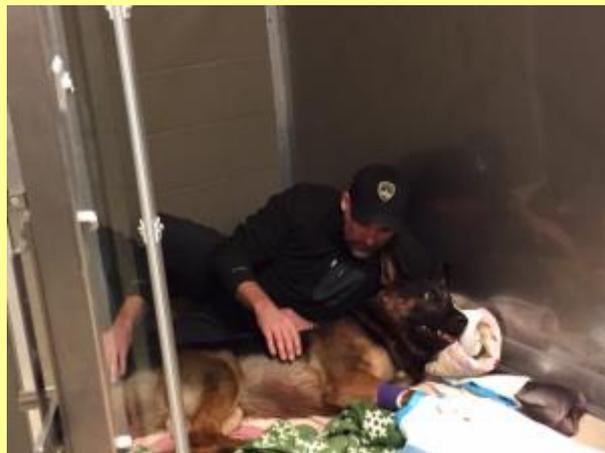




Sunday morning, Canton police posted on their Facebook page that Jethro is still resting and that he did not need surgery. The bullets that hit him didn't strike any vital organs, but one did hit him on the bridge of the nose, which caused brain trauma.



The Police K-9 Association posted Saturday night that it was very tough to get Jethro to actually rest, because "He's just trying to beat this thing the way he's used to, by fighting." Jethro was given a sedative to help him rest...and he finally closed his eyes and slept.



Jethro and his partner (Photo courtesy: Canton Police)



In Europe, Muslim Extremists Turn To Sexual Terrorism

By M.G. Oprea

Source: <http://thefederalist.com/2016/01/11/in-europe-muslim-extremists-turn-to-sexual-terrorism/>

Jan 11 – Europe has a big problem on its hands. On Sunday, Germany's justice minister

attacks in the first few days of the New Year. Rather than face the reality that they have a problem with their Muslim population, city officials tried to sweep it under the rug.



said a series of attacks across the country on New Year's Eve appear to have been pre-planned. In downtown Cologne, about a thousand men of Arab and North African descent entered a square full of celebrators and proceeded to surround women, robbing and in many cases sexually assaulting them. Police describe a horrifying scene of women running terrified and attackers aggressively pushing back police. So far, 170 women (update: ~650) have come forward with complaints, three-fourths of which involve sexual assaults. Similar attacks from that night have been reported in Hamburg, Stuttgart, Frankfurt, and Düsseldorf.

It now appears that officials tried to cover up the attacks lest they stoke anti-immigrant sentiment. On Friday, Cologne's police chief was fired because of his poor handling of the

Hiding Sexual Assault In the Name of Tolerance

How they thought they could conceal an attack of this scale and nature is difficult to say. Then again, they're just following a rising European trend. Consider the Rotherham rape scandal last year in Britain, which revealed that police and social workers had for years been hiding what amounted to 1,400 gang rapes of young women and girls by men of Pakistani descent. Social workers and others claimed they were afraid to come forward for fear some would accuse them of racism and "Islamaphobia."

Something similar is happening in Cologne. Mayor Henriette Reker was quick to come out and claim "there are no indications that this involved people who have sought shelter in Cologne as refugees." On Friday, news broke that 18 of 31 identified suspects were confirmed asylum-seekers. German's leaders rushed to insist this couldn't possibly have anything to do with the recent migrant crisis, before knowing the facts.

This isn't just a European habit. Recall the U.S. media's initial knee-jerk denial of the motivations of the San Bernardino terrorists. But Europe is especially afraid to acknowledge it has a problem with its Muslim population, and its leaders are giving the impression they don't take the problem seriously.

To prevent similar attacks during Carnival celebrations next month, Reker awkwardly proposed that city officials would work to explain Carnival to people from other



cultures so they won't be "confused" about "celebratory behavior in Cologne," as if the New Year's Eve attackers merely didn't understand that sexual assault is an inappropriate way to "celebrate" and all that's needed to uproot deeply held cultural norms is a little bit more information.

The Muslim World Has a Violence against Women Problem

To date, only 18 of the approximately 1,000 attackers have been confirmed as asylum seekers. But what about the rest of them? They may have been second- or third-generation immigrants from Muslim-majority countries, which suggests these communities are not assimilating sufficiently into European society and are not adopting its most important cultural norms.

It's often the second and third generation, not the first that is most resistant to Western culture.

This bodes ill for European countries that have seen massive migration from Muslim-majority countries in recent years because it's often the second and third generation, not the first that is most resistant to Western culture. Pew data shows that Muslims in Europe are having children at a faster rate than non-Muslim Europeans, so this ought to be a real concern.

Of course we should be careful not to portray all Muslim men as violent and repressive toward women. However, it would be madness to ignore the pervasive and persistent trend in the Muslim world of treating women as unequal to men and being physically violent toward them.

Until recently, women in Morocco (the most progressive Muslim state) couldn't travel without permission from their father or a male relative, and courts often forced rape victims to marry their rapist. Women in Morocco (including many of my own personal acquaintances) are habitually chased, harassed, and groped. Groping and sexual assault tend to happen when large crowds gather, like in Tahir Square during the Egyptian Arab Spring—and what happened across Germany on New Year's Eve.

Even a liberal Moroccan Muslim public intellectual, Fatima Sadiqi, once said in a lecture that men and women are equal, but

women belong in the home sphere while men belong in the public one. This is the mildest way to interpret Muslim cultural attitudes toward women.

But let's assume that it's the correct one, for the sake of argument. Is this an acceptable future for Germany, or for any part of Europe? Given the continent's rapidly changing demographics, where it's predicted that by 2050 10.2 percent of the population will be Muslim, this is a question Europeans must answer.

Assimilation Is Now a Life or Death Project

It seems German officials are not worried enough about the potential problems a huge influx of mostly male emigrants from Muslim majority countries may bring. We live in an age where suggesting migrants need to assimilate is seen as colonialist and anti-multicultural. Yet not expecting them to accept some of the core values of the country they would call home—like treating women with respect—invites violent outbursts like those on New Year's Eve, or worse, terrorist attacks like those in November in Paris.

Not expecting immigrants to accept some of the core values of the country they would call home—like treating women with respect—invites violent outbursts.

Perhaps these mass sexual assaults will turn out to be more unsettling to Europeans even than terrorist attacks, because it isn't just their security that's being threatened, but their way of life. One police man reported he had never seen such a lack of regard for the police in 29 years on the job as among the assailants on New Year's Eve in Cologne.

Yet it seems like no one in charge is really that concerned—or if they are, they're too politically correct to come out and say it, much like some liberals in America are reluctant to put the words "Islam" and "terrorist" in the same sentence.

If Europe's political leaders don't adequately address these real and troubling concerns and convince voters they're taking it seriously, they will have a rebellion on their hands. Ignoring these incidents in the name of "tolerance" will further fuel far-right nationalist



movements and xenophobic rhetoric. It's easy to see how attacks like this one will become a useful talking point for the far right, a ready-made argument against immigration. It's

also easy to see how it could point back toward the kind of nationalism that Europe has tried so hard to leave behind.

M. G. Oprea is a writer based in Austin, Texas. She holds a PhD in French linguistics from the University of Texas at Austin.

The Other Face of Jihad

By Phyllis Chesler

Source: <http://www.meforum.org/5779/other-face-of-jihad>

Jan 09 – On New Year's Eve, large gangs of Arab, North African, and Muslim men sexually assaulted women in a large number of cities in both Germany and in Austria.

These attackers, often a thousand strong, simultaneously stuck their fingers into every female orifice; groped, licked, hit, and terrified every vulnerable woman who was out celebrating the holiday.

The traumatized women did not all report these assaults to the police because they were traumatized and because many could not identify their attackers; there were so many of them. The media also under-reported these rapes—not until one hundred German women in the city of Cologne, a number that grew to close to 400 by the weekend, reported their assaults to the police, did the matter become public.

Some media, including feminist media, refused to name the perpetrators as being of Arab or North African descent or as "Muslims." They do not wish to be demonized as "racists" or "Islamophobes" but there is also a legitimate feminist reason.

European men rape European women every single day. But make no mistake: the pattern of sexual harassment and rape in the Muslim world in general is vastly different. Muslims in Sudan and Nigeria have perpetrated similar horrific attacks upon Christian, animist, and Muslim women. Similar atrocities took place in the former Yugoslavia, perpetrated by both Serb and Croat Christians and Muslims. Nevertheless, in an Islamist era, such Muslim-perpetrated attacks have assumed monstrous proportions.



Recall the roving gangs in Egypt in Tahrir Square in 2011, the mass groping and the assault of blonde American journalist Lara Logan. Realize that hundreds, perhaps thousands, of Egyptian Muslim and Christian women were also groped and sexually assaulted, whether or not they were wearing headscarves or face masks.

I am haunted by an Algerian story that took place in Hassi Messaoud in the summer of 2001. A mob of three hundred men, incited by a Friday sermon in the mosque, embarked upon a three-day pogrom against women whom the Imam had targeted as "immoral." The women had been bussed in from another province. Some owned hair dressing salons but most cleaned the offices of foreign companies. Shouting "Allahu Akhbar," the men went to war against 39 impoverished Muslim women. They tortured, stabbed, mutilated, gang-raped, buried alive and murdered these innocent but vulnerable women. Unsurprisingly, **some of the women who survived became mentally ill.** Algerian-American lawyer, Karina Bennoune, writes: "Terrorist attacks on women in Algeria have had the desired effect: widespread psychosis among the women; internal exile—living in hiding, both physically and psychologically, in their own country." In Bennoune's view, "the collective psychosis" is due to the "escalation of violence" by the "soldiers of the Islamic state."



(This is pre-Daesh in Iraq and Syria).

In addition to what happened in Germany and Austria, similar male Muslim group gropings and assaults of women on New Year's Eve have now been widely reported to the police in Finland and Sweden.

If Germany and Austria—if all Europe--does not find, prosecute, and deport all the men who took part in the recent New Year's Eve atrocities, they will soon discover that such attacks might become regular features of European life and will occur on most holidays; that, like Muslim women, European women will increasingly live in fear; begin to stay indoors; and that female workers will increasingly suffer

from post-traumatic stress symptoms. A European woman's quality of life and efficiency at work may decrease. This will be true for women of every ethnicity and religion.

How can one educate a barbarian lynch mob? In my opinion, only through the mosques and the Islamist media. That is not likely to happen any time soon. Until it does—or failing that—elimination of the growing threat to the West will be required. That will only begin to happen when people realize that such mass public gang rapes represent the normalization of "Islamist" ways and are also another face of jihad.

Phyllis Chesler, a Shillman-Ginsburg fellow at the Middle East Forum, is an emerita professor of psychology and women's studies and the author of sixteen books.



What makes a “smart gun” smart?

By Donald Sebastian

Source: <http://www.homelandsecuritynewswire.com/dr20160112-what-makes-a-smart-gun-smart>

Jan 12 – Every time a toddler accidentally shoots a friend or family member, a teen kills himself via gunshot or a shooter perpetrates an act of mass violence, public discussion circles back to “smart gun” technology. The concept has roots in a 1995 National Institute of Justice (NIJ) study that recommended a technology-based approach to reduce the incidence of police officers killed in gun-grabs by assailants. More recently, President Barack Obama’s message on gun violence included specific recommendations on federal actions designed to promote the development and commercialization of electronic gun-safety systems.

The term “smart gun” has been embraced by the popular press as a catchall for all forms of electronic personalized safety technology. The idea is to make sure a gun can be fired



only by its authorized user. But the different scenarios in which a gun could be inappropriately discharged call for fundamentally different safety systems.

The metaphor of a common door lock is a useful way to think about the various technological approaches. The key serves as the personal identifier. The pin tumblers that recognize the key inside the lock serve as the authenticator. And the latch serves as the block. All electronic gun safety systems must accomplish all three of these basic functions — identify authorized shooters, authenticate their credentials and then release the block to the firing mechanism.

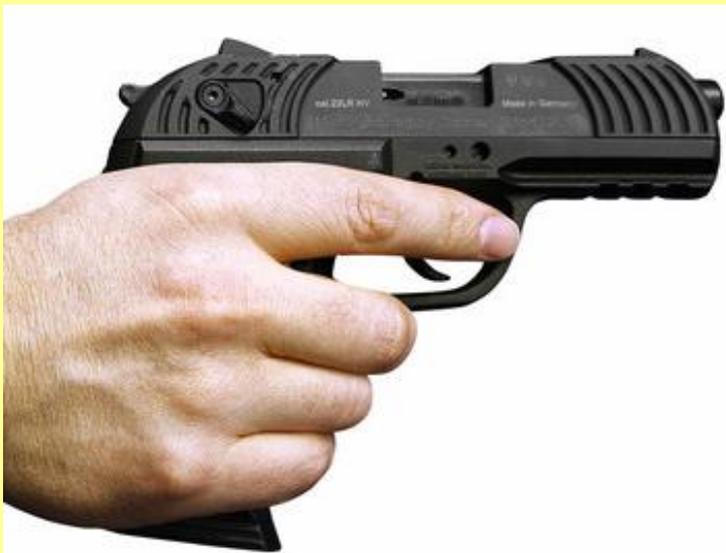
How one satisfies those needs is subject to the performance constraints of the application environment and the physical constraints of the weapon itself. These differences create distinct branches on the family tree of personalized-weapons technology.



TriggerSmart

Proximity sensors — can you hear me now?

One group of solutions owes its heritage to the NIJ study focused on protecting police weapons from



takeaway during a close quarters struggle. It suggested a token-based proximity sensor using Radio Frequency Identification (RFID). A number of working RFID prototype guns have been demonstrated, beginning with Colt's 1996 handgun and including Triggersmart (above), iGun M-2000 (left), and the Armatix iP1 (p.61).

In a badge, wristband or ring, a user wears a passive RFID tag, like those embedded in products to prevent shoplifting. It's the "token" and serves as the key in the front door metaphor. Like a physical key, it can be duplicated or shared.

What matters is possession of the token, not the identity of the token holder.





A wireless RFID reader is built into the gun and serves the role of authenticator. It generates a signal that activates the RFID tag to respond with an embedded code. If there's a match, the electromechanical components unblock the weapon firing system and the gun functions normally. The response time of these systems is generally dependent on the choice of electromechanical components used in the blocking system

(for example, servomotors, solenoids, shape memory metals), but are generally less than half a second. By design, the gun can remain active as long as there is a signal link, or in some configurations as long as pressure sensors detect the gun is being held.

If the tag is too far away from the transmitter to self-activate and respond, then it's like losing your key to the front door – the gun remains locked down. The Armatix iP1, for example, specifies a range of fifteen inches. If you try to spoof the transponder with a signal that does not contain the individual code, it's like using the wrong key — it may fit the slot but cannot be turned because it does not match the tumblers — and the gun remains locked down.

Various designs interfere with the mechanical firing mechanism in different places — from trigger bar to firing pin. There are also different technologies including solenoid actuators, shape memory alloy-based components and even electronic firing systems that serve as the deadbolt to be released upon receiving an authentication system. The details are proprietary to the individual products on the market and reflect design trade-offs in power consumption, free space to accommodate components and response time.

Proximity of gun to token is not an absolute determinant of rightful possession during a close-quarters struggle. But the technology does offer simplicity of operation, easy weapons exchange across permitted users (that is, partners) and reliably disables a weapon from use if the officer has been overpowered and the duty weapon taken.

Biometrics — do I know you?

The benefits of a token-based system in a street encounter become a liability in the home. The viability of the approach is wholly dependent on the owner securing the token where it cannot be accessed by denied users. But guns used for home protection are more likely to have token and weapon stored together to prevent any delay in the event of an intrusion. And anyone who has both the token and the weapon can fire it.

A second group of technologies evolved in response to child-safe handgun legislation adopted in New Jersey and Maryland in the early 2000s, designed to prevent unauthorized use of personal firearms stored in the home. Biometric authentication systems eliminate the physical token. Instead, a measurable physical characteristic of any authorized user becomes the key. It can't be taken without permission, counterfeit or otherwise transferred.

To date, fingerprints have been the primary attribute used in biometric systems. Kodiak Arms Intelligun and Safe Gun Technology's retrofit for rifles use fingerprint detection as a primary mode of security. If the fingerprint is the key, then the sensor and pattern matching software are the pin tumblers that perform the authentication function in these guns.

The most widely used sensor technology relies on capacitance imaging of the fingerprint. The variation in distance between the ridges and grooves of the finger and the sensor plate creates a distribution of electrical charge storage (capacitance) that can be measured in an array of conductor plates in the sensor. Other fingerprint sensors rely on



infrared (thermal) imaging, and some use pressure detection to create a digital pattern that is a unique representation of the print.

The sensor software needs to be trained to store acceptable patterns that may represent different fingers of a single user or various fingers from multiple authorized users. After that, any pattern that doesn't match within some specified tolerance is rejected. The reliability of the authentication process is influenced by the resolution of the sensor, the extent and orientation of the exposed finger, and physical factors that can interfere with the mapping. For example, moisture on the finger can defeat a capacitive detector, cold fingers can reduce the reliability of thermal imaging, and dirt, paint or gloves can obscure the fingerprint beyond recognition.

There are other types of biometric security being explored. One prototype sponsored by NIJ adopted vascular biometrics that detect the blood vessel structure below the skin surface. An emerging class of biometrics are dynamic or behavioral and combine some element of individualized physicality amplified by learned patterns of behavior. For instance, voice identification combines the structure of one's vocal chords with the breath patterns of speech learned in infancy. Electronic signature authentication captures the speed and pressure of pen on LCD pad (and not the image of the signature) as the signer executes handwriting in a pattern ingrained early in life.

Over the last fifteen years, our research team at NJIT has developed a gun safety system based on a novel behavioral biometric called Dynamic Grip Recognition (DGR). The team demonstrated that changes over time to the pressure pattern created on the grip of a handgun as one counter-braces the force of trigger pull were individual to the user, reproducible and measurable.

Our prototype detects grip patterns during the first 1/10th of a second of trigger pull and unlocks the weapon with no apparent lag to the shooter. Because DGR works during trigger pull of a properly held weapon, the approach can also reduce accidental firings during mishandling of a loaded weapon.

Reliability – can I trust you?

Reliability is always a concern raised in discussions of electronic gun safety systems.

The interior of a firing weapon is not a friendly environment for electronics, but there is now a sufficient history of ruggedized circuitry that failure rates of the underlying electronic hardware are orders of magnitude less than the predicted failure rates of the mechanical weapon (somewhere between 1 in 1000 and 1 in 10,000 depending on the precision and quality of the weapon).

Power is clearly a concern here, too. But advances in microprocessor technology and battery storage that have been driven by smart phones and portable electronics remove this issue as a show stopper. Motion detection and wake-up software can reduce battery drain during storage. Integrating the power supply to the ammunition clip and even charging by mechanical cycling are all ways to address power loss as a mode of failure.

In biometric systems, there is another element to consider: failure of the identification algorithm. Those are false negatives in which a rightful user is not recognized, or false positives in which an impostor is wrongly authenticated. **The recognition rates for fingerprint detectors have been claimed to be as high as 99.99 percent (1 in 10,000 failure rate).**

As the array of sensor technologies grows, one might expect a multisensor or multispectral approach to be the ultimate choice for biometric-based systems. These have the advantage of multiplying reliability rates when independent measures are used. For example, a fingerprint sensor with a 1-in-10,000 failure rate, coupled with a dynamic grip recognition with a failure rate of 1 in 1000, would produce a combined reliability of 1 in 10,000 x 1000 or 1 in 10,000,000.

Will we ever be able to buy one?

Throughout the 20-year-long discussion of "smart guns," the topic has been a lightning rod for debate between pro- and anti-gun lobbies. But too often, there isn't substantive knowledge of the underlying technologies, their appropriate use and their design limitations.





Personalized weapons technology can make a contribution to reducing death and injury from accidental or unauthorized weapons use. It is not a panacea — the technology can't stop shootings like Virginia Tech, Aurora or Sandy Hook, where lawfully purchase weapons were used. But it can be an option for gun buyers to ensure their weapons never fall into the wrong hands.

The existing platforms show that smart guns are not science fiction and could be a commercial reality much sooner than later. A [recent survey](#) by the NIJ identified thirteen different personalized weapon systems, at least three of which were deemed to be in commercial preproduction. Obama's initiative could be an important step to accelerate development and promote private sector investment necessary

to mature these technologies to the point of reliability and affordability that will spur consumer adoption.

Donald Sebastian is Professor of Chemical, Biological and Pharmaceutical Engineering, New Jersey Institute of Technology.

Rate of violent crime in England and Wales rising

Source: <http://www.homelandsecuritynewswire.com/dr20160113-rate-of-violent-crime-in-england-and-wales-rising>

Jan 13 – **A new method of analyzing crime statistics finds that violent crime in England and Wales is increasing, not decreasing.**

Distinguished Professor Sylvia Walby, Dr. Jude Towers, and Professor Brian Francis of Lancaster University developed the method and used it to analyze data from the Crime Survey for England and Wales over a 20-year period from 1994 to 2013-14.

Lancaster U reports that they found the rate of domestic violence has been increasing since 2009. The rate of violence against women has also been increasing since 2009. But violent crime against men is still decreasing.

The rate of violent crime overall has started to increase since 2009, driven by the changes in domestic violent crime and in violent crime against women.

These findings contradict the official view that violent crime in England and Wales is continuing to fall.

This increase is concentrated among "high frequency" victims — those who experience multiple attacks.

The research finds that domestic violent crime and violent crime against women have been increasing since 2009. Before this, these forms of violent crime had been falling since the mid-1990s. **The change point, from decrease to**

increase, coincides with the start of the economic crisis.

The researchers compare trends based on the number of victims, capped crimes, and all reported crimes. This new analysis finds that high frequency victims, rather than all victims, are key to the increasing rate of violent crime in England and Wales.

This new methodology rejects 'capping' and uses all reported crimes without increasing volatility. Official methods of estimating violent crime using this data cap the yearly number of violent crimes against any one individual at five, despite around 5 percent of respondents reporting a greater number than this. Capping is a widely used statistical technique designed to reduce year-to-year volatility when examining change over time, but this method can introduce significant bias.

The new method manages volatility through an alternative statistical technique of three year moving averages. This results in the same level of volatility but without introducing the bias caused by capping. The research analyses trends using segmented regression which allows the identification of change points.



Ten percent of Turks do not see Islamic State as terrorist body

Source: <http://www.reuters.com/article/turkey-politics-survey-islamic-state-idUSL8N14W3PN20160112>

Jan 12 – **Nearly one-in-ten Turks do not regard Islamic State as a terrorist organization, and more than 5 percent agree with their actions, according to a new survey published on Tuesday.**

The data was released on the same day as a suspected Syrian suicide bomb attack in the heart of Istanbul's tourist district which killed at least 10 people and raised **fresh fears of Islamist violence in the NATO member country.**

The United Nations, including Turkey, brand the group, which has taken swathes of land in Syria and Iraq, a terrorist organization.

The research, entitled Turkey's Social Trends Survey, was carried out by an Ankara-based think-tank and surveyed more than 1,500 people across Turkey – a predominantly Sunni Muslim nation – in November.

In response to questions, 9.3 percent of respondents said that Islamic State was not a terrorist organization, with **5.4 percent supporting its actions.**

Twenty-one percent said it represents Islam and 8.9 percent believe the group is a country or state, according to the research, which paints a picture of a small but significant pool of potential Islamic State sympathizers among Turkey's 78 million inhabitants.

Conversely, fears over terrorism, both generally and specifically from Islamic State and the outlawed Kurdistan Workers' Party (PKK), dominated the list of concerns expressed by respondents.

"There are two conflicting positions that we have here," Suleyman Ozeren, President of Global Policy and Strategy, the report's authors, told Reuters.

"But the high number of people supporting IS actions should concern us. It also tells us that prevention of radicalization policies should be the number one priority for the government. Once people are radicalized it's very difficult to deradicalize them."

Turkey has stepped up its fight against Islamists, playing an active role in the U.S.-led coalition bombing Islamic State in neighboring Syria and Iraq.

Last year it was rocked by two suicide bomb attacks blamed on Islamic State in the southeastern town of Suruc and Ankara, the capital. In the latter, more than 100 people were killed.

Critics have at the same time accused the Turkish government of failing to crack down sufficiently on Islamist networks using Turkey as a route to smuggle would-be jihadists into Syria.

Ankara has also been caught in bitter conflict with PKK militants since the collapse of a ceasefire last July.

The Social Trends Survey covered a range of topics, including President Tayyip Erdogan's desire to introduce an executive presidency.

Almost 50 percent said they favored the current parliamentary system, with 28.6 percent in favor of a presidential system. More than 22 percent said they had no opinion or declined to answer.

EDITOR'S COMMENT: 10% out of 74.93 million?

3 year old boy 'raped at asylum center in Norway'

Source: <http://www.independent.co.uk/news/world/europe/3-year-old-boy-raped-at-asylum-centre-in-norway-a6808551.html>

Jan 13 – Police are investigating reports that a toddler has been raped at an asylum center in Norway, it has been reported.

The alleged incident took place on 6 January at around 10pm at the Forus Akuttinnkvartering centre in Stavanger.

It is understood to have taken place in a communal area of the center and may have involved multiple perpetrators.



The victim is thought to be a three-year-old boy. His nationality has not been disclosed.

According to The Local, Police superintendent Bjørn Kåre Dahl said: “We have no suspects yet. We are investigating the case as if the worst thing has happened and that we are talking about the rape of a child.



“We will investigate further to find out what happened. If it is what we fear- a rape- then this is very serious. But we do not know for certain yet.” Mr Dahl added that several people have been questioned in relation to the incident, including a minor.

A spokesperson for the asylum center, Lars Petter Einarsson, told local media that they were aware of the incident and were cooperating with enquiries: “We had many people at work, both sanitation workers and security guards, but nobody saw anything.

“But we immediately took the case to the police, as is the routine, and they came out. We have had a good dialogue with them throughout.”



France brings in bulldozers to smash a third of the Calais Jungle after migrants REFUSE to move into new £20million housing because 'it looks like a prison camp'

Source: <http://www.dailymail.co.uk/news/article-3395901/France-brings-bulldozers-smash-Calais-Jungle-camp-migrants-REFUSE-new-20million-housing-looks-like-prison-camp.html>



Jan 12 – France has given protesting Calais refugees two days before bulldozing a third of the notorious Jungle camp, after 1,500 refuse to move into new government-built housing.





Jungle residents reject the new £20million camp, designed to accommodate 1,500 refugees in powered and heated converted shipping containers, complaining that it looks like 'a prison'.

However, French police today served the protesting refugees with eviction orders, telling them they have until Wednesday night to vacate their tents before bulldozers level the camp on Thursday.



Despite the much improved living conditions in the new camp, Jungle residents have refused to move, claiming to want to stay put in their makeshift tents.

'Community leaders', in the Jungle released a statement earlier today, 'respectfully declining' the local government's orders to vacate a third of the camp.

'We, the united people of the Jungle, Calais, respectfully decline the demands of the French government with regards to reducing

the size of the jungle.

'We have decided to remain where we are and will peacefully resist the government's plans to destroy our homes.

'We plead with the French authorities and the international communities that you understand our situation and respect our fundamental human rights.'

According to volunteers working in the Jungle, residents are reluctant to move into the new camp because 'it looks like a detention centre'.

The new camp consists of metal transport containers which have been converted into heated homes, complete with power sockets, heated towel rails, toilets and washing facilities,

Yesterday, charity workers complained at the constrained time scale they had been given by French authorities to move more than 1,500 people into the new £20million camp.



'We had been given a Wednesday deadline, although this timeframe is now less certain, to move and relocate approximately 2,000 refugees, including over 300 women and 60 kids,' charity HelpRefugees UK wrote in a statement on Monday.



© REUTERS

'We are doing our utmost to ensure the safe movement of the refugees. A particular concern is the large number of women and children.

'The refugees are not rejecting the new container camp. The new container camp can only accept a maximum of 55 new people per day and this is far below the numbers required. In the interim, refugees face what shelter they have being destroyed.'

The group added that they feared they would only be able to move some 200 of the people living in the area which will be destroyed come Thursday.

In the wake of the refugees' refusal to move, HelpRefugees has now said that they will respect the wishes of the Jungle community, while assisting those who are still willing to move.

The new facilities are located in the heart of the Jungle camp, which has ballooned in recent months and has evolved into a slum with shops, mosques and a church between the tarps and tents.

Up to 6,000 people were reportedly staying there in the months leading up to Christmas, though the number has decreased recently. Authorities are cautious not to allow housing to attract more migrants, and the goal is to reduce the Calais migrant population to 2,000.

EU Source: 'Brussels Won't Admit Migrant Policy Caused Cologne'

By Raheem Kassam

Source: <http://www.meforum.org/5790/brussels-migrant-policy-rape>

Jan 08 – A source within one of the European Union's security organizations has told *Breitbart London* exclusively that to his knowledge, no widespread discussions are being had at an EU level about the spate of migrant rapes that have taken places across the continent – with **Cologne, Hamburg, Helsinki, Paris, Salzburg, Zurich, and more cities**



now affected. EU leaders are said to be unwilling to admit the cause: Brussels policy on open borders immigration and migrant quotas.

Speaking on the condition of anonymity, the source told *Breitbart London* this afternoon that the EU has no "real analytical ability" to help it



inform policy decisions, therefore when an incident like this happens, there is no one to help guide the process. Instead, while Brussels is happy to dictate an open borders policy, and a policy of mandatory migrant quotas – it simply will not and cannot deal with the fall out. EU chiefs have been unusually silent on the issue of the migrant rape epidemic, with no real statements or leadership from the Presidents of the European Commission, European Council, or European Parliament on the matter.

The security source said:

Half the problem is no effective analysis is applied to these things in Brussels as there's no real analytical capability to inform policy decisions. So the dots between Brussels and EU policy on the one hand and security implications, social cohesion etc, particularly in the medium to long term – the second and third order effects' you might say – on the other are never joined. That is a serious and systemic problem. ... I can't guarantee that it's not been/being discussed in the cabinets of other institutions – as there is virtually no cross institutional information flow, coordination or cooperation on these things.

The news that the EU is unable or unwilling to deal with such a serious problem and global

news story serves to underline points made by Eurosceptics that the organization is not interested in the people of Europe, but rather, the political expansionism, the career political classes, and the bureaucrats: the European elite. But pro-EU types will likely argue back that this is further evidence that the EU needs to function as a unified government, so that institutions find it easier to share information and respond in time. Indeed, some may go so far as to say that a pan-European police force is the only answer to presumably orchestrated crimes like this across European borders.

EU chiefs have been unusually silent on the issue of the migrant rape epidemic.

Our source concluded: "The final point is that I suspect nobody will admit Brussels policy is inherently linked to what happened in Cologne – they will not welcome such a link – and the attitude will therefore be that such matters are for member states."

Lumping the blame for the mass migration at the feet of EU member states is likely to cause consternation – especially from Eurosceptic governments like those in Poland, Hungary, and Slovakia – though those countries, which have been stricter on immigration and related crime, are the ones who have suffered less from migrant crime in the past few weeks.

Over 1.4 million people are believed to have entered Europe from the Middle East and North Africa this year. While many estimates suggest the number is far fewer, these do not include the number of "overstayers" – those told to leave who don't – and those who remain "beneath the radar" and "do not register," according to EU sources.

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



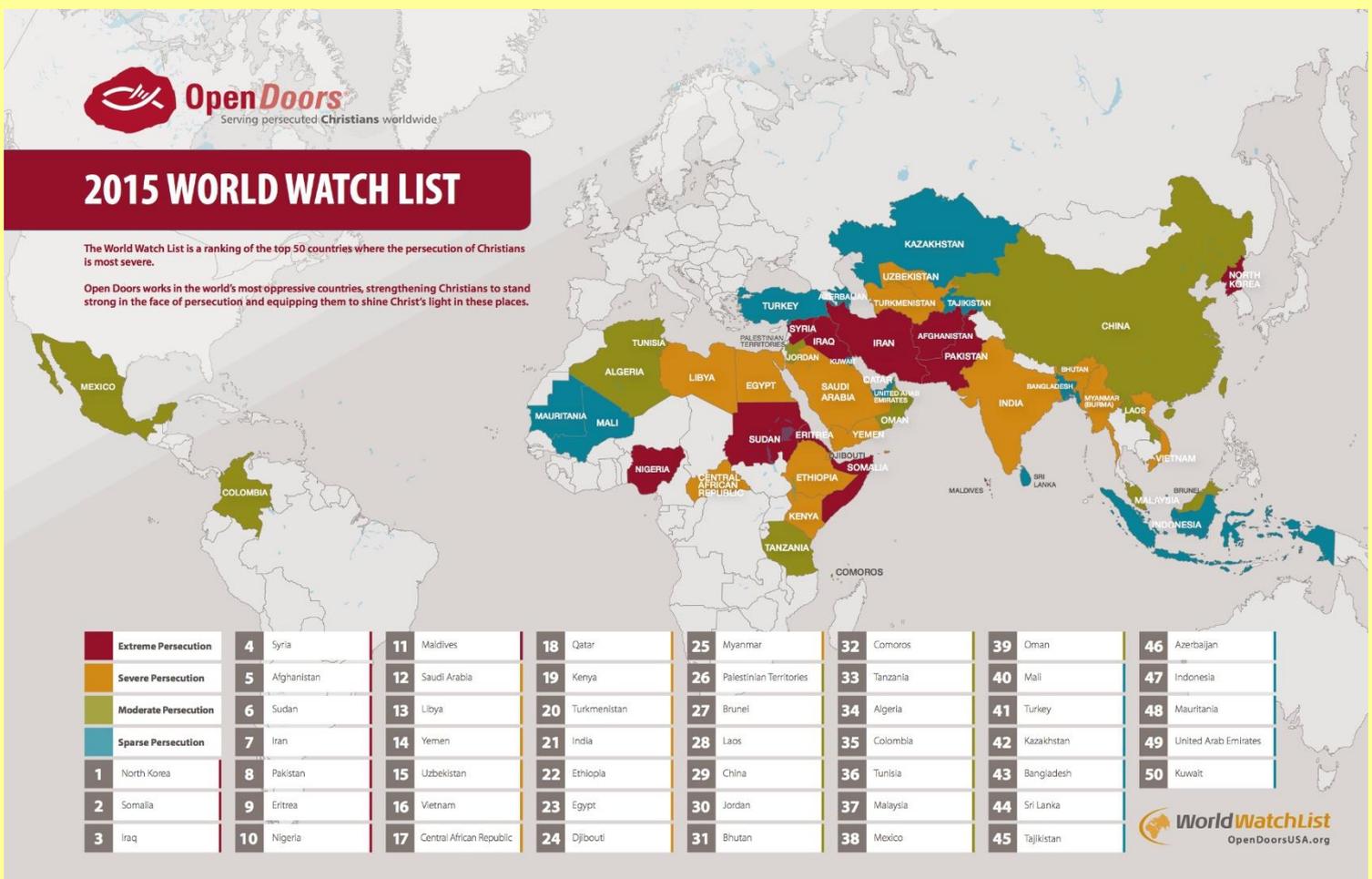
Global persecution of Christians more extreme than ever before: Report

Source: <http://www.homelandsecuritynewswire.com/dr20160115-global-persecution-of-christians-more-extreme-than-ever-before-report>

Jan 15 – Religious fundamentalism is sweeping the globe, according to figures released the other day as part of the [Open Doors 2016 World Watch List](#). “Persecution levels have been rapidly rising. This year, a country had to score 50 per cent more points than in 2013 to even make it onto the list,” says Open Doors CEO Lisa Pearce. “This is a cause of great concern.”

Systematic religious cleansing is widespread across Africa and the Middle East. Every year well over 100 million Christians are persecuted because of their beliefs.

Open Doors reports that North Korea remains the worst place to be a Christian while Iraq (2) has replaced Somalia (7) as the second most dangerous place to be a Christian. Eritrea, now nicknamed the “North Korea of Africa” due to high levels of dictatorial paranoia, follows at number three. Afghanistan (4), Syria (5), and Pakistan (6) are the next most difficult places for Christians.



Persecution has seen the biggest rises in Afghanistan, Pakistan, Tajikistan, Azerbaijan, and Eritrea. The number of refugees from Afghanistan and Eritrea has increased significantly. Persecution in each country is recorded by Open Doors using a point system, and while the lowest ranking country in 2013 had 35 points, this year's lowest ranking country had 53 points — an increase of more than 50 percent.

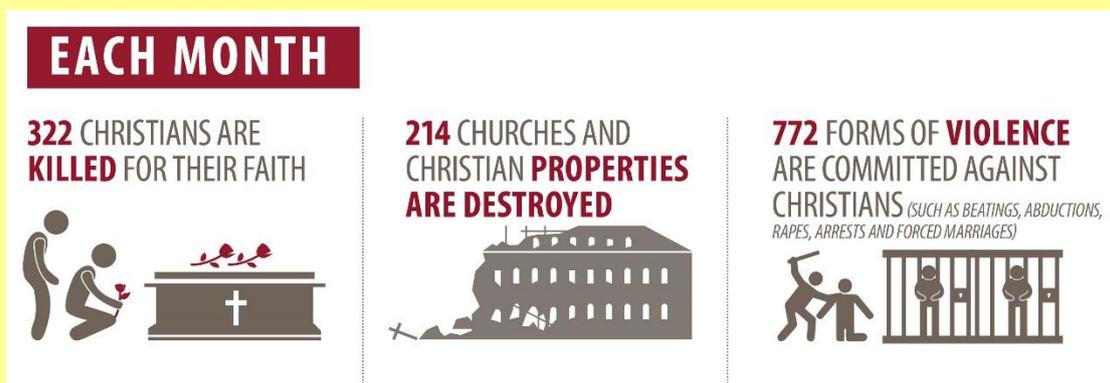


Emerging superpower India sees sharp rise in persecution

Emerging superpower India (17), the second most populous country in the world, has seen persecution levels rise dramatically for the third year running, taking it up to number 17 from a ranking of 31 in 2013. Analysis by Open Doors researchers found that the religious freedom of over 200 million people is severely threatened by a new wave of Hindu nationalist electoral successes that have seen the introduction of drastic anti-conversion laws. Pastors have been beaten and killed, and members of their congregations forced to convert to Hinduism in

spreads across Africa westwards from Somalia, almost every country from Kenya upwards is affected, with only a few exceptions around the Gulf of Guinea. Eritrea (3), Kenya (16), and Ethiopia (18) have all seen sharp rises in persecution levels.

Kenya rose again in the rankings from 19 in 2015 to 16 in 2016 after seeing its worst terrorism in fifteen years at Garissa College, near the Somali border. Some 700 students were held by extremists in April 2015 and 147 Christians were slaughtered after being separated out from their fellow Muslim students.



an increasing number of attacks across the country. On average a church is burned down or a pastor beaten three times a week.

Religious fundamentalism is spreading

Religious fundamentalism has fueled a rise in persecution in 80 percent of the countries on the list. North Korea remains the most dangerous place on earth to be a Christian, with estimates of around 70,000 Christians imprisoned in labor camps. Others who worship in secret risk death if they are discovered.

Religious fundamentalism comes in different forms. In North Korea and Turkmenistan (19) the population is required to revere their leader. Persecution in countries like Colombia (46) is driven by fundamentalist approaches of Animists and people following tribal religions.

Islamic fundamentalism

Islamic fundamentalism is most extreme and is rising most sharply in sub-Saharan Africa. More people are killed for their Christian faith here than anywhere else in the world. As fundamentalism in the form of radical Islam

Boko Haram has dominated the headlines with over 2,500 killings in Nigeria (12) this year. An estimated 2.1 million people are internally displaced in Nigeria alone, driven out by Boko Haram. Less reported violence against Christian farmers by Hausa Fulani tribesmen has also been extreme with conservative estimates putting it at more than 1,500 killings. Both factions are carrying out religious cleansing, aiming to eradicate Christianity.

The Middle East is a hotbed of Islamic extremism forcing millions to flee their homes after violent killings, hostage-taking and extreme violence against women and children. Syria and Iraq dominate the headlines with Libya moving up sharply. Syria is the largest displacement crisis globally. Aleppo was home to 400,000 Christians at the start of the civil war - now Open Doors estimates that less than 60,000 remain with families leaving every day. Summing up this year's figures, Lisa Pearce, CEO of Open Doors, said: "The persecution of Christians is getting worse, in every region in which we work - and it's getting worse fast. The trend is stark, as



are the consequences for real people — we should not expect that to change unless we are part of changing the situation. As a key voice within the international community and a generous provider of aid to a number of the countries on the 2016 World Watch List, I urge our government to do everything possible within their spheres of influence to affect what happens next. We will not get these days back.”

The Archbishop of Canterbury, Justin Welby, said: “In the Middle East Christians are

suffering terribly and around the world in many other places. Those who speak for them with information and authority are few and far between. Open Doors is clearly one of them.”

Prime Minister David Cameron said: “Standing up for religious freedom is a priority for my government. We are committed to promoting and protecting the right to freedom of religion or belief as one of the foundations of human rights. No matter what faith we follow, charity, compassion, responsibility and forgiveness are values which speak to us all.”

Norway to send “bicycle refugees” back to Russia

Source: <http://www.homelandsecuritynewswire.com/dr20160115-norway-to-send-bicycle-refugees-back-to-russia>

Jan 15 – In 2015, about 5,500 people, most of them refugees Syrians, cycled through the Arctic Circle Storskog crossing, on the border between Russia and Norway, taking take advantage of a loophole in the rules governing border crossing: Russia does not allow people to cross on foot and Norway does not let in drivers carrying people without documents, but bicycles are permitted at both ends.



Norway: bicycles



Greece: life-vests

The English-language Norwegian news site *The Local* reports that Sylvi Listhaug, who was appointed in December to head a new cabinet office, the Immigration Ministry, and who promised to stem the refugee flow, said this week that all those who crossed at Storskog without a transit visa would be sent back to Russia.

International Business Times reports that the Norwegian national police directorate did say, however, that it would avoid sending the refugees back on bicycles. Jan Erik Thomassen, told the broadcaster NRK that the police did issue an instruction that the bikes ditched after the crossing “be gathered up for use by the foreigners who will be returned to Russia. I can understand that it feels a bit awkward and odd,” he said.

The *Times* notes that **those who arrived on bikes to Norway typically obtained Russian visas in Damascus or Beirut, then flew to Moscow and took a train to Murmansk, which is located about 130 miles from the Norwegian border.**

The refugee issue has cause growing tensions between Norway and Russia. Since November, Norway has been trying to send back to Russia those asylum seekers who have Russian residency permits, but Russia has refused to allow them back into Russia.

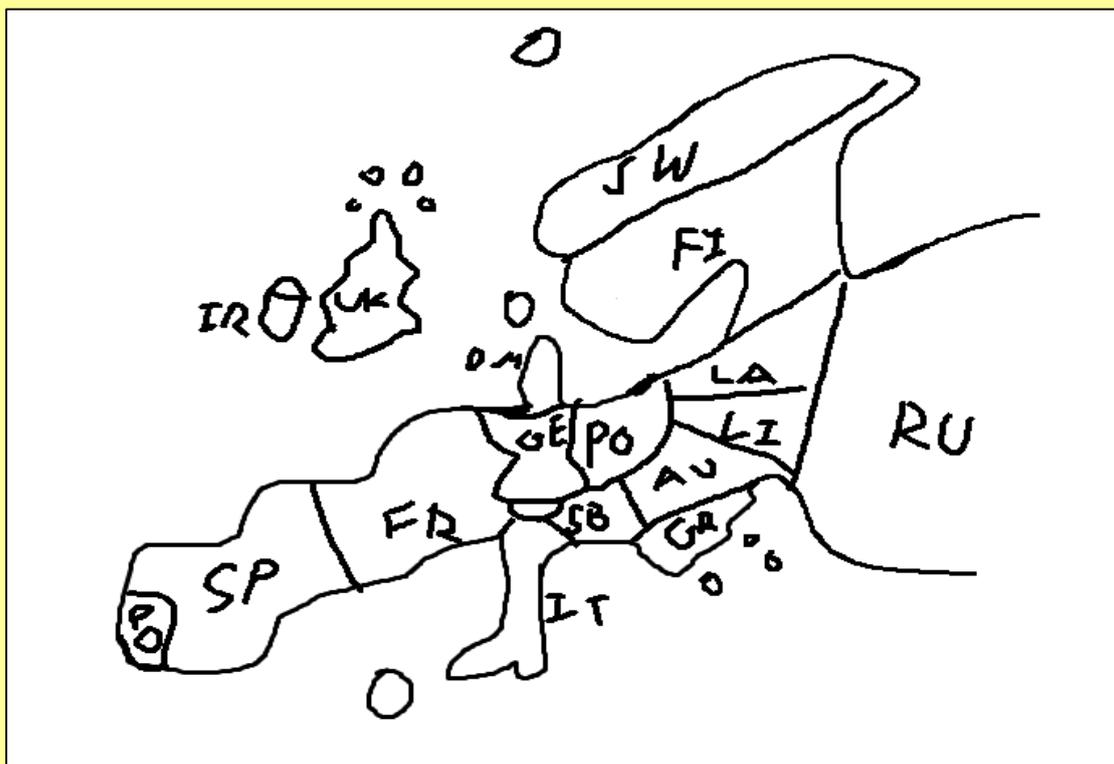
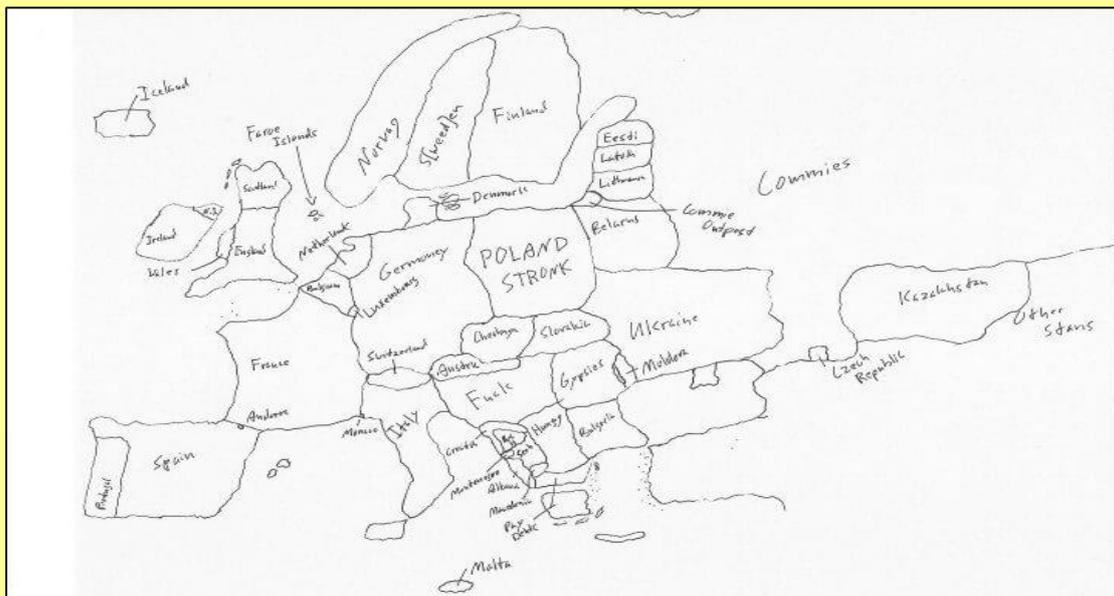


Svetlana Gannushkina, an immigration activist in Russia, told the *Guardian* that of the 12,000 Syrians now in Russia, 2,000 have been granted one-year temporary asylum and 2,000 another legal status. She noted that Russian authorities gave visas to Syrians, but often did not provide them with legal status or assistance in integrating.

Gannushkina said Russia had given permanent asylum to only 790 people, of whom two were Syrian. "What is 790 people for Russia?" she said. "That's one apartment building."

Hilariously Bad Attempts by Americans to Draw Europe from Memory, With an Unexpected Twist

Source: <http://brilliantmaps.com/europe-from-memory/>





Cologne Imam: "Perfume Is to Blame for Rape"

Source: <http://fortruss.blogspot.gr/2016/01/cologne-imam-perfume-is-to-blame-for.html>

Jan 18 – In an exclusive interview with REN TV, the preacher said that women are to blame for their rape by Eastern men – the alleged victim provoked visitors with revealing clothing and perfume.



Germany still cannot get away from events on New Year's Eve. In Cologne, migrants abuse the local population, especially the girls. Many German women were victims of sexual violence. Now in German society there is a schism: someone decides to use force to resist the refugee-rapists, someone sees any negativity towards the refugees as 'fascism'.

Throughout Germany self-defense units are being created, which include far-right

radicals and ordinary citizens. Within the immigrant community there is a different interpretations of New Year's Eve in Cologne. Some came to the rally and asked for forgiveness from the indigenous population. However, there were also those who did not want to turn the right cheek: for example, some mosques have already explained that all the blame belongs to European women.

In an exclusive interview to the journalists of REN TV, a local Imam told one of his sermons. *"We need to respond correctly, not to add fuel to the fire. To speak, and to find solutions. But if someone is attacking others, insulting them, it may be a dangerous situation. One of the reasons (why migrants raped girls), they were dressed as women themselves. If they go half-naked, use perfume, and then such things happen. Man, woman... It's like a splash of fuel to the fire..."* said our correspondent, Imam of the mosque "Al-Tawheed" in Cologne, Sami Abu-Yusuf.

EDITOR'S COMMENT: "Encourage the peasant and he will step on your bed" we say in Greece! Too much democracy and tolerance is bad for the health of European citizens. Enough is enough!

Canada avoids sex attacks by accepting refugee families over single men

Source: <http://www.homelandsecuritynewswire.com/dr20160119-canada-avoids-sex-attacks-by-accepting-refugee-families-over-single-men>

Jan 19 – Canada's immigration minister John McCallum said Canada will not suffer from Cologne-style sex attacks because the country "carefully selects" the Syrian refugees it takes in.



McCallum said that because Canada has welcomed Syrian refugees "with open hearts and love," Canadians will not be affected by their resettlement as Germany has been.

CBC reports that in a speech last week, McCallum addressed the issue of resettlement of the more than 10,000 refugees who arrived in Canada.

"We are mindful of the situation in Germany, but let me remind you that we are talking about 25,000 Syrian refugees, while Germany has accepted close to a million," said McCallum.



“The one’s we have accepted, we have carefully selected them. Most of them are not single men. Most of them are family members.

Canadians have generally welcomed the refugees, but in Germany the public sentiment is turning sour. **The German ZDF (Zweites Deutsches Fernsehen) TV conducted a poll which showed that Germans are more pessimistic about refugees, with 60 per cent of people surveyed now saying they believe Chancellor Merkel has handled the situation poorly.**

McCallum concluded his speech by saying: “I think the two situations are quite different in the sense of the numbers involved and the kinds of people coming into our country.

He said: “I also think we have a pretty good history in this area of successfully integrating newcomers.”

The minister stressed that Canada is not putting Syrian refugees ahead of its own people, especially when it comes to issues such as social housing.

The country had pledged to settle 25,000 refugees by 31 December, but lowered the figure to 10,000 in November.

EDITOR’S COMMENT: I wish us in Greece also have an ocean separating homeland from hot spots. If one carefully watch various immigrant-related videos’ it is evident that there are two categories of asylum seekers: young, strong men and families. The first category is the one involved in all urban clashes and unrest. Perhaps they could stay home and fight for their country – at least this is what we should have done perhaps because we have done it so many times in the past.

‘Stop asylum nonsense!’ Anti-refugee rally in small Dutch town erupts in violence

Source: <https://www.rt.com/news/329385-netherlands-anti-refugee-clashes/>



Jan 19 – A mass anti-immigration rally in the Netherlands has erupted into violence after riot police moved in to disperse a 1,000-strong march against the opening of a refugee center in the town of Heesch.





Protesters shot fireworks and threw flares at riot police who attempted to disperse a crowd of an estimated 1,000 people marching on the local town hall. The protesters took to the streets as officials held a meeting on Monday to discuss plans of accommodating some 500 refugees over the next 10 years. Far right activists tried to storm the local government headquarters, forcing local officials to abandon their

scheduled debate and evacuate the premises. The town “had given police extra powers” after a “demonstration ran out of control,” said a message from the mayor, Marieke Moorman, posted on the town’s website.

Authorities did not immediately announce the number of those detained or possibly injured in clashes.

The demo began peacefully at around 6:00pm GMT. Protesters carried signs bearing slogans such as “stop the asylum nonsense!” the crowd marched to the town hall, where the building was eventually pelted with eggs.



Clashes erupted hours after notorious far-right politician Geert Wilders demanded that male Muslim migrants be locked up in asylum centers, justifying the move as a measure of protection for Dutch women after the New Year’s Eve assaults in Cologne, Germany. Anti-migrant activists took the video message of the head of the Freedom Party (PVV) seriously, and moved quickly to organize an event via Facebook.

Protesters insist that 500 asylum seekers is a disproportionately high number for a town of some 12,500 people, urging authorities to scrap their plans for refugee resettlement.

Muslims Demand Cross Be Removed from the Swiss Flag Because They “Find It Offensive”

Source: <http://beforeitsnews.com/politics/2016/01/muslims-demand-cross-be-removed-from-the-swiss-flag-because-they-find-it-offensive-2771792.html>

Jan 18 – Muslims in Switzerland are demanding that the white cross be removed from the Swiss national flag because, as a Christian symbol, it “no longer corresponds to today’s Muslim multicultural Switzerland.” Poqari: The Muslim group behind this idiotic demand, known as the “Secondos,” began a nationwide campaign in October to urge Swiss citizens to change the flag to something that is “less offensive” to Muslims. How about this?



Gatestone Institute [reports](#):



CBRNE-TERRORISM NEWSLETTER – January 2016

The proposal to change the Swiss flag has been met with outrage across the political spectrum and is sure to fuel anti-immigrant sentiments in Switzerland.



Sylvia Flückiger, a counselor with the conservative Swiss People's Party (SVP), said the demands are: "Totally unacceptable. With our Swiss flag there is nothing to change. The next thing you know, they will demand even more, that we change our constitution."



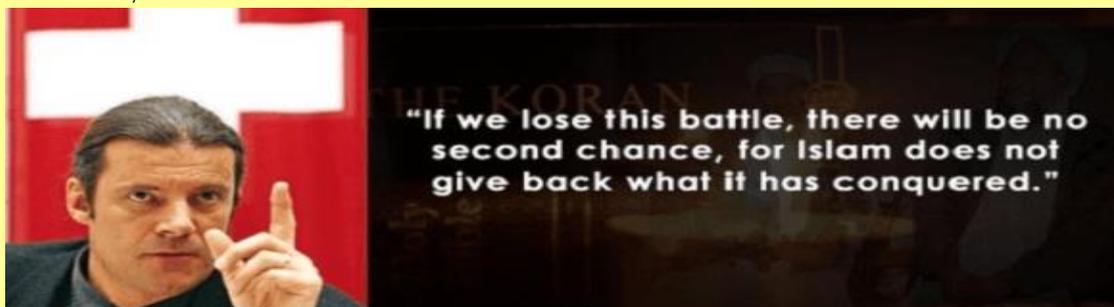
Marianne Binder, spokeswoman for the center-right Christian Democrats (CVP), said: "This is just what was missing, that we need to change our flag. The



Swiss flag is part of Swiss identity, precisely because it is inviting for all to want to be involved...even the immigrants."

Stefan Brupbacher, general secretary of the libertarian Free Democrats (FDP), said: "This is utter nonsense. The Swiss cross is an

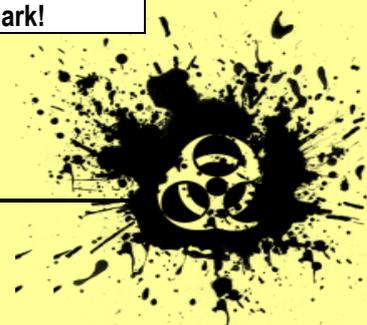
extremely successful and valuable global brand. It is a symbol of success and quality. We will tightly hold on to it, out of love for Switzerland."



EDITOR'S COMMENT: Surprised? Not really! Watch this video to realize why:

<https://shariaunveiled.wordpress.com/2013/04/14/what-islam-is-not-video/>

If the nine European nations with crosses into their flags (Iceland, UK, Norway, Sweden, Finland, Denmark, Greece, Switzerland and Malta) do not react then the consequences will be much more terrifying than changing a symbol in a flag. **Cross is more than a trademark!**



shame
on
you

Islamic scholar 'says Allah allows Muslim men to RAPE non-Muslim women to humiliate them'

Source: <http://www.express.co.uk/news/world/635942/Islam-Scholar-Saud-Saleh-Cairo-Slavery-Muslim-Women-Pagan-ISIS-Al-Azhar-University-Egypt>



Jan 19 – Professor Saud Saleh – from Al-Azhar University in Cairo, Egypt – reportedly said rape is allowed between times of “legitimate war” between Muslims and their enemies.



In a television interview Saleh appears to try to discourage the purchase of slaves from Asian countries for sex, claiming Allah has given Muslim men a “legitimate” way to have sexual relations with slave women.

The controversial professor allegedly said slavery existed before Islam and anyone could trade “freeborn men and women” but that Islam put slavery

“into order” by regulating when it was allowed.

It is believed she claimed the only “legitimately owned slaves come from among prisoners from a war”.

Saleh allegedly said: “The female prisoners of wars are ‘those whom you own’.

“In order to humiliate them, they become the property of the army commander, or of a Muslim, and he can have sex with them just like he has sex with his wives.”

Dr Andrew Holt, professor of history at Florida State College, said Saleh’s alleged comments are disheartening coming from a professor from “Sunni Islam’s most prestigious university” which is more than 1,000 years old.



He is concerned the statements could be viewed as approval for the enslavement of Yazidi women by barbaric ISIS - also known as Daesh.

Dr Holt explained how the fanatical death cult detailed that pagan women should be enslaved in its propaganda magazine Dabiq.

He said: "According to ISIS, the practice of forcing the Yazidis and other religious minorities into sexual slavery is a way to prevent the sin of premarital sex or adultery, as well as a sign that the Final Battle will soon occur.

"In the fourth issue of Dabiq, an article titled 'The Revival of Slavery before the Hour' explains that polytheist and pagan women can and should be enslaved."

EDITOR'S COMMENT: Lets "chain" Professor Saud Saleh for a few days to see if she likes it! It is really worrying how this virus change people and destroys brains on both sexes!

Europe's failed response to refugee crisis risks fraying local labor markets

By Nikos Passas and Nicolas Giannakopoulos

Source: <http://www.homelandsecuritynewswire.com/dr20160122-europe-s-failed-response-to-refugee-crisis-risks-fraying-local-labor-markets>

Jan 22 – Europe's refugee crisis neither began nor ended when the body of a Kurdish boy was found washed up on a Turkish beach in September.

In all, he was just one of 3,770 people who lost their lives in 2015 as over a million people crossed into Europe fleeing wars in Syria, Afghanistan and elsewhere. Some are forecasting that many millions more will try their luck in 2016 and beyond, as the conflicts prompting this exodus offer no end in sight.

Doctors Without Borders this week called the response of European governments a "catastrophic failure," pointedly summing up how countries' "capricious" policies of opening and closing borders created "senseless stress and hazardous conditions of passage."

As this crisis continues to unfold and countries in Europe reevaluate how to manage its challenges, it is essential that we take time to appreciate the broader context of the problem and some of the issues that have been neglected, specifically the negative effects on labor markets.

As specialized researchers in the fields of illicit flows, cross-border crime, corruption and development, our objective was to highlight how mismanaging the integration of refugees into local labor markets will not only harm the migrant themselves but could also imperil the system that has allowed our wealth and rights to flourish since the Second World War.

Abandoning one's land

A lot has been written about the causes of this exodus out of the Middle East, *hmmmm...*

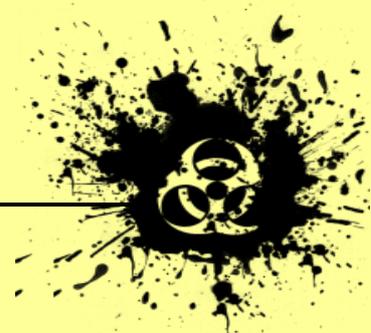
but it is worth remembering that the migrants are generally fleeing disasters caused or prolonged by Western policies. They are not leaving their homes by choice, despite what some U.S. and European politicians claim.

People do not massively abandon their land, possessions and loved ones for a dangerous and uncertain passage to a foreign country that may or may not be welcoming newcomers for no good reason.

And the causes go far deeper than the civil war in Syria. Sociopolitical, economic and power asymmetries, such as lack of security and stability, inequalities and threats to livelihoods, underlie the massive flight from misery, starvation, massacres and insecurity that the West has either caused or done little to alleviate.

Lawful but awful business practices have been producing financial, environmental, health and security disasters for decades. Interventions in Afghanistan, Iraq, Syria, Egypt, Libya and Somalia and a lack of progress in resolving the Kurdish and Palestinian plights have fueled the human flows and constitute negative "externalities" of U.S. and European foreign policies.

The refugee crisis, arguably, is simply a result of the



consequences of our own policy failures returning to our doorstep.

European integration at risk

While the plight of the refugees is desperate, the consequences of the crisis are also dire for some of the most significant achievements of European integration: open borders, social welfare, and human rights.

This was true before the current media frenzy about migrant participation in sexual assaults and other crimes in Germany, Austria and elsewhere, **but these recent events have darkened the atmosphere and given a**

hmmmm... **further boost to xenophobic reactions.** They have also affected the functioning of European labor markets in ways that have been poorly understood. Understanding these effects are the main issues we wish to address here because welfare, peace, human rights and open borders all depend on the capacity of governments to generate wealth through work and production.

Thriving black markets

As soon as refugees and other migrants pass through Greece – a typical entry point into Europe – they seek jobs whether they have a work permit or not. They have to earn something in order to take care of their families and themselves.

This vulnerability creates opportunities for employers in a saturated market to take advantage of them, pay low salaries (or even no salary at all), offer no benefits and demand long hours. In some cases, they seize migrant passports and exploit their illegal status to deprive them of justice and basic rights.

The impacts are felt by everyone, not just those being exploited. Governments collect less tax revenue, while locals lose jobs, and not just the low-paying ones. The wave of migrants includes many well-educated and skilled workers, so tensions and frustrations with local labor may grow into other parts of the economy.

In this tense environment, the usual labor framework breaks down as neither migrants nor employers go by the book, leading to a thriving black market in which tax, welfare and labor rules are broken routinely. Unfortunately there are very poor studies on black market

labor in the EU and the relationship between international migration and labor market suffer from a lack of studies or interest, mostly because the topic is a politically difficult one.

In any case, the vast and growing network of migrant smugglers is making matters worse, pushing more refugees into crime or forced servitude as the only solution to their personal crises. This in turn reinforces stereotypes and adds fuel to the racist and xenophobic flames.

These problems are drastically transforming Europe in terms of governance, social integration, security and labor. And this is only the beginning as some expect many millions more refugees to flow northward in the near future.

Furthermore, fears that terrorists are using the refugee flows as cover to sneak into Europe to commit atrocities are shaking the foundations of European integration and the agreements over free movement at the core of the EU project.

The refugees themselves are driven by the universal need for dignity, education,

work and a secure future for their *hmmmm...*

families. Classifying their efforts to work as illegal only worsens the problem by depressing salaries and leading to more criminality. Finding a way to integrate these refugees into labor markets is not only the charitable thing to do: it's also essential to preserving the European Union and its values.

Politicians and unions drop the ball

Unfortunately, official responses in Europe do exactly the opposite of what is required. As for worker representatives and unions, they are largely silent or inert.

Blocking "flows" when it comes to humans desperately abandoning wreckages at home have far more adverse consequences than positive effects.

Countries in Europe are failing to meet their obligations for crisis management, raising walls and blocking borders, shooting at refugees and even depriving them of assets over US\$1,000.

Efforts to crack down on the black labor markets – primarily by building costly walls, barbed wire and criminal justice measures – have been counterproductive so far and only incentivize organized



crime and create deeper and more sophisticated shadow economies. In other words, creating a “fortress Europe” will not work.

As for unions, and especially the International Trade Union Confederation (ITUC), one might expect them to be concerned about the erosion of labor market integrity and the rights of workers (local and foreign), something mandated by the International Labor Organization. Yet their silence on this issue has been deafening.

A systematic review of national and international unions shows that very few of them have taken a strong position on migrant labor or engaged in any concrete initiatives. Some stand accused of inertia and for looking out for their self-interests. A notable exception is the European Trade Union Council, which aims to speak with a single voice on behalf of Europe's workers and publishes a lot more than others on migration.

Even there, however, the serious effects of the crisis are insufficiently discussed and no innovative solutions are proposed. Instead, the emphasis is on putting pressure on European leaders to adopt common and sustainable approaches with regard to management and the respect of human dignity.

A better approach

There are few (if any) perfect solutions, but better approaches that respect the dignity of refugees while benefiting Europe do exist.

Christina Boswell and Thomas Straubhaar of the Hamburg Institute of International Economics, for example, suggest considering the following steps:

- expand legal entry programs to minimize the illegal entry and its consequences

- regularization of those already in the country for similar reasons
- financial incentives to business so that they employ legal workers
- appropriate employer sanctions for labor violations
- toleration and management (rather than prohibition) of unofficial and unrecorded labor practices.

The goal for disaster-fleeing populations is for



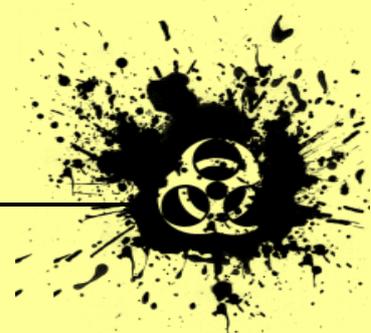
them to thrive, not just survive. This can constitute in fact also self-help for aging countries and weak economies that may benefit from the injection of energetic, eager and diversely skilled workers.

Meanwhile, unions could do more to help by focusing on the defense and improvement of all workers' conditions and rights. The migrants themselves are especially in need of information about what rights they do have, status so they are not easy prey for criminal enterprises and collective action to fight for services on their behalf.

So even if the U.S. and Europe cannot welcome all of the misery in the world — as French Socialist Michel Rocard put it — we should do our part to help alleviate it.

Nikos Passas is Professor of Criminology and Criminal Justice, Co-Director of Institute for Security and Public Policy, Northeastern University;

Nicolas Giannakopoulos is Vice Director of the University Observatory on Security, University of Geneva.



Syrian Authorities Seize Equipment for Use of Chemical Weapons

Source: <http://sputniknews.com/military/20151225/1032322678/syria-chemical-weapons.html>

Dec 25 – In August 2015, the UN Security Council authorized the launch of a Joint Investigative Mechanism (JIM) to identify people who were involved in the use of chemical weapons in Syria.



"Following a special operation, authorities in Latakia province seized equipment for using chemical weapons, as well as medical supplies and equipment of Turkish, Saudi, and Qatari origins which had been in the possession of terrorist organizations in Latakia's northern countryside," SANA reported on Friday citing a field commander in charge of the operation.

Syria has been in a state of civil war since 2011, with the army loyal to President Bashar Assad fighting several opposition factions and militant groups, including Daesh.

In August 2013, an unprecedented chemical weapons attack which killed more than 1,300 civilians took place in Ghouta, a suburb of the Syrian capital Damascus. Militants and Assad's government blamed each other for the attack. A mission to eliminate Syria's chemical arsenal was announced after the deadly gas attack. Moscow urged Damascus to place its chemical weapons under international control, and Syria agreed to the Russian initiative.

Army technology team helps field robot

Source: <http://www.army.mil/article/160212/>



Dec 18 – U.S. Army science and technology advisors have initiated a project to field a robot capable of assessing chemical, biological, radiological, nuclear, explosives, or CBRNE, threats from a safe distance.

Several Army organizations combined on a **new variant of the PackBot 510 robot** with enhanced CBRNE detection capabilities.



January 2016



"These robots are one-of-a-kind and filled a critical gap for Soldiers on the front lines in Korea," said Lt. Col. Mark Meeker, field assistance in science and technology advisor assigned to U.S. Forces Korea.

The robots provide the 2nd Infantry Division's 23rd Chemical Battalion with a remote, first-look capability in underground facilities, Meeker said.

Three U.S. Army Research, Development and Engineering Command, or RDECOM, science advisors from RDECOM-Pacific combined to facilitate the project. Science advisor James Koh initiated the process through an industry partnership.

"We leveraged an existing cooperative research and development agreement to integrate RDECOM's expertise with a contractor that builds robots," Koh said. "This opportunity is open to all comers and leverages the best of what industry has to offer."

The yearlong effort included RDECOM; Program Executive Office for Combat Support/Combat Service Support, or

PEO/CS/CSS, and the Rapid Equipping Force, or REF.

RDECOM's Tank Automotive Research, Development and Engineering Center built a prototype robot, and contractor iRobot began exploring tunnel training areas in South Korea.

"We conducted a technical demonstration at the 2nd Infantry Division's Micro Experiment," said RDECOM-Pacific science advisor Richard Moore, who facilitated the demonstration on behalf of RDECOM. "Once they saw the technology, they were completely on board."

The REF-funded modification of the 2nd Infantry Division's existing PackBot 510, with the enhanced CBRNE sensor capability, developed through the Cooperative Research and Development Agreement.

"It is our job to get off-the-shelf technology into the hands of Soldiers as quickly as possible," REF representative Peter "Gregg" O'Neill said. The Robot Logistics Support Center, or RLSC, part of PEO-CS/CSS, began building robots within a month.

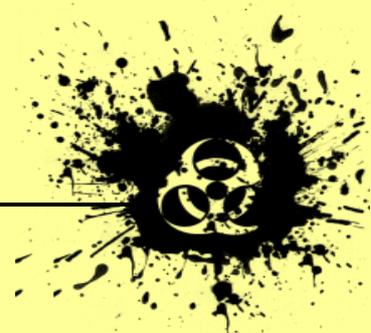
"We wanted to start burning the lead time, so we began the build as soon as we had the necessary details," said RLSC director Michelle



Link. "The expertise and help from iRobot was invaluable."

The robots arrived at Camp Stanley in November 2015, and the 501st Chemical Company tested the new robots in several scenarios to learn about the system's capabilities.

RDECOM-Pacific director Col. Ernest L. Dunlap emphasized that the command's expansive reach enables its subject matter experts



to quickly support Soldiers' technology needs. "One of our core missions is to ensure innovative solutions for the warfighter. We bring diverse stakeholders together and

leverage the strength of RDECOM's labs to expedite capability in response to Army warfighting challenges and support the Army Operating Concept," Dunlap said.

Emerging threats of chemical weapons

By Yasir Hussain

Source: <http://www.dailytimes.com.pk/opinion/24-Dec-2015/emerging-threats-of-chemical-weapons>

Dec 24 – During the meeting with Ahmet Uzumcu, Director General (DG) of the Organisation for Prohibition of Chemical Weapons (OPCW), who was on a two-day visit to Pakistan, Adviser to Prime Minister on Foreign Affairs Sartaj Aziz once again reaffirmed Pakistan's commitment to the objectives of the convention on the prohibition of chemical weapons (CWC). He also stated that Pakistan will remain actively engaged with the OPCW.

During the visit, Uzumcu expressed gratitude for Pakistan's remarkable contribution to the work of OPCW. He also inaugurated the newly established Regional CWC Assistance and Protection Centre. During the 20th session of conference of states party to the CWC, Pakistan was unanimously re-elected as member of the executive council of the OPCW for the term 2016-2018.

Indeed, Pakistan's efforts for the prohibition of use of chemical weapons are exemplary. As a confidence building measure, it has signed a joint agreement on the complete prohibition of chemical weapons with India in 1992. In response to Syrian chemical weapons issue, the official stance of Pakistani representatives to the OPCW was that "Pakistan remains opposed to the use of chemical weapons by anyone under any circumstances, and finds it totally unacceptable."

Toxic chemicals generally known as chemical weapons, have historically received significantly less attention as compared to nuclear weapons. Yet, these weapons of mass destruction have been massively used not only in battle fields but also in conflict zones. From World War 1 (WW1) to the current crisis in Syria and Iraq, hundreds of thousands people lost their lives or handicapped. During WW1 the massive usage of chemical weapons caused more than 100,000 fatalities and a million casualties. Unfortunately, we don't have accurate statistical data to prove disastrous consequences of chemical weapons but it is widely believed that the ratio of casualties are far enormous than what is mentioned in publically known documents.

The OPCW has 192 member states and it is the implementing body of chemical weapons convention. The major objectives of OPCW are destruction of existing chemical weapons, monitoring of chemical industries to prevent new weapons, assistance and protection to party states against chemical weapons, and international cooperation for implementation of the convention and promote peaceful use of chemistry.

Since its inception, CWC has demonstrated that chemical weapons can be verifiably prohibited and it has been instrumental in making such weapons illegitimate weapons of warfare. Its struggle for the abolition of these weapons is indeed remarkable. The monitoring of thousands of chemical industries around the world has never been an easy task. It requires continuous attention as well as monitoring of such facilities to avoid any kind of misadventure. In recognition of its tireless efforts, OPCW was awarded with Nobel Peace Prize in 2013 for dismantling of chemical weapons in Syria.

In her appraisal for the work of OPCW, Angela Kane, the top United Nations (UN) disarmament official stated, "If he were alive today, Alfred Nobel would be gratified indeed that his committee has once again recognized disarmament for its great benefit to humanity."

With the emergence of militant organization like the IS, incidents of chemical terrorism seem more likely to occur. In September 2015, the UN official reported that the IS is making and using chemical weapons in Iraq and Syria. The official further stated that the US has identified at least four occasions on both sides of the Iraq-Syria border where IS has used mustard agents. Chaotic regions particularly Syria and Iraq have become safe havens for such terror organizations to operate and use weapons of mass destruction on major scale.



Unfortunately, global community has paid less attention to these increasing chemical weapons threats. Though, IS is a common enemy for entire world community yet, the US and Russia, the two major powers, couldn't find common grounds in fight against IS. Both Moscow and Washington need cooperation not only in the fight against terror but also to realize their joint potential to save the entire Middle East from further chemical attacks. What lacks is a comprehensive strategy from both eastern and western blocs in dealing with one of the deadliest terror outfits. A number of experts who are capable of manufacturing deadly weapons from raw materials are believed to be among the IS' new recruits. It will be disastrous if Russia and the US fail to come up with a comprehensive strategy to wipe-out the IS. The spill-over effect will bring more chaos not only in Middle East but in other parts of the world too.

The world we are living in is passing through the phase of unprecedented scientific advancement and technological innovation. Scientific knowledge has brought many benefits to society but has also at times been a source of profound social evils. The continuous presence and further development of chemical weapons cast a dark shadow on peace initiatives particularly initiated by the OPCW. It also puts a question mark on scientific community too. It is the moral obligation of scientists and engineers to use scientific knowledge for the betterment of world community. With collective efforts, we can save millions of lives from the disastrous consequences of chemical weapons.

Yasir Hussain is a doctoral student in Education at the University of New Mexico.



Ultimate Waterproofing Industrial Coating

Source: <http://www.spillcontainment.com/ever-dry>

Ultra-Ever Dry is a superhydrophobic (water) and oleophobic (hydrocarbons) coating that will completely



repel almost any liquid. Ultra-Ever Dry uses proprietary nanotechnology to coat an object and create a barrier of air on its surface. This barrier repels water, oil and other liquids unlike any coating seen before. The other breakthrough associated with Ultra-Ever Dry is the superior coating adherence and abrasion resistance allowing it to be used in all kinds of applications!

Anti-Wetting

The superhydrophobic coating keeps objects dry, water and many other liquids simply repel off.

Anti-Corrosion

Maximum corrosion protection since the superhydrophobic coating ensures water and moisture never actually contact the base material.

Anti-Icing

The superhydrophobic properties of Ultra-Ever dry

keeps coated materials completely dry, eliminating the formation of ice.

Anti-Contamination

Dust, dirt, water and other liquids that contain bacteria or radiation never actually contact the surface of the coated material so bacteria and radiation is greatly diminished or eliminated and easy to decontaminate to sterile, if needed.



Self-Cleaning

The Ultra-Ever Dry repels dirty water and thick oils, and remains clean and virtually bacteria-free. When dust, dirt or other molecules accumulate on a superhydrophobic coated surface, a light spray of water or a blast of air grabs the dust and removes it.

Product Life-Extending

Many products fail from moisture, water, oil or simply getting too dirty for continued use. Use Ultra-Ever Dry superhydrophobic coating to extend the life of work gloves and other PPE, electric motors by preventing moisture on the windings, coat nuts and bolts to prevent corrosion, coat tools, equipment, and virtually any item that needs to be kept dry, corrosion free, de-iced, uncontaminated or clean. Save money, provide greater safety and a cleaner work environment.

EDITOR'S COMMENT: It would be highly interesting to see how this innovative product might be used in PPEs against CWAs/TICs.

ChemTag protects first responders against unseen chemical hazards

Source: <https://www.crisis-response.com/comment/blogpost.php?post=196>

Dec 14 – In 2013, over 17,000 firefighters in the US suffered an injury owing to exposure to chemical hazards, now new funding for research into a personal chemical warning device has been announced.



In any emergency incident there are obvious and hidden threats to people's lives, and hazardous chemical exposure can go unnoticed before the first responder feels any symptoms. It is therefore crucial that firefighters and other emergency personnel be able to detect these threats and remove themselves from the situation before coming to any harm.



Firefighters are sometimes unaware of dangerous levels of chemicals building up at incidents – last year, 17,000 firefighters were injured in such incidents in the US alone



The Department of Homeland Security has begun funding research to develop ChemTag, a personal chemical warning device. The goal is to create a device durable enough to withstand the harsh conditions faced by responders without burdening the life-saving efforts they provide. The low cost, user friendly device will detect levels of gasses like carbon monoxide, hydrogen cyanide, and methane and alert the wearer if these levels go above the safe limit as defined by the National Institute for Occupational Safety and Health Permissible Exposure Limits.

Partnerships have been developed with the Los Angeles Fire Department, Los Angeles Police Department, and the Chicago Fire Department to test the effectiveness of the device in the field. With the development of this type of technology, it will

reduce the risk of injury or death by alerting responders to potentially dangerous situations.

Transforming deadly chemicals into harmless dirt

Source: <http://www.homelandsecuritynewswire.com/dr20151229-transforming-deadly-chemicals-into-harmless-dirt>

Dec 29 – DARPA's [Agnostic Compact Demilitarization of Chemical Agents \(ACDC\)](#) program recently awarded two contracts to develop prototypes of a transportable disposal

DARPA notes that destroying bulk stores of chemical warfare agents is a challenge for the U.S. and international community. Current methods of eradication, such as incineration or hydrolysis, are not fully agnostic, require significant amounts of water and create hazardous waste that requires further processing. And the logistics required to transport large stockpiles from storage to a disposal site can be risky and expensive. ACDC aims to develop a "one size fits all" technology that would work on any chemical, without requiring water or creating large amounts of waste



system able to convert dangerous chemicals into safe output, such as harmless soil, using minimal consumables and creating no hazardous waste. If successful, the system could be used to safely destroy chemical warfare agent stockpiles on site without having to transport the highly toxic chemicals to a remote location for processing. The approaches could also ultimately find application in a variety of industrial chemical neutralization and clean-up efforts. The awardees are Southwest Research Institute (SwRI), San Antonio, Texas, and SRI International, Menlo Park, California.

for post-processing.

If the ACDC program is a success, it could radically streamline logistics requirements for destroying chemical weapons, according to Cheryl Lynn Maggio of the Defense Department's Joint Program Executive Office for Chemical and Biological Defense, where she serves as director of research and technology in the office responsible for elimination of chemical weapons.

"We are very interested in the new technologies DARPA is pursuing in the ACDC program, which could enable environmentally



safe, cost-effective onsite destruction of chemical warfare agents anywhere in the world.”

The challenges associated with today's chemical destruction methods are not widely appreciated in people's everyday lives, but were overwhelmingly apparent to those who were tasked with the international effort to destroy Syrian chemical weapons in 2014. The international community finally agreed to transport the stockpile from Syria for destruction at sea aboard the U.S. MV Cape Ray. “We were able to successfully and safely neutralize those chemical weapons on the Cape Ray using hydrolysis, but the logistical and other challenges were immense,” said Julia Limage of the Office of the Chief Scientist, Defense Threat Reduction Agency, who served as liaison officer on the ship during preparations for the chemical destruction process. Among those challenges, Limage said, were building what amounted to a customized floating neutralization lab able to operate on the high seas, capable of withstanding the potentially destabilizing effects of chemical drum movements and shifting fluids in the massive tanks used in the neutralization process. In addition, hazardous waste from the process had to be transported to several countries for post-processing and final destruction. Developing a deployable system that neutralizes dangerous chemicals and chemical weapons without creating hazardous waste as a by-product would have a major positive impact on U.S. and international elimination efforts, Limage said.

Under the ACDC program, SwRI will develop a field-deployable, automated process to destroy toxic industrial compounds. The company's approach combines a commercially available reforming-engine technology that, along with local soil, can convert organic molecules to non-hazardous components. The engine is

designed such that, as part of the destruction process, the organic molecules act as a fuel and efficiently generate recoverable energy that can be converted to electricity. The SwRI process is agnostic to the chemical to be degraded, and is a much greener process than either conventional hydrolysis or incineration, both of which are logistically intensive and require subsequent secondary treatment of large amounts of hazardous waste.

SRI International has partnered with Parsons Corporation and MarqMetrix, Inc., to develop a self-contained, transportable chemical destruction system that also relies on locally available resources. SRI plans to use a high-energy plasma technology to combust organic molecules, with built-in scavenging of reaction byproducts in the same reactor. A strong focus of the SRI approach is real-time characterization of reactor output, as well as development of process-control strategies to ensure that waste is reprocessed for complete destruction and conversion efficiencies of greater than 99.9999 percent.

“Both performers bring not only deep expertise in relevant chemistries but also, importantly, truly unique methodologies to address a potentially wide spectrum of chemical neutralization challenges,” said Tyler McQuade, DARPA program manager. “The desired outcome from the neutralization process is environmentally safe material — fertilized soil. Most toxins are produced from safe natural materials in the first place, so we want to put them back into their original harmless state.”

DARPA says that performers in the ACDC program are in the early stages of demonstrating that their proposed approaches are viable methods to destroy small organic molecules. Within six months, each group hopes to demonstrate 99 percent conversion to non-hazardous output.

Why ISIS Needs to Be Destroyed Now

By P. David Hornik

Source: <https://pjmedia.com/homeland-security/2015/12/31/why-isis-needs-to-be-destroyed-now/>

Dec 30 – **Dany Shoham, a top Israeli expert on chemical and biological warfare, has written a truly alarming overview of ISIS's progress on weapons of mass destruction (WMD).**



ISIS, Shoham notes, is “an even more brutal and radical group than al-Qaida” that “does not display any degree of morality whatsoever and does not fear the consequences of its deeds”; its “extreme...nature indicates that it would not hesitate to use any means to achieve its goals.”

ISIS, in other words, is exactly the kind of group you wouldn't want to be in possession of WMD. But it already is — and its WMD capacities are growing all the time.

No further proof is needed as to whether ISIS would use these weapons — it already has. Shoham gives a spate of examples, such as this one from around September 2014: “ISIS insurgents surrounded hundreds of Iraqi soldiers in the Saqlawiyah district of northern Fallujah, and used chlorine gas to suffocate them before detonating a car bomb. This resulted in the death of 300 Iraqi soldiers.”

Or: “This past August, ISIS launched 45 120mm-mortar shells tipped with mustard warheads against the Kurds in Makhmour, Iraq, and the effects included burns, blisters, severe damage to the eyes, respiratory system, and internal organs.”

How is ISIS getting a hold of this stuff? In June 2014, Shoham notes, the group took over “the huge Muthanna State Establishment, the main Iraqi chemical weapons facility dating back to [Saddam Hussein's regime].” Around that time, it also “captured approximately 40kg of uranium compounds at Mosul University.”

Does ISIS itself have the expertise to develop its WMD? No — but it brings in “Iraqi and Syrian scientists who are currently assisting the development of chemical weapons, particularly nerve and mustard gas. Foreign experts came from Chechnya and Southeast Asia as well.”

While ISIS, Shoham says, is very unlikely to get hold of a nuclear bomb, it is highly likely to “acquire further chemical agents, and seek to obtain biological and radiological agents for the first time...”

As for getting the toxic material to target populations, ISIS “could capture and use agricultural spraying airplanes or unmanned aerial vehicles. ISIS could also infect individuals with pathogens found in civilian facilities, and let them roam freely among the public and across borders as rudimentary dispersal devices.”

Such prospects are even scarier in light of ISIS's great skill at making forged passports and Western governments' eagerness to admit large numbers of unvettable Muslim immigrants into their countries.

As Shoham sums up: “An attack could occur anywhere across the globe.... Only an incapacitating blow against the group will remove this threat.”

What are the chances of such an incapacitating blow? Isn't ISIS already being driven back in Iraq and Syria?

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CBRN Activity and Attacks by Insurgent Organizations

Source: https://www.start.umd.edu/pubs/START_BAAD_CBRN_ResearchBrief_Oct2015.pdf



To examine the factors that make an organization more likely to pursue a chemical, biological, radiological, or nuclear (CBRN) weapon or use a CBRN device, we conducted an analysis using the Big Allied and Dangerous Version 2.0 - Insurgent (BAAD2-I) dataset (Asal et al. 2015). BAAD2-I includes information on all “code-able” organizations (that is, entities that are clearly distinct, bounded in terms of their membership, and persistent across time) that appear for at least one year in the Uppsala Conflict Database Program (UCDP) dataset (Themnér and Wallenstein 2011) during the period 1998-2012. UCDP includes only those insurgent organizations that (1) engaged in battle with a government that (2) resulted in at least 25 battle



deaths (3) during at least one year between 1998 and 2012. The BAAD2-I data was then married to variables (1) on terrorist incidents and fatalities drawn from the Global Terrorism Database (GTD), (2) on pursuit and use of chemical, biological, radiological, and nuclear capabilities and weapons drawn from the Profiles of Incidents Involving CBRN by Non-state Actors (POICN) dataset, and (3) on the nature and the “homebase” country of the state from the Quality of Government (QoG) dataset.

Methodology

The research team specifically looked at either pursuit or use of CBRN weapons and focused on organizational factors that might make this more or less likely. Because CBRN is rare for any organization, all count variables for CBRN pursuit or use were coded as “1” if the organization sought or actually used a CBRN weapon in a given year and “0” otherwise. Both standard and rare event logit models were estimated; the results were very similar. To more clearly disentangle causality, all independent variables were lagged by one year. We also included a lagged dependent variable to check for year-to-year correlation of activity. Robustness checks were done by leaving out country-level variables, fatalities, and pursuit/use in the previous year; the results were largely the same.

Variables included in the model

- **Pursuit or use by an organization:** The organization was coded as having sought the capability to use a CBRN weapon or having actually used a CBRN weapon (based on data from START’s Profiles of Incidents Involving CBRN Use by Non-State Actors – POICN database).
- **Number of fatalities:** Number of persons killed by a given terrorist organization in a given year, as reported in the GTD.
- **Size of organization:** The number of members in the organization reported in orders of magnitude (0-9, 10-999, 100-999, 1,000-9,999, 10,000 or more).
- **Leftist ideology:** The organization promotes economically leftist policies such as redistribution of wealth by the government and nationalization of industry. Most organizations that fall into this category will primarily be communist and socialist organizations and their variants (Marxist, Leninist, Maoist).
- **Religious ideology:** The organization is guided by some set of religious principles. Such organizations may seek to incorporate religious policies into public life or exist to protect a distinct religious group.
- **Age:** Years since the organization was known to be founded, or years since first known mention in any media outlet, or years since first known attack – whichever occurred earliest.
- **Number of alliance connections:** An alliance connection is defined as when organizations are reported to have cooperated with one another.
- **Number of rivalry connections:** A rivalry connection is defined as when organizations compete for the same object or goal, or try to equal or outdo another organization, or use violence against one another. Rivals seek to dispute another’s preeminence or superiority.
- **Receives funding from a state:** Organization is known to have received financial, material, or other forms of support from a state.
- **Involved in drug trafficking:** Organization is known to have transported and/or sold drugs in order to generate revenue for the organization.
- **Controls territory:** Organization is able to control movement into, out of, or within a given territory. The territory must be a substantial area (city, region, etc.) and not just an organization occupying a few buildings. Additionally, the organization must have control over the land for more than a few days.
- **GDP per capita in “homebase” country:** Measure of economic activity in the homebase country.



Organizations

Organizations plotting, attacking or threatening with CBRN, 1998-2012

Al-Qasa Martyrs Brigade	Al-Qa'ida	Al-Qa'ida in the Arabian Peninsula
Al-Qa'ida in the Lands of the Islamic Maghreb	Ansar Al-Islam	Armed Islamic Group
Communist Party of India- Maoist*	Eastern Turkistan Islamic Movement	Hamas*
Hizballah	Islamic State of Iraq and al Sham*	Kurdistan Workers' Party
Liberation Tigers of Tamil Eelam*	Mujahedin-e Khalq	National Liberation Army of Colombia
National Union for the Total Independence of Angola	Oromo Liberation Front*	Palestinian Islamic Jihad
Popular Liberation Army*	Real Irish Republican Army	Revolutionary Armed Forces of Colombia*
Salafist Group for Preaching and Fighting	Taliban*	

* Designates organizations that used CBRN weapons in one or more attacks.

Findings

The organizations that are most likely to pursue a CBRN device are:

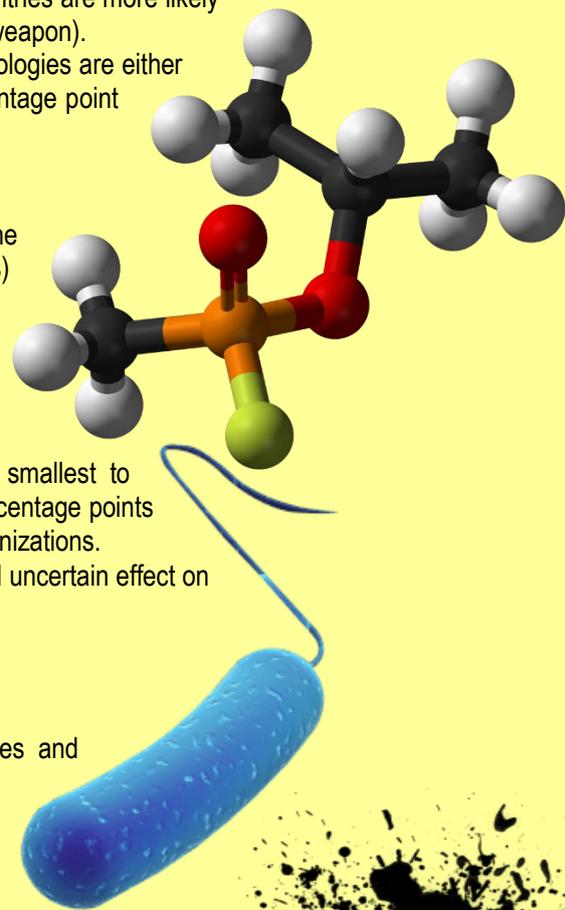
- ✓ Lethal - lethal organizations are the most likely to pursue and use CBRN capabilities.
- ✓ Allied – highly connected organizations engage in more CBRN development activity and more attacks.
- ✓ Based in wealthy countries – organizations in more developed countries are more likely to seek a CBRN capability (but this does not affect actual use of a weapon).
- ✓ No other factors have more than a 3 percentage point impact. Ideologies are either not significant or have extremely small effects – less than 1 percentage point (though positive).

Chemical Weapons

- While more common than any other form of CBRN activity, the dataset includes only 59 incidents (1.73% of all organization-years) in which a group made any attempt to acquire or use a chemical weapon.
- Lethality of the organization has by far the largest impact: The most lethal organizations are 99 percentage points more likely to engage in some form of chemical weapon activity.
- Alliance counts also have substantial impact: moving from the smallest to largest value increase the probability of chemical activity by 32 percentage points for religious organization and 26 percentage points for Islamist organizations.
- In contrast to CBRN use in general, rivalry counts have a small and uncertain effect on pursuit or use of chemical weapons.

Biological Weapons

- Alliance connections have a small positive impact
- Other variables do not have consistent results across techniques and specifications
- Rarity and unstable results suggests the need for new methods.



Iraqi Army Foils Daesh Attack on Strategic Chemical Factory

Source: <http://sputniknews.com/middleeast/20160107/1032781400/iraq-daesh-ambush.html>

Jan 07 – The Iraqi security forces have thwarted a planned attack by Daesh terrorists on a strategic chemical factory in the city of Samarra and continued their advances in Ramadi, Iran's Fars news agency reported on Thursday.



The terrorists were ambushed as they tried to enter the Al-Mothana factory 40 kilometers west of Samarra losing many of their men and several armored vehicles seized by government forces. Earlier, the Iraqi armed forces and volunteer units continued their advance in Ramadi after securing the central parts of the city.

Lt. Gen. Abdul-Ghani Asadi, commander of Iraq's anti-terrorism contingent, said on Sunday that parts of Ramadi still under Daesh control, would be liberated within the next four or five days.

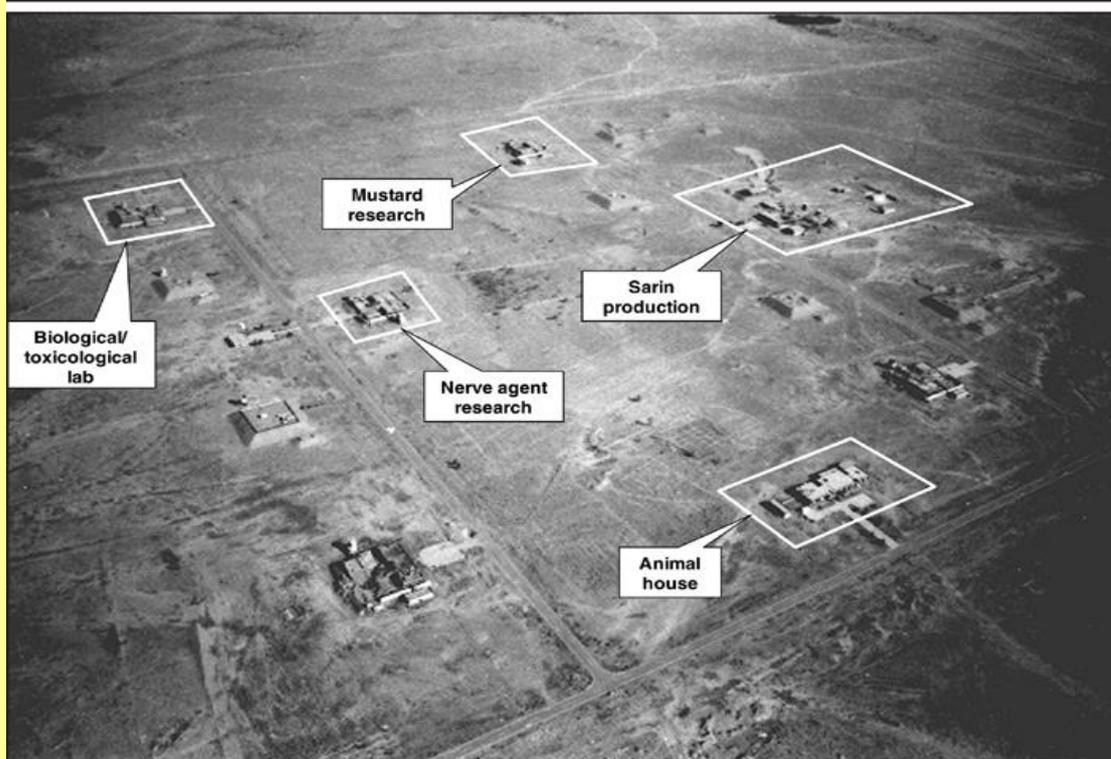


Figure 2. Al Muthanna R&D/Laboratory area after Desert Storm.

"Few areas of Ramadi are still controlled by the ISIL [Daesh], they will soon be liberated. We will establish full control over Ramadi in four to five days," Asadi said. The Iraqi Army will then move on to drive the terrorists out of the city of Fallujah, 70 kilometers west of the capital Baghdad.



"The area surrounding Fallujah is under siege, which allows for attacks on the ISIL militants there," Asadi added.

Last month the Iraqi armed forces began an operation to liberate the center of Ramadi from Daesh terrorists, who have occupied the city since May.

Iraqi Army Chief of Staff Lieutenant General Othman al-Ghanemi said his troops needed only days to completely drive Daesh out of Ramadi.

Most important differences between Chemical Safety and Chemical Security

Source: <https://www.linkedin.com/pulse/most-important-differences-between-chemical-safety>

The International Centre for Chemical Safety and Security plays an active role as a leading international center of excellence on chemical safety and security, and promotes chemical security culture at national, regional and global levels, among the different audiences, with an emphasis on governments, chemical industries, academia and NGO's. Chemical safety and chemical security can be understood as actions, which are implemented to allow chemistry processes to be used in a safe and secure way. Safety and security will always be a vital field for development with regards to chemicals; however only when an accident occurs we start questioning ourselves for ways of improvement.

In order to understand the importance of increasing awareness of chemical safety and chemical security it is essential to be familiar with the *differences* between these terms. *Chemical safety* applies to methods of preventing non-deliberate toxic chemicals being released into the environment; therefore, it is necessary to decrease the impact if such actions take place. *Chemical safety* focuses on areas such as; occupational and public safety, process safety, consumer safety and transport safety. On the other hand, *chemical security* deals with preventing deliberate releases of chemicals; therefore, preventing chemicals being obtained by threatening individuals.

There are several methods used to **increase awareness** of chemical safety and chemical security. The philosophical thought behind preventing toxic chemicals being released into the environment is to continue raising awareness so that people are aware of its importance. As a result, various conferences and projects will allow stakeholders to exchange their knowledge which will act

preventively with the new knowledge gained. Conducting, more in-depth seminars will improve the use of best practices and preventative strategies in the field of chemical safety and security culture.

To further increase the understanding of raising awareness of chemical safety and security, Dialogic Model of Change was used. The National Forum provides several of their own activities which benefit the higher education for the public good. One of the Models they describe is *Dialogic Model of Change* which represents the organizational change with an explanation of the four processes that are vital in this model. **The four processes include awareness, understanding, commitment, and action.** The National Forum states that firstly the organization must be **aware** of the threat posed to the environment (in this case chemical safety and chemical security) and involve the relevant stakeholders together. Similar stage called "contemplation" is used in The Trans theoretical model. The second stage of the process is: **understanding**. Once we are familiar with the threat, it is necessary to inform ourselves. Research and critical thinking is necessary to understand the complex questions and answers, it is possible to use the National Forum quantitative and qualitative methods. The third process is **commitment** and it is vital that stakeholders are involved in the research, throughout the process they learn about new obstacles and challenges that can be a barrier on the way. At last, **action** means putting all of the three aspects into practice. Only when the action is completed, one can see if all of the aspects provided real change. A simple method of awareness rising is the International



Chemical Safety Cards (ICSC) project that aims to promote safe use of chemicals in the workplace. The data sheets aim to provide vital information on chemicals. The target is set for workers and individuals responsible for occupational health and safety; however using the Dialogic Model of Change any stakeholders may inform themselves regarding a possible non-deliberate or deliberate chemical threat. To further develop the methods there are various institutions that provide assistance through workshops and seminars in the field of chemical safety and chemical security (example: ICCSS, OPCW, ILO, Homeland Security).

To Sum UP:

It is important to understand the differences in the terms of Chemical Safety and Chemical Security:

Chemical Safety: focuses on areas such as; occupational and public safety, process safety, consumer safety and transport safety,

Chemical Security: deals with preventing deliberate releases of chemicals.

To further increase the understanding of raising awareness of chemical safety and security, Dialogic Model of Change was used. There are four processes that are vital in this model. The four processes include *awareness, understanding, commitment, and action:*

1. **Awareness** of the threat posed to the environment,
2. **Understanding** of the threat to move into research and critical thinking,
3. **Commitment** to the research for learning about new obstacles and challenges,
4. **Action** of putting all of the three aspects into practice, and only then the result is achieved.

Chemical Safety and Chemical Security is an important topic, which is getting more and more attention every day. So, understanding of the topic is very crucial to discover viable solutions and create innovative ideas.

Officials: ISIS may be testing chemical weapons as terror group rapidly expands

By Catherine Herridge

Source: <http://www.foxnews.com/politics/2016/01/12/isis-testing-chemical-weapons-as-terror-group-expands-rapidly-officials-say.html>



A 120-millimeter chemical mortar shell which struck near Mosul Dam, Iraq on June 2015



Jan 12 – **There is growing evidence that ISIS is experimenting with chemical weapons as the number of foreign fighters' hits a new high, according to current and former government officials.**

Photos taken by the Kurds in northern Iraq last summer and fall and reviewed by Fox News show burns and blistering on the skin that a source on the ground there said are consistent with the use of chemical agents. The agents were described as "odorless, colorless and absorbed through the clothing," causing burns or illness hours later.

"I think it's, could be a perfect testing ground," former FBI intelligence officer Timothy Gil Sr. said. "They (ISIS) were particularly interested in using these chemicals in confined space environments, soft targets like shopping malls and movie theaters."

Gill who is doing his own independent research for an upcoming international conference on weapons of mass destruction said there is a disturbing trend, that ISIS is using safe havens in Syria, Iraq and potentially Libya as laboratories to learn how chemical agents impact the battlefield, with the goal of sharing their expertise via social media with ISIS followers outside the region.

"It's enough to use in a crude weapon that could really push the panic button," Gill said. "This now provides an opportunity to say 'this is working, we're now going to push this out to any potential lone wolf, lone actor that may have a background in chemistry.'"

A doctor who was in northern Iraq last year and asked not to be identified for security reasons, said he treated Kurdish fighters whom ISIS used as "lab rats for WMD," adding that the variety of burns and illnesses over several weeks suggested to him that "mustard gas, precursors, as well as neurotoxic acids" were being tested.

A U.S. government source said there is reason to doubt ISIS is experimenting with rudimentary chemical agents to instill fear rather than inflict mass casualties.

While ISIS tries to broaden its use of unconventional weaponry, the terror group also has broadened its appeal. A US intelligence official confirms to Fox News the number of foreign fighters has hit a new high -- more than 36,000 from 120 countries since the conflict

began in 2011, including at least 6,600 from Western countries.

A year ago, at the worldwide threat hearing on Capitol Hill, where the U.S. intelligence community publicly presented its global view on terrorism, the Director of National Intelligence, James Clapper said that since the conflict began, more than 20,000 foreign fighters from 90 countries had travelled to the region. A key figure is the number of countries affected, with the extremist ideology now drawing followers from 60 percent of the world's nations.

During congressional testimony before the House Armed Services Committee Wednesday, former senior intelligence officials said ISIS is expanding.

"ISIS has gained affiliates faster than Al Qaeda ever did -- from nothing a year ago, there are now militant groups in nearly 20 countries that have sworn allegiance to ISIS," former CIA deputy director Mike Morell said. "They have conducted attacks that have already killed Americans."

On the development of unconventional weapons, Morell added, **"They have made two things very clear publicly in documents that have come out. One is that if they acquire these weapons they would use and they wouldn't care that the vast majority of those killed were civilians and they have also provided a religious justification very similar to Al Qaeda's, in fact I think it is identical to Al Qaeda's justification for using such weapons."**

The Special Presidential Envoy for the Global Coalition to Counter ISIL (ISIS) recently briefed reporters in Washington DC, emphasizing the overall trend line is in the right direction, pointing to progress securing the Turkish border to stem the flow of foreign fighters.

"This is a challenge like we've never seen before," Brett McGurk said, "The world has never seen something like this, upwards of 35,000 now foreign fighters from 100 countries all around the world supercharged by



social media and Twitter and everything.

Catherine Herridge is an award-winning Chief Intelligence correspondent for FOX News Channel (FNC) based in Washington, D.C. She covers intelligence, the Justice Department and the Department of Homeland Security. Herridge joined FNC in 1996 as a London-based correspondent.

Toxic Cloud Covers Brazil's Port of Santos after Chemical Explosion

Source: <http://sputniknews.com/latam/20160115/1033170255/toxic-cloud-brazil-port-santos-chemical-explosion.html>



Jan 15 – A cargo warehouse, located in the Guarujá area near Santos, São Paulo state, has exploded after a water leak caused a reaction with stored chemicals, Brazil's *Veja* magazine reported late Thursday.



Containers stored at the cargo terminal belonging to the Localfrío Company contained **hydrochloric acid and sodium dichloroisocyanurate**, a disinfectant, Localfrío representatives said, according to the magazine.

A series of fires and explosions broke out after water reacted with the chemicals, causing a large toxic cloud to spread through the port area.

Firefighters have not gained complete control of the fire



CBRNE-TERRORISM NEWSLETTER – January 2016

by nighttime, Guaruja's fire department said.

Eye irritation and respiratory problems caused **51 people to be hospitalized**, Guaruja City Hall said, according to the magazine. Local authorities evacuated the port and surrounding residential areas while urging others to stay inside.

Organic, inorganic and toxic substances caused eye irritation, throat, nausea and fainting, Guaruja's mayor stated. The State Dock Company of Sao Paulo suspended the port's operations, stopping ship movement as a precautionary measure.

Sodium dichloroisocyanurate is a highly toxic product, which acts as an irritant as well causing long-term environmental damage, particularly to aquatic life. The chemical is stored away from water and direct sunlight.

Avon Protection CRS15 CBRN Protection System

Source: <http://www.avon-protection.com/products/crs15.htm>

Complete System

- Leading edge decontamination capability
- Full respiratory protection provided utilizing the NH15
- Full skin, hand and touch protection

Discreet System

- Discreet packing
- Branded and unbranded options available

Ease of use

- User friendly
- Clear instructions and operating procedures

Training

- Training packages available at an additional charge

Approvals

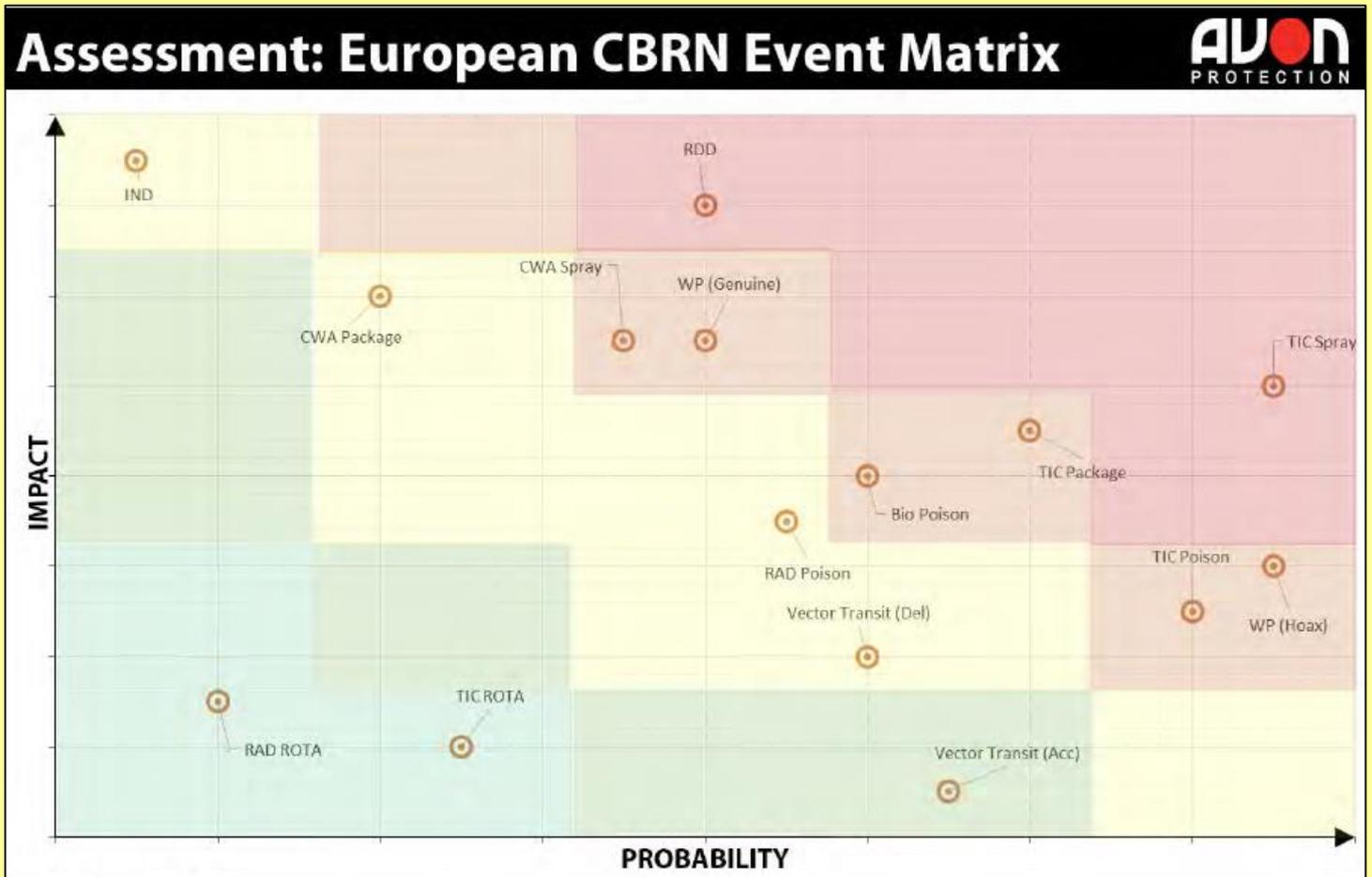
- NH15 Escape Hood is approved to the NIOSH CBRN APER Statement of Standard & PPE Directive 89/686/EEC article 10 type examination for CE marking.
- The CRS15 system is not certified as a kit, however all individual items of the CRS15 carry an approval body mark.



Chemical Warfare Agents		Biological Warfare Agents	
Nerve	Tabun Sarin Soman Cyclosarin VX	Bacterial	Anthrax Brucellosis Cholera Tularemia Plague
Blister	Sulfer Mustard Nitrogen Mustard	Viral	Smallpox Ebola
Blood	Hydrogen Cyanide Arsine Cynogen Chloride	Toxins	Botulinum Ricin



Choking	Chlorine Phosgene	Radioactive	Alpha dust particles Beta dust particles Gamma dust particles
Riot Control	Chloracetophenone Ortho-chlorobenzylidene Malononitrile	Toxic Industrial Chemicals	Acids Caustic Gases Petrochemicals Pesticides Many other TICs



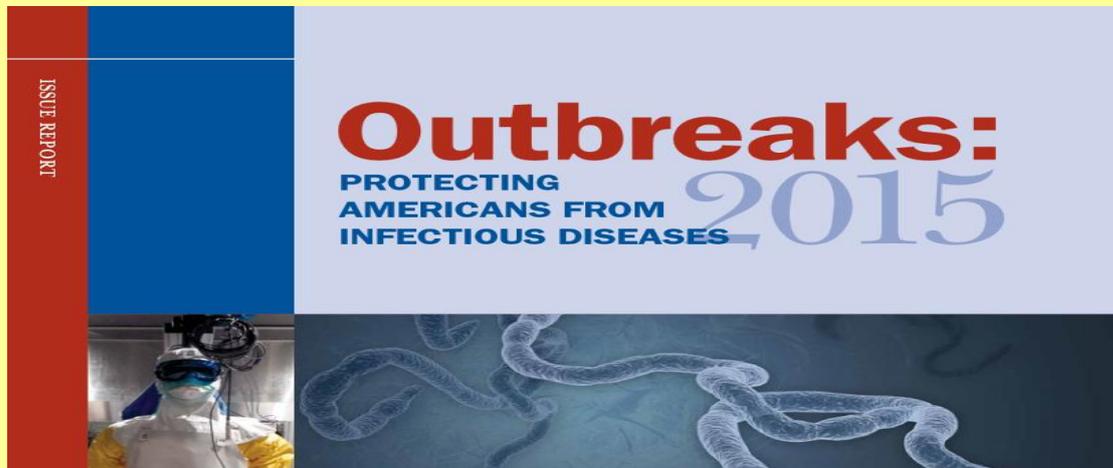
IND: Improvised Nuclear Device; **ROTA:** Release Other Than Attack; **Acc:** Accidental;
WP: White Powder



Protecting Americans from infectious diseases 2015

Trust for America's Health

Source: <http://healthyamericans.org/assets/files/TFAH-2015-Outbreaks-FnIRv.pdf>



► Read the full report at source's URL.

“Kill switches” shut down engineered bacteria

By Helen Knight

Source: <http://www.homelandsecuritynewswire.com/dr20151228-kill-switches-shut-down-engineered-bacteria>

Dec 28 – Many research teams are developing genetically modified bacteria that could one day travel around parts of the human body, diagnosing and even treating infection. The bugs could also be used to monitor toxins in rivers or to improve crop fertilization.

However, before such bacteria can be safely let loose, scientists will need to find a way to prevent them from escaping into the wider environment, where they might grow and cause harm.



To this end, researchers at MIT, the Broad Institute of MIT and Harvard, and the Wyss Institute at Harvard University have developed safeguards in the form of two so-called “kill switches,” which can cause the synthetic bacteria to die without the presence of certain chemicals.

In a paper published in the journal *Nature Chemical Biology*, the researchers describe their two kill switches, which they call “Deadman”

and “Passcode.”

Stand-alone circuits

There have been a number of attempts to develop kill switches over the past year, according to James Collins, the Termeer Professor of Medical Engineering and Science in MIT's Department of Biological Engineering and Institute for Medical Engineering and Science (IMES), who led the research.

These include efforts to reprogram the entire genome of the organism to ensure that it requires the presence of certain amino acids or other chemicals in order to survive, divide, and grow.

However, this approach can be both labor- and resource-



intensive, and could introduce changes that might make the organism less useful as a monitoring or diagnostic tool, Collins says.

“In our case, we are introducing standalone circuits that can be popped in to any number of different organisms, without needing to rewire or change much of the genome in order for it to accommodate the switch,” he says.

The Deadman switch, for example, is part of a bacterial strain that needs an external chemical to prevent a continuously expressed toxin from killing the cell.

The switch was motivated by the so-called dead man brakes on old trains, which required a conductor to be in constant contact with the handle or pedal in order for the vehicle to move forwards, Collins says.

The system, which builds on previous work in Collin’s lab, consists of a genetic “toggle” switch made up of two transcription factor genes.

The switch can flip between two states, in which either one of the two transcription factor genes is turned on. The researchers altered the expression of these two transcription factors, leading to strong expression for one gene and weak expression for the other.

The presence of a small molecule keeps the switch in its weak state, but as soon as this is removed, the switch will flip to its strong state. The switch is programmed to express various toxins as soon as this strong state is turned on, Collins says.

“If the system does get flipped, by removing the small molecule, it would express toxins at a very high level that could then quite rapidly and readily kill off the bug,” he says.

A cellular logic gate

The Passcode switch, in contrast, acts like a logic gate in that it requires a specific combination of several chemical inputs in order to enable the genetically modified bacteria to survive and proliferate.

The switch consists of a set of modular transcription factors that contain separate domains for sensing small molecules — the inputs — and for regulating gene expression. By mixing and matching these functional domains, the researchers are able to construct hybrid transcription factors in which different

small molecule inputs are linked to the control of a specific promoter for gene expression.

If the transcription factors detect that the right combination of small molecules are present in the environment, then the bacteria will survive. But if the correct combination of input signals is not present, the switch kills the bug, according to the paper’s lead author Clement Chan, a postdoc in Collin’s laboratory.

“If any of the required inputs are not correct, then the bug will die,” he says.

By using different transcription factors, the researchers can change the passcode combination of small molecules needed for the cell to survive. In this way the switches can be easily changed to meet the needs of different applications, Chan says.

“It makes our biocontainment system much more flexible, so you can apply the passcode system in a much wider range of applications.”

The switches could also be used to protect a company’s intellectual property, Chan says.

“Imagine that you own a certain bug, and you don’t want your competitors to use it. Then you could incorporate this device so that only people who know the passcode can use your bug,” he says.

Even if a competitor somehow managed to get hold of the passcode, the researcher could simply change it by using different transcription factors, he says.

Scaling up

The new safeguards have exciting possibilities for scaling kill switches in two important directions, according to Farren Isaacs, an assistant professor in the Systems Biology Institute at Yale University, who was not involved in the research.

First, they establish the feasibility of using kill switches across diverse species, Isaacs says.

“They also expand the passcode switches to a large combination of synthetic molecules and transcription factors for many unique sets of bio-contained strains and customized cocktails of synthetic small molecules,” he adds.

Having successfully tested the two kill switches in *Escherichia coli*, the researchers are now hoping to incorporate them into living diagnostic or therapeutic tools,



designed to target a variety of bacterial infections, Collins says.

— *Read more in Clement T Y Chan et al., “‘Deadman’ and ‘Passcode’ microbial kill switches for bacterial containment,” [Nature Chemical Biology](#) (7 December 2015).*

Emergency Department Crowding in Relation to In-hospital Adverse Medical Events

A Large Prospective Observational Cohort Study

By Sandra Verelst, MD, PHD; Pieter Wouters, MSC; Jean-Bernard Gillet, MD; Greet Van den Berghe, MD, PHD

J Emerg Med. 2015;49(6):949-961.

Source:http://www.medscape.com/viewarticle/855324?nlid=94923_545&src=wnl_edit_medp_emed&uac=82598DG&spon=45&implID=937663&faf=1

Background: Emergency department (ED) crowding has been linked with adverse medical events. However, this association was inadequately controlled for potential confounding variables.

Objectives: To investigate whether ED crowding is independently associated with risk of in-hospital death and morbidity, and longer total hospital stay.

Methods: Prospective observational cohort study of all patients (≥ 18 years) presenting to the ED of an academic teaching hospital in Leuven, Belgium from June 21, 2010 to July 20, 2012. Multivariate logistic regression and proportional hazard analysis was used to control for risk factors. ED occupancy was determined for 108,229 included patients and labeled "ED crowding" when occupancy was within the highest quartile of occupancy. Outcomes within 10 days of ED admission included in-hospital death, hospital-acquired morbidities, and total hospital stay.

Results: During ED crowding, a median of 58 (interquartile range 55–63) patients were present for 40 licensed treatment bays. After controlling for all baseline risk factors and as compared with the lowest quartile of ED occupancy (30 [26–32] patients), ED crowding was not independently associated with mortality (odds ratio [OR] 0.94, 95% confidence interval [CI] 0.74–1.19; $p = 0.6$), but tended to be associated with higher incidence of hospital-acquired pneumonia (OR 1.24, 95% CI 0.96–1.62; $p = 0.09$).

Conclusions: Failing to control for baseline risk factors may have led to false-positive associations between ED crowding and mortality in previous studies. After controlling for risk factors, we showed that ED crowding was associated with longer hospital stays but not with increased mortality.

► [Read the full paper at source's URL.](#)

Public Health & Political Knowledge

By Raphael M. Barishansky

Source:http://www.domesticpreparedness.com/Medical_Response/Public_Health/Public_Health_%26_Political_Knowledge/

Public health professionals fill vital roles in homeland security preparedness. One of these roles is to ensure that government decision makers are well informed on issues that may affect the life and health of – perhaps not all, but at least most of – their community members.

Sept 16 – **When referring to public health preparedness efforts, the need for a deeper understanding of the political knowledge of efforts, successes, and future challenges is paramount.** Webster's defines the word "politics" as "any activities that relate to influencing the actions and policies of a government or getting and keeping power in a government." A working definition of this word should encompass a range of situations. In other words, the meaning of politics should reflect what it is for each person,



in terms of his or her own agenda, and the agenda he or she purports to pursue. Thus, politics – and the elected officials involved in the political world – are fundamentally variable as opposed to constant. Public health, on the other hand, is based on the concept of doing the greatest good for the greatest number of people. This means that, on occasion, elected officials and decision makers need to be informed about initiatives and programs that may not benefit all, but rather most, of their constituents. A panel of experts in 2007 defined public health emergency preparedness (PHEP) – a subset of public health – as:

The capability of the public health and health care systems, communities, and individuals, to prevent, protect against, quickly respond to, and recover from health emergencies, particularly those whose scale, timing, or unpredictability threatens to overwhelm routine capabilities. Preparedness involves a coordinated and continuous process of planning and implementation that relies on measuring performance and taking corrective action.

Any preparedness program that readies a community could potentially have a positive effect, even if the program has yet to be tested in a true emergency. However, the inherent difficulty working in a field such as public health preparedness is that, although there are dedicated professionals with significant awareness and even operational experience, there are other elected or appointed officials without the same subject matter expertise, who must be rapidly educated. Additionally, policy goals have been overshadowed by politics in public health preparedness on numerous occasions.

The State of Readiness & Other Successes

There have been multiple successes in public health preparedness efforts, least of which is the overall state of readiness achieved since the post-9/11 Anthrax attacks. In the time period prior to these events, the United States experienced a degradation of public health preparedness infrastructure and capacity including a lack of laboratory readiness and appropriately trained personnel.

Since then, with the assistance of multiple federal funding streams – including the PHEP, Cities Readiness Initiative, and Hospital Preparedness Program grants – **the strengthening of the public health infrastructure includes qualified professionals performing the following tasks:**

- Conducting surveillance for pathogens;
- Practicing mass prophylaxis distribution;
- Safe-guarding the food supply;
- Engaging in cross-jurisdictional training and communication efforts;
- Participating in media training;
- Keeping first responders healthy;
- Creating volunteer opportunities and community outreach; and
- Consistently training in incident management.

On a daily basis, these improvements in the public health infrastructure have assisted during everyday occurrences – including environmental, food-based, and terrorism-

related incidents – and have also been augmented to handle large-scale bioterrorism attacks or other emergencies affecting the public's health. The knowledge of these successes was solidified during the 2009-2010 H1N1 pandemic and the recent Ebola situation when, moving rapidly, the federal government released funds to state and local partners to strengthen response efforts for the specific situations.

The conundrum of public health preparedness efforts is that many community members and elected officials understand response efforts, but not readiness efforts. They fail to understand that well-trained responders responding to an emergency situation are an element of overall preparedness. The fact that experts have been trained and educated about myriad public health emergencies, conducted various drills and exercises based on relevant scenarios, and stand at the ready is not easily understood. Therefore, without seeing an incident occur, the need to have grant funding for readiness efforts may not be apparent.

Another area of success is the establishment of well-developed, operationally sound emergency plans for the wide variety of public health-specific emergencies that call for health departments to respond. Although these plans are primarily related to health emergencies, they can also include other incidents, such as weather emergencies, where



the health department plays a tangential role. The National Response Framework, the National Disaster Recovery Framework, and the National Preparedness Goal all highlight the key roles that the field of public health plays in community preparedness and resilience, specifically in the planning process.

At best, it can be difficult to get elected officials to attend necessary drills and exercises in order to understand their distinct roles in an emergency. At worst, they may be so removed from the incident that they actually hamper agencies' efforts in an emergency and provide news media with inaccurate information.

Budgets, Planning & Other Challenges

Politics, budgets, and long-term planning are dynamically intertwined in the public health preparedness context. The electoral process may impact preparedness in significant ways. Representatives' thinking about preparedness leads to adjustments in budgets and policies. Elected officials who are aware of preparedness efforts may choose to funnel resources to this area, whereas others might elect to trim budgets and focus more narrowly on specific strategic priorities. These shifts may alter, or even undermine, long-term efforts.

Below are some points to keep in mind:

- At times, public health representatives must be proactive in making elected officials aware of specific community successes at the city, regional, and state levels.

- Forward-leaning politicians – local, state, or even national representatives – understand the “lay of the land” when it comes to preparedness efforts. However, for those who do not understand, local, regional, or state-based agencies must relay to elected officials that public health preparedness is a long-term issue that is affected by the term-to-term fluidity of politics.
- Subject matter experts must be able to clearly explain complex public health-specific terms such as quarantine, isolation, and patient screening realities to elected officials of all levels. This optimally should be done in a proactive manner, but may be required during an emergency.
- State and local health officials traditionally receive guidance, as well as incident-specific resources such as vaccines, from the federal government. Ensuring that elected officials understand dispensing practices and priorities before distributing antivirals or antibiotics could prevent a public relations debacle.

Public health preparedness programs need buy-in from all levels of government in order to build upon current successes. A strong commitment must be made at the federal, state, and local levels to maintain and improve local public health preparedness capacities and to make this effort a national priority. Without such a commitment, public health will continue to fail in its primary functions and lack the capacity to meet homeland security preparedness goals.

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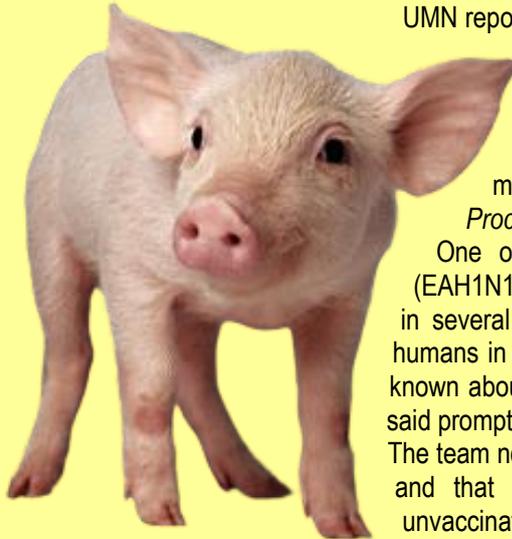


Flu virus in pigs shows worrisome pandemic profile

Source: <http://www.homelandsecuritynewswire.com/dr20160104-flu-virus-in-pigs-shows-worrisome-pandemic-profile>

Jan 04 – Tests on the most common type of influenza found in Chinese pigs reveal that it has the potential to transmit easily in humans, posing a pandemic threat similar to the virus that triggered a pandemic in 2009 after jumping from swine to people.





UMN reports that a research team from China and Japan isolated 139 Eurasian avian-like H1N1 swine influenza viruses during surveillance in Chinese pigs from 2010 to 2013, then put the virus through its paces to assess its pandemic threat, including experiments in ferrets to gauge transmissibility in mammals. They reported their findings yesterday in *Proceedings of the National Academy of Sciences*.

One of two swine H1N1 lineages, Eurasian avian-like H1N1 (EAH1N1) swine influenza viruses (SIVs) has been circulating in pigs in several Eurasian countries since 1979 and has infected several humans in Europe and in China, one fatally in China in 2011. Little is known about its evolution and properties, however, which researchers said prompted the study.

The team noted that China is the world's largest pork-producing country and that flu viruses can spread easily once introduced to the unvaccinated herds.

Tests reveal transmissibility, virulence

For the surveillance part of the study, investigators sampled more than 34,000 pigs from twenty-four Chinese provinces. Of 228 SIVs isolated from the pigs, EAH1N1 was by far the most common strain and was found in ten of China's provinces.

Genetic sequencing found that the strains formed five genotypes and fell into two antigenic groups, both distinct from the 2009 H1N1 virus: A/swine/Guangxi/18/2011 and A/swine/Guangdong/104/2013.

Other tests on the EAH1N1 SIVs showed that they preferentially bind to human-type receptors. The team also found that 9 of 10 viruses they tested transmitted by respiratory droplets in ferrets, considered the best experimental model for human flu.

The authors said the virus might be able to replicate well in humans and cause notable disease, based on mutations the group found on the virus' PB2 protein genes. Like the 2009 H1N1 virus, EAH1N1 SIV does not cause severe disease in pigs but may cause more notable disease in humans, they observed.

Little cross-protection adds to threat

Experiments to assess whether humans have any immunity to the viruses showed a small degree of antibody response to A/swine/Guangxi/18/2011, but none of the 159 people tested had neutralizing antibodies against A/swine/Guangdong/104/2013 in their blood.

Antibody findings and an earlier study that found no substantial cross-protection from seasonal flu vaccine against EAH1N1 SIV suggest that humans aren't likely to have much preexisting immunity to the virus, the team concluded.

Using a U.S. Centers for Disease Control and Prevention (CDC) risk assessment tool to look at the pandemic potential of influenza viruses, the researchers found that EAH1N1 SIV scored the highest of six viruses, which also included H5N1, H9N2, variant H3N2, H7N9, and avian H1N1. The result suggests that EAH1N1 SIVs "may pose the highest pandemic threat among the avian influenza viruses currently circulating in animals," they wrote.

Wake-up call

Michael Osterholm, director of the University of Minnesota's Center for Infectious Disease Research and Policy (CIDRAP), publisher of CIDRAP News, praised the study and said the findings are "very sobering."

He said it may be a wake-up call that alerts the world to a virus that has pandemic potential similar to the one that emerged in 2009. He said that although the research community has been watching flu viruses in pigs and poultry since the 1990s, the emergence of the pandemic virus in 2009 caught it by surprise.

Based on the new findings, studies are urgently needed to see if current vaccines or vaccine seed stock show any protection



against EAH1N1 SIV, Osterholm said. “This is why we need game-changing influenza vaccines,” he added, noting that if another pandemic emerged tomorrow, the world would

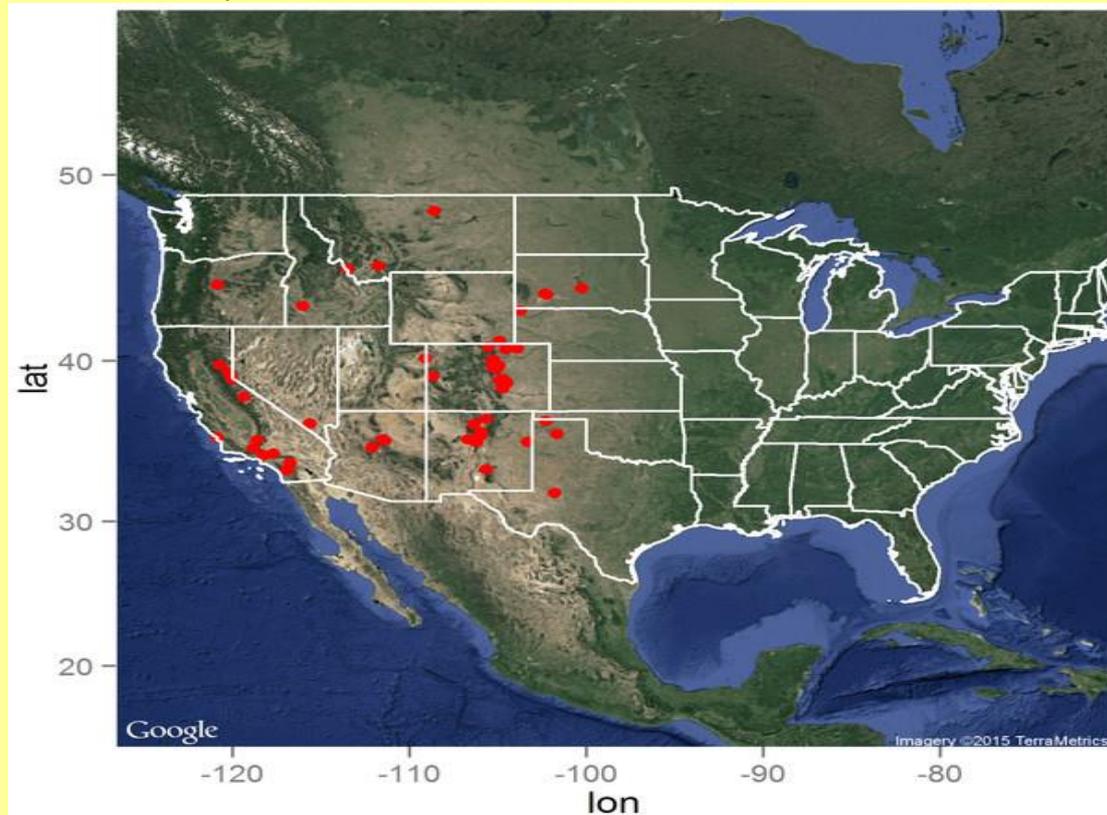
likely be faced again with too little pandemic vaccine, too late, offering, at best, moderate protection.

— Read more in Huanliang Yang et al., “Prevalence, genetics, and transmissibility in ferrets of Eurasian avian-like H1N1 swine influenza viruses,” *Proceedings of the National Academy of Sciences* (19 November 2015).

Identifying areas of plague risk in Western U.S.

Source: <http://www.homelandsecuritynewswire.com/dr20160104-identifying-areas-of-plague-risk-in-western-u-s>

Jan 04 – **Researchers at SUNY Downstate Medical Center have identified and mapped areas of high probability of plague bacteria in the western United States.** Their findings were published in a recent edition of the journal, *PeerJ*.



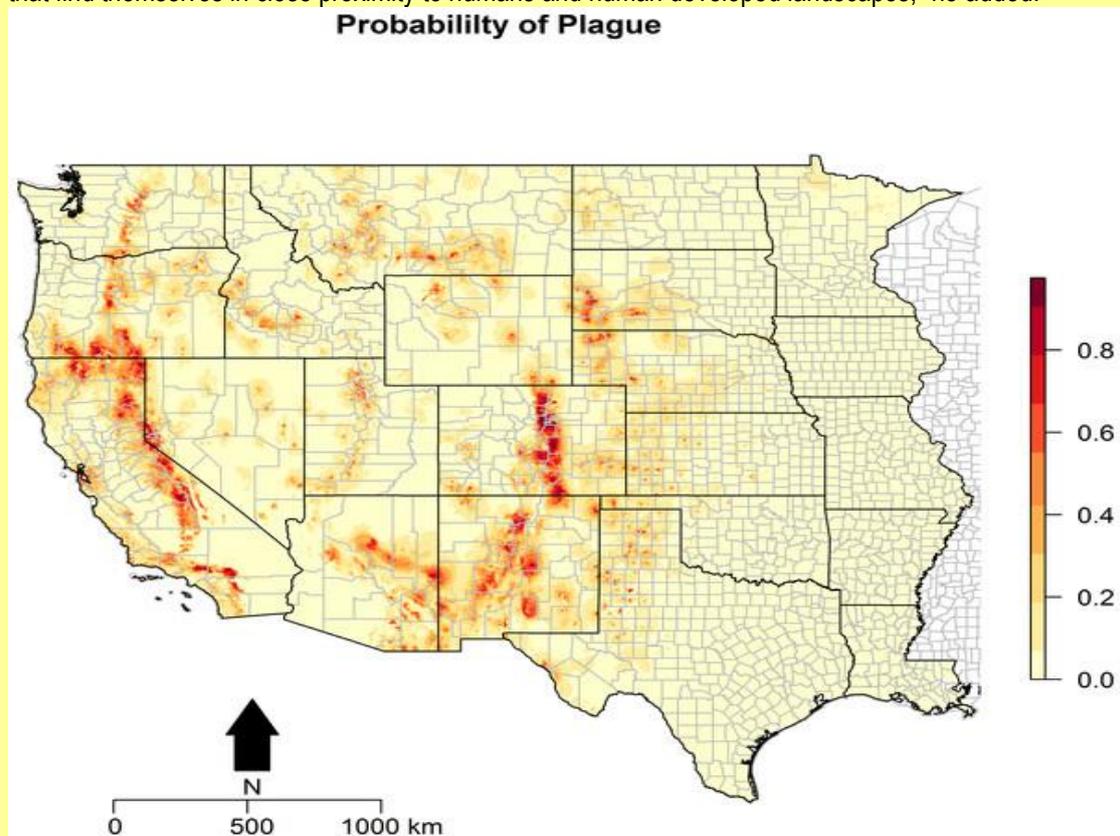
The distribution of the 66 laboratory-confirmed animal plague cases identified through the ProMED system between January 1, 2000 and August 31, 2015 in the United States.

This investigation predicted animal plague occurrence across western states based on reported occurrences of plague in sylvan (wild) and domestic animal hosts. Plague is a disease caused by *Yersinia pestis*, a bacterium found in rodents and their fleas in many areas around the world.

“This study used surveillance data of plague in wild and domestic animals in the American West to identify and map those areas with the greatest potential for human exposure to this infection, which can be particularly deadly when transmitted to humans,” said Michael Walsh, assistant professor in the Department of Epidemiology and Biostatistics in the School of Public Health at SUNY Downstate.



“The findings can be used by public health agencies to target specific areas for enhanced plague surveillance within areas and counties predicted to be at high risk, as well as by other research teams to direct the sampling of local wildlife populations for the identification of *Yersinia pestis* in wild animals that find themselves in close proximity to humans and human developed landscapes,” he added.



Predicted probability of epizootic animal plague (these risk surfaces are based on the ecologic niche of animal plague as derived from the Maxent model)

SUNY reports that according to the federal Centers for Disease Control and Prevention (CDC), plague was first introduced into the United States in 1900, by rat-infested steamships which had sailed from affected areas. Epidemics occurred in port cities, with the last urban plague epidemic in the United States occurring in Los Angeles from 1924 through 1925. Plague then spread from urban rats to rural rodent species, and became entrenched in many areas of the western United States. Since that time, plague has occurred as scattered cases in rural areas. Most human cases in the United States occur in two regions: Northern New Mexico, northern Arizona, and southern Colorado; and California, southern Oregon, and far western Nevada.

The CDC also notes that in recent decades, an average of seven human plague cases has been reported each year (range: 1–17 cases per year). Plague has occurred in people of all ages (infants up to age 96), though 50 percent of cases occur in people ages 12–45.

The authors note in their article that while zoonotic (animal) transmission to humans is much less common in modern times, significant plague risk remains in parts of the western United States. Moreover, risk to some threatened species that are part of the epizootic cycle can be quite substantive. This investigation attempted to predict the risk of plague across the western United States by modeling the ecologic niche of plague in sylvan and domestic animals identified between 2000 and 2015. An algorithm was used to predict this niche based on climate, altitude, land cover, and the presence of an important enzootic (carrier) species, *Peromyscus maniculatus* (a rodent commonly known as the North American deer-mouse).

This model demonstrated good predictive ability and identified areas of high risk in central Colorado, north-central New Mexico, and southwestern and northeastern California.



The presence of *P. maniculatus*, altitude, precipitation during the driest and wettest quarters, and distance to artificial surfaces, all contributed substantively to maximizing the gain function. These findings add to the known landscape epidemiology and infection ecology of plague in the western United States and may suggest locations of particular risk to be targeted for wild and domestic animal intervention.

— Read more in Michael Walsh and M. A. Haseeb, “Modeling the ecologic niche of plague in sylvan and domestic animal hosts to delineate sources of human exposure in the western United States,” *PEERJ* 3 (14 December 2015): e1493

Inactivation of Ricin Toxin by Nanosecond Pulsed Electric Fields Including Evidences from Cell and Animal Toxicity

By Kai Wei, Wei Li, Shan Gao, Bin Ji, Yating Zang, Bo Su, Kaile Wang, Maosheng Yao, Jue Zhang and Jinglin Wang

Scientific Reports 6, Article number: 18781 (2016)

Source: <http://www.nature.com/articles/srep18781>

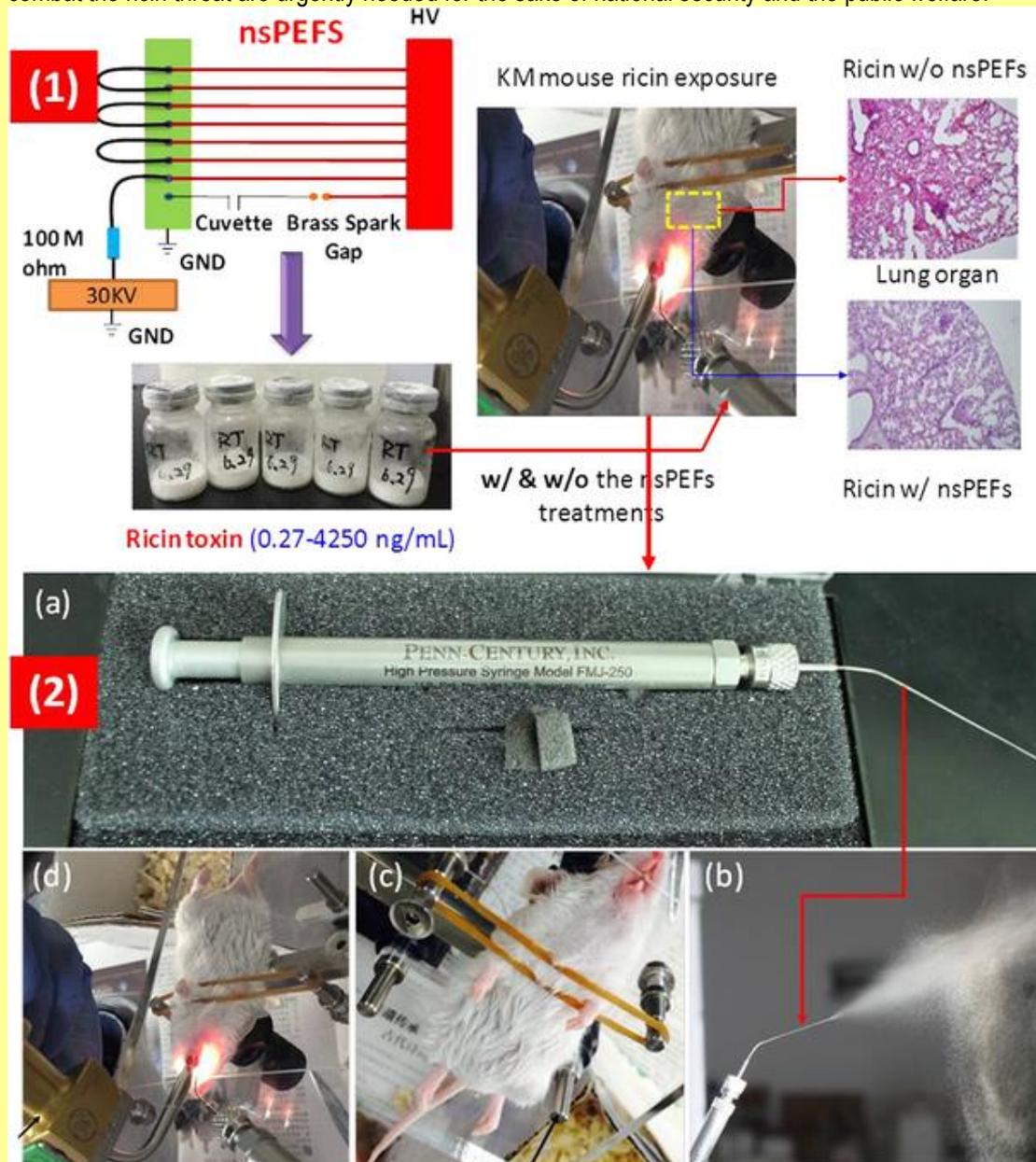
Jan 05 – Ricin is one of the most toxic and easily produced plant protein toxin extracted from the castor oil plant, and it has been classified as a chemical warfare agent. Here, nanosecond pulsed electric fields (nsPEFs) at 30 kV/cm (pulse durations: 10 ns, 100 ns, and 300 ns) were applied to inactivating ricin up to 4.2 µg/mL. To investigate the efficacy, cells and mice were tested against the ricin treated by the nsPEFs via direct intraperitoneal injection and inhalation exposure. Results showed that nsPEFs treatments can effectively reduce the toxicity of the ricin. Without the nsPEFs treatment, 100% of mice were killed upon the 4 µg ricin injection on the first day, however 40% of the mice survived the ricin treated by the nsPEFs. Compared to injection, inhalation exposure even with higher ricin dose required longer time to observe mice fatality. Pathological observations revealed damages to heart, lung, kidney, and stomach after the ricin exposure, more pronounced for lung and kidney including severe bleeding. Sodium dodecyl sulfate polyacrylamide gel electrophoresis (SDS-PAGE) and circular dichroism (CD) analyses revealed that although the primary structure of ricin was not altered, its secondary structures (beta-sheet and beta-turn) underwent transition upon the nsPEFs treatment.

Ricin toxin (RT) is one of the most toxic and easily produced plant protein toxins extracted from the castor oil plant *Ricinus communis*. It is estimated that 50,000 tons of RT are produced annually as a by-product of castor oil. The RT has a heterodimeric structure consisting an A-chain (approximately 30 kDa, the toxic component) and B-chain (approximately 32 kDa) linked together by a disulfide bond⁴. In general, the B-chain facilitates internalization of the A-chain, subsequently the A-chain exerts its toxic effects by inhibiting protein synthesis leading to cell death. The degree of health damage by the ricin is dependent on both the amount of toxin internalized and also the route of exposure. After inhaling the ricin aerosol particles, respiratory failure and allergic response can be triggered for human and mice. The median lethal dose (LD₅₀) of inhaling exposure for mouse was described to be approximately 3–5 µg/kg of ricin particles of less than 5 µm. In contrast, uptake of food and water contaminated with ricin by humans and animals can lead to the circulatory collapse and subsequently their death. The LD₅₀ of ingestion ricin is 30 mg/kg for mouse according to experiments and 1–20 mg/kg for human beings by estimation. Owing to its ease of production and high toxicity, the ricin has been, as early as 1918, listed as one of chemical warfare agents by US Department of Defense, and the ricin toxin was used to develop biological weapon during World War I and World War II.

Now, the ricin toxin is increasingly being considered by terrorist groups to carry out biochemical attacks on high profile individuals and buildings. For example, in 2003, a terrorist threatened to contaminate the water supply using ricin if his demands failed to be satisfied in South Carolina, US. One year after, a letter with ricin powder addressed to the White House was discovered in the mailroom serving US Senator office in South Carolina. On



April 16th and 17th, 2013, two letters were mailed out from Memphis, Tennessee, US. The first one was addressed to the office of Mississippi Republican Senator, and the second one was mailed to the President of the United States. Both of the mails contained white powder which was later tested positive for ricin toxin, provoking a national security alert. Most recently, the terrorist groups also threatened to carry out terrorist attacks using ricin in the United States. A ricin toxin attack by terrorist groups could cause not only human death but also significant public fear. As a consequence, practical solutions to combat the ricin threat are urgently needed for the sake of national security and the public welfare.



(1) Experimental procedures for testing ricin toxicity using mouse model (2) The inhalation exposure experiments of KM mouse: (a) the ricin aerosolizer utilized in this experiment; (b) example of liquid's aerosolization (the normal saline was used); (c) and (d) the experimental procedures of anesthetization and inhalation exposure, respectively.

Over the years, a range of methods have been attempted, including heating, chemicals, and vaccination. However, these methods fall short of providing a satisfactory solution toward the ricin threat or not validated against humans. In recent decades,



pulsed electric fields, known as nsPEFs, is attracting wide attention in practical applications of medicine and biology, including calcium fluctuation, changes in membrane permeability and voltage change, and even solid tumor treatment. The nsPEFs approach delivers electric pulses with low, non-thermal energy, but instantaneous high power for ultra-short durations (nanoseconds) and high electric fields (tens kV/cm). Due to the ultra-short duration of pulses, nsPEFs can also induce a series of unique biological effects such as apoptosis, and phosphatidylserine translocation but not through the hyperthermal effects. Cell apoptosis induced by the nsPEFs has been observed in various types of cells, including pancreatic cancer, melanoma and HeLa cells. And recent studies also show that nsPEFs can effectively eliminate murine melanoma and murine basal cell carcinoma *in vivo*. It was reported that MAPK, GCN2 and PERK pathways are involved in the biological effects induced by the nsPEFs.

Despite of its extensive applications in life sciences, reports regarding the effects and relevant mechanisms of nsPEFs on proteins remain limited and elusive. Using a simulation model, myoglobin was shown to undergo a fast unfolding transition (occurring within 100–200 ps) under a 10^9 V/m electric (E) field, which in turn caused the denaturation. Several other studies also presented the evidence that E and electromagnetic (EM) fields can render major changes in protein's secondary structure and disruption of hydrogen bonds associated with protein charged residues. Here, we have demonstrated the inactivation efficacy of ricin toxin by nsPEFs, including both *in vitro* with BEAS-2B cells and *in vivo* experiments with mice. The pathological damages in heart, lung, kidney and stomach in mice resulting from exposure of pure and treated ricin by 10 ns, 100 ns and 300 ns nsPEF treatments were observed. Our work further revealed that certain secondary structures of the ricin toxin underwent transition due to the nsPEFs exposure.

► Read the rest of the full paper at source's URL.

Medical Countermeasures for Children in Public Health Emergencies, Disasters, or Terrorism

DISASTER PREPAREDNESS ADVISORY COUNCIL

Pediatrics; February 2016

From the American Academy of Pediatrics

Policy Statement

Source: <http://pediatrics.aappublications.org/content/early/2015/12/31/peds.2015-4273>

Significant strides have been made over the past 10 to 15 years to develop medical countermeasures (MCMs) to address potential disaster hazards, including chemical, biological, radiologic, and nuclear threats. Significant and effective collaboration between the pediatric health community, including the American Academy of Pediatrics, and federal partners, such as the Office of the Assistant Secretary for Preparedness and Response, Centers for Disease Control and Prevention, Federal Emergency



Management Agency, National Institutes of Health, Food and Drug Administration, and other federal agencies, over the past 5 years has resulted in substantial gains in addressing the needs of children related to disaster preparedness in general and MCMs in particular. Yet, major gaps still remain related to MCMs for children, a population highly vulnerable to the effects of exposure to such threats, because many vaccines and pharmaceuticals approved for use by adults as MCMs do not yet have pediatric formulations, dosing information, or safety information. As



a result, the nation's stockpiles and other caches (designated supply of MCMs) where pharmacotherapeutic and other MCMs are stored are less prepared to address the needs of children compared with those of adults in the event of a disaster. This policy statement provides recommendations to close the remaining gaps for the development and use of MCMs in children during public health emergencies or disasters. The progress made by federal agencies to date to address the needs of children and the shared commitment of collaboration that characterizes the current relationship between the pediatric health community and the federal agencies responsible for MCMs should encourage all child advocates to invest the necessary energy and resources now to complete the process of remedying the remaining significant gaps in preparedness.

Events over the past 2 decades are a stark reminder that disasters, human-caused or natural, can affect children directly. Despite our best efforts to protect children, this population may be the chance target of natural disasters or the intended target for acts of violence or terrorism. Children represent a particularly vulnerable population during a pandemic, natural disaster, or act of terrorism. Medical countermeasures (MCMs), defined as medications, antitoxins, vaccines, immunoglobulins, medical devices, and pediatric age-appropriate life-saving medical equipment and supplies required to protect or treat children for possible chemical, biological, radiologic, or nuclear (CBRN) threats, are of paramount importance to the health security of children and the nation as a whole.

Children have unique needs that must be taken into consideration for communities to be truly prepared to respond to disasters and public health emergencies and to remain resilient in their aftermath. It has been well documented that children differ from adults by virtue of their unique anatomic, physiologic, and developmental/behavioral characteristics. The National Commission on Children and Disasters examined the current state of pediatric disaster readiness in the United States and made recommendations in the *2010 Report to the President and Congress*. In particular, this report included a recommendation that the US Department of Health and Human Services (DHHS) and the US Department of Homeland Security (DHS)/Federal Emergency Management Agency should ensure the availability of and access to pediatric MCMs at the federal, state, and local levels for CBRN threats. Formed in 2014, the DHHS National Advisory Committee on Children and Disasters provides advice and consultation to the DHHS Secretary on issues related to the medical and public health needs of children as they relate to disasters.

► Read the rest of the full paper at source's URL.

Human Cutaneous Anthrax, the East Anatolian Region of Turkey 2008-2014

By Parlak E and Parlak M

Vector Borne Zoonotic Dis. 2015 Dec 31. [Epub ahead of print]

Source: <http://www.ncbi.nlm.nih.gov/pubmed/26720232>

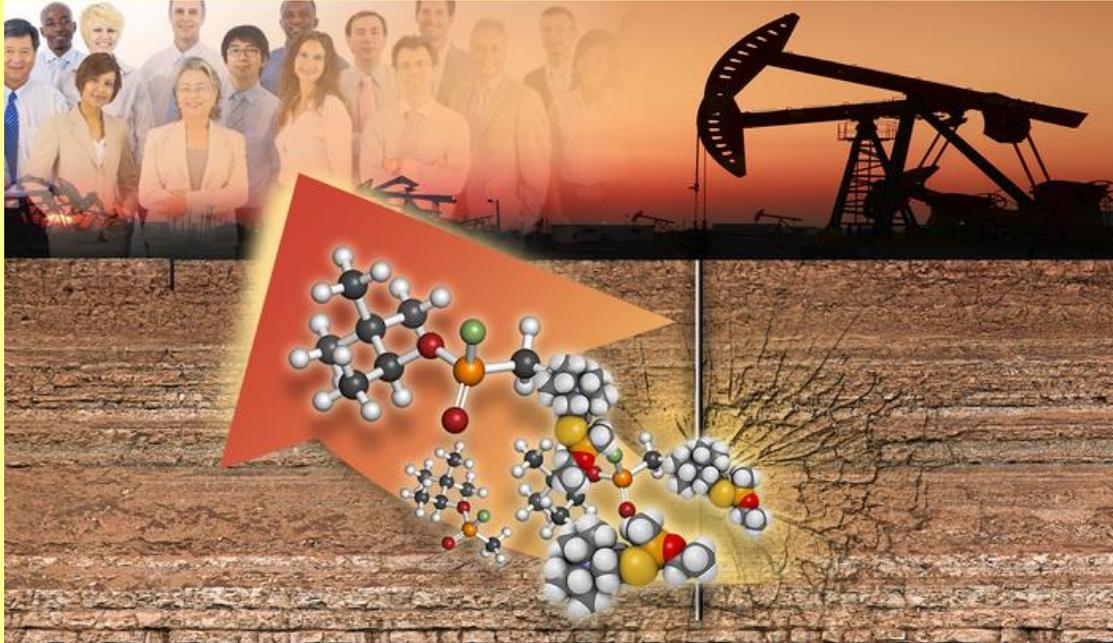
Anthrax is a zoonotic infectious disease caused by *Bacillus anthracis*. While anthrax is rare in developed countries, it is endemic in Turkey. The names of the different forms of the disease refer to the manner of entry of the spores into the body-cutaneous, gastrointestinal, inhalation, and injection. The purpose of this study was to evaluate the clinical characteristics, epidemiological history, treatment, and outcomes of patients with anthrax. Eighty-two cases of anthrax hospitalized at Atatürk University Faculty of Medicine Department of Infectious Diseases and Clinical Microbiology in 2008-2014 were examined retrospectively. Gender, age, occupation, year, history, clinical characteristics, character of lesions, length of hospitalization, and outcomes were recorded. Thirty (36.6%) patients were female and 52 (63.4%) patients were male; ages were 18-69 and mean age was 43.77 ± 13.05 . The mean incubation period was 4.79 ± 3.76 days. Cases were largely identified in August (41.5%) and September (25.6%). Sixty-nine (84.1%) of the 82 patients had been given antibiotics before presentation. Lesions were most common on the fingers and arms. The most common occupational groups were housewives (36.6%) and people working in



animal husbandry (31.7%). All patients had histories of contact with diseased animals and animal products. Penicillin-group antibiotics (78%) were most commonly used in treatment. One patient (1.2%) died from anthrax meningitis. The mean length of hospitalization was 8.30 ± 5.36 days. Anthrax is an endemic disease of economic and social significance for the region. Effective public health control measures, risk group education, vaccination of animals, and decontamination procedures will reduce the number of cases.

Toxins found in fracking fluids and wastewater: Study

Source: <http://www.homelandsecuritynewswire.com/dr20160108-toxins-found-in-fracking-fluids-and-wastewater-study>



Jan 08 – **In an analysis of more than 1,000 chemicals in fluids used in and created by hydraulic fracturing (fracking), Yale School of Public Health researchers found that many of the substances have been linked to reproductive and developmental health problems, and the majority had undetermined toxicity due to insufficient information.**

Further exposure and epidemiological studies are urgently needed to evaluate potential threats to human health from chemicals found in fracking fluids and wastewater created by fracking, said the research team in their paper, published 6 January in the *Journal of Exposure Science and Environmental and Epidemiology*. Yale University reports that the research team evaluated available data on 1,021 chemicals used in fracking, a process that recovers oil and natural gas from deep within the ground by using a mixture of hydraulic-fracturing fluids

that can contain hundreds of chemicals. The process creates significant amounts of wastewater and fractures the bedrock, posing a potential threat to both surface water and underground aquifers that supply drinking water, note the researchers.

While they lacked definitive information on the toxicity of the majority of the chemicals, the team members analyzed 240 substances and concluded that 157 of them — chemicals such as arsenic, benzene, cadmium, lead, formaldehyde, chlorine, and mercury — were associated with either developmental or reproductive toxicity. Of these, sixty-seven chemicals were of particular concern because they had an existing federal health-based standard or guideline, said the scientists, adding that data on whether levels of chemicals



exceeded the guidelines were too limited to assess.

“This evaluation is a first step to prioritize the vast array of potential environmental contaminants from hydraulic fracturing for future exposure and health studies,” said Nicole Deziel, senior author and assistant professor of public health. “Quantification of the potential exposure to these chemicals, such as by monitoring drinking water in people’s homes, is vital for understanding the public health impact of hydraulic fracturing.”

Some previous studies have observed associations between proximity to hydraulic fracturing sites and reproductive and developmental problems, but they did not investigate specific chemicals. This latest evaluation could inform the design of future studies by highlighting which chemicals could have the highest probability of health impact, note the researchers.

Fracking has increased dramatically in recent years and the practice is expected to grow in the future. It involves drilling into the earth — as deep as two miles — and releasing a high-pressure mixture of water, sand, and chemicals that fracture the rock and release the gas trapped inside. Fracking is now commonly used in the United States and has significantly

boosted domestic natural gas production and driven down prices.

However, the practice may come with a significant public health consequences, warn critics of fracking, noting that the process has the potential to contaminate drinking water supplies with toxic chemicals. Air pollution, greenhouse gas emissions, and small earth tremors from the drilling and waste disposal processes are also cited as concerns.

“We focused on reproductive and developmental toxicity because these effects may be early indicators of environmental hazards. Gaps in our knowledge highlight the need to improve our understanding of the potential adverse effects associated with these compounds,” said Elise Elliott, a public health doctoral student and the paper’s first author.

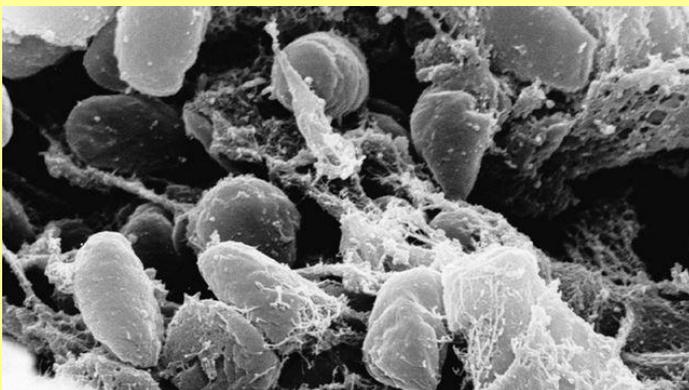
The researchers determined that wastewater produced by fracking may be even more toxic than the fracking fluids themselves. This led the researchers to conclude that more focus is needed to study not just what goes into the well, but what chemicals and by-products are generated during the fracking process.

The researchers also noted that the 781 chemicals for which information is currently lacking need to be rigorously analyzed to determine if they pose health threats.

— Read more in *Elise G Elliott et al., “A systematic evaluation of chemicals in hydraulic-fracturing fluids and wastewater for reproductive and developmental toxicity,” [Journal of Exposure Science and Environmental Epidemiology](#) (6 January 2016).*

Bubonic plague outbreak kills 63 in Madagascar

Source: <http://www.thespec.com/news-story/6222323-bubonic-plague-outbreak-kills-63-in-madagascar/>



Jan 07 – **The latest outbreak of bubonic plague on the Indian Ocean island of Madagascar has killed 63 people since August,** the Health Ministry said.

At least 174 cases of the disease have been detected, Maherisoa Ratsitorahina, head of disease surveillance at the ministry, said in a statement Thursday in the capital, Antananarivo.

Madagascar notified the

World Health Organization of the current outbreak in September.

At least 79 people died after an outbreak in 2014 that continued into early 2015, when at least 335 cases were reported, according to the WHO. The bacterial disease



is spread by rodents or sometimes directly to people who have bitten by infected fleas, the WHO says. Efforts to curb the spread of the disease are being impeded by a build-up of garbage in Antananarivo amid a dispute between the municipality and the national government over who is responsible for waste management in the city.

Plague is caused by the *Yersinia pestis* bacillus, carried by rat fleas. At the start of the rainy season, currently, rats flee the sewers of Madagascar in massive numbers and take refuge in people's cottages. Care must be taken in any rodent eradication program to ensure that a flea-killing compound is part of the plan. Just as in a natural rodent die-off from *Y. pestis*, the fleas will seek alternate hosts, that is, humans.

The following paragraph is from 1998 (Chanteau S, Ratsifasoamanana L, Rasoamanana B, et al: Plague, a Reemerging Disease in Madagascar. *Emerg Infect Dis* 1998; 4(1): 101-4; <http://wwwnc.cdc.gov/eid/article/4/1/98-0114_article.htm>).

"Between 1930 and 1990, bubonic plague had 'virtually disappeared' on the island due to efficient pest-control and good health management. However since 1990, an annual 200 cases are being reported, and bubonic plague takes on epidemic form, especially in the port of Mahajanga, each year. In the capital city of Antananarivo, more cases are also being notified each year since 1990. Madagascar (pop. 13 million) has accounted for 45 percent of all the cases of plague in Africa."

Fatalities related to plague usually are caused by spread of the organism from the bubo (the very painful infected lymph node which drains the area where the flea bite occurred) to the bloodstream. The bacteremia can cause a coagulopathy, producing the purpura seen in the "black plague" and also spread to the lungs causing a hemorrhagic pneumonia. It is the pneumonia that can facilitate person-to-person transmission.

Madagascar was the location of the isolation of multi-antimicrobial resistant *Y. pestis* in 1995 (Galimand M, Guiyoule A, Gerbaud G, et al: Multidrug resistance in *Yersinia pestis* mediated by a transferable plasmid. *N Engl J Med* 1997; 337(10): 677-81; <<http://www.nejm.org/doi/full/10.1056/NEJM199709043371004>>). The strain was resistant to chloramphenicol, streptomycin, and tetracycline but sensitive to fluoroquinolones and trimethoprim as well as other aminoglycosides. This was an ominous observation; however, it is not clear whether this naturally occurring strain has persisted or spread.

Korea: MERS-CoV virus mutation

Source:http://www.koreatimes.co.kr/www/news/nation/2016/01/116_195002.html

Jan 08 - The Middle East Respiratory Syndrome Coronavirus (MERS-CoV) which swept Korea [during 2015] underwent a mutation not found in the strains of MERS samples collected in Saudi Arabia, according to the Korea Centers for Disease Control and Prevention (KCDC).

The mutation may have affected the virulence of the virus as it has shown different patterns of spreading and infection in Korea from those in Saudi Arabia, such as an unusually fast human-to-human transmission.

While investigators suspected a mutation at the time of the epidemic, health authorities denied it. This is the 1st official confirmation of the mutation.

"Spike glycoprotein genes of the MERS virus strains from South Korea were closely related to those of strains from Riyadh, Saudi Arabia. However, the virus strains from South Korea showed strain-specific variations," chief author Kim Dae-won reported in a journal published

by the U.S. Centers for Disease Control and Prevention earlier [in January 2016].

Spike glycoprotein, found on the surface of a virus, is believed to play a critical role in virus proliferation in human cells. Researchers of the KCDC analyzed spike glycoprotein genes from samples of 8 patients here and compared them with those obtained in Saudi Arabia.

However, the research team said it cannot conclude that the mutation was responsible for the fast spread of infection, saying it needs more study.

A KCDC official said the center is conducting a separate test on MERS patients. "We're running gene sequencing on 32 patients, including 5 super spreaders. Today's finding is meaningful, but more research is needed to obtain a more comprehensive understanding of the mutation and its effects on the epidemic."

An anonymous professor at Catholic University lauded the



team's findings. "Not fully, but this finding can hint at why the MERS virus spread so fast and killed so many people in Korea."

The virus infected 186 people and killed 36 in the span of 2 months, with another 2 dying later. On 23 Dec 2015, the government officially declared Korea to be free of the deadly respiratory disease.

1 of the 8 samples tested was that of the 1st patient, a 67-year-old man who contracted the virus during his trip to Bahrain, the United Arab Emirates and Saudi Arabia for 2 weeks during

April and May [2015]. He showed symptoms on 11 May [2015], but his case was confirmed to be MERS on 20 May [2015]. In between, he visited several hospitals, infecting his family members, other patients and their families. [Reference: D-W Kim, Y-J Kim, SH Park, et al. Variations in Spike Glycoprotein Gene of MERS-CoV, South Korea, 2015. Emerging Infectious Diseases 22(1). January 2016 (<http://wwwnc.cdc.gov/eid/article/22/1/pdfs/15-1055.pdf>)

Conclusions

Accurate genome sequencing can identify spatiotemporal patterns that help understand dynamics of rapid spread of MERS-CoV infection. We report S glycoprotein gene sequences of MERS-CoV from 8 patients and a strain cultured in Vero cells. Genetic information obtained is useful for understanding the evolutionary history of MERS-CoV.

On the basis of our phylogenetic analyses, virus sequences of strains isolated in South Korea in 2015 form a unique clade. Genetic variations elucidated in this study show an unreported sequence in the RBD, which suggests that MERS-CoV circulating in South Korea during the outbreak in 2015 has higher genetic variability and mutation rates. However, we cannot conclude that deleterious effects promoting spread of infection will occur because of these mutations. Additional genetic information will resolve precise characteristics of the MERS-CoV obtained during the outbreak in South Korea.

It is not at all clear that the mutations observed in the MERS viral genome are responsible for the rapid spread of the virus in Korea, but it is important to conduct research to determine whether they allow for more efficient transmission, greater infectiousness, improved ability to evade immune response, or other possible biologic consequences. Certainly environmental factors and behavioral factors must be taken into account, especially considering MERS is an RNA virus which mutates rapidly.

► **A good commentary can be found at Ian Mackay's blog:**

<http://virologydownunder.blogspot.com.au/2016/01/research-on-mers-in-south-korea-seems.html>

A Mathematical Model of Bioterrorist Attack Risk Assessment

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J Bioterr Biodef 2012, 3:1

Source: <http://dx.doi.org/10.4172/2157-2526.1000114>

The authors propose a bioterrorism risk assessment model comprising 22 qualitative and 10 quantitative parameters. Scores 0 and 1 refer to low and high probability of a bioterrorist attack, respectively. *Vulnerability analysis* is related to targets, while *feasibility analysis* refers to perpetrators, agents and means/media of delivery. The model is applied on the US anthrax attack in 2001. Mathematical modeling is also proposed to express the risk of human losses in a bioterrorist attack. The model may be helpful in predicting and preventing bioterrorist attacks.



Strategies in Fighting Bioterrorism

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J Bioterr Biodef 2012, 3:1

Source: <http://dx.doi.org/10.4172/2157-2526.1000e102>

All countries face the threat of bioterrorism and preparatory defense measures are needed to avoid unnecessary destruction of human, animal and plant lives. Doctrine in fighting bioterrorism should define enemies and the available sources of bio-defense. Strategies that derive from a counter-bioterrorism doctrine are developed in three fields: deterrence, intelligence and prevention. A biodefense strategy should define types of biorisks, their structure and feasibility, levels and ways of their prevention. Biodefense doctrine and strategy constitute a scientific basis for efficient investments preferably in scientific community, and then in public health infrastructure, diagnostic technologies and finally in vaccines and medicines.

Strategy of deterrence

The first step in fighting against real unusual epidemic events (UEEs), is to develop pragmatic models for their detection and identification [1,2]. At the same time it is the best weapon against hoaxes. It is necessary to develop databases with potential bio-agents, as well as prompt and accurate networks for their matching with samples from the focus. Prevention of bioterrorist attacks in classical way, by strengthening intelligence to identify and interdict bioterrorists before they strike, slowly but surely comes to the second place of importance. A reason is simple: a typical or classical terrorist could be only perpetrator, but a top scientist is at the same time both a source of agents and potential perpetrator, as was case in Amerithrax attack in 2001. A priority should be the development of a cadre of highly skilled and competent analysts to build and maintain bio-surveillance systems (methods and models) at all levels. The cheapest and the most effective is investment in knowledge and personnel (developing new methods and models). Rapid access to accurate and reliable diagnostic data will be of the highest strategic importance in a catastrophic health event. Clinical laboratory

data is very specific and reliable-much more so than syndromic data or physicians' clinical assessments. Technologies to develop rapid, reliable, and cheap diagnostic tests exist (diagnostic tools that will be necessary to manage public health emergencies), but they should be continually improved.

Although some experts state that the most powerful form of deterrence is the ability to catch a perpetrator and prevent future attacks [3], we do not agree with it. Many perpetrators, especially "low sophisticated", could be suicidal or at least easy to be caught.

Should strengthen deterrence of biological attacks by expanding our ability to reduce the consequences of such attacks (build capacity to mitigate the consequences of bioterror attacks).

Strategy of intelligence

While gathering intelligence on nation-states is not easy, gathering intelligence on activities of non-state actors in time to prevent or respond to an attack is even more difficult. The first challenge is the difficulty and impracticality (indeed, impossibility) of limiting the illicit transfer of materials, technologies, and knowledge. Policymakers would want to know immediately following an attack with a bioweapon: what type of system would give us more information about the attacker, how the attack was carried out, and how the next attack could be stopped.

BioWatch does not provide data in real time, and because the system relies on too few sensors that are spread too far apart, it cannot reliably detect an attack with a biological weapon. Consequently, BioWatch does not support interdiction, which is crucial. Any multibillion dollar system that has been years in development but does not allow the U.S. to know who attacked, when, and what with, and then to stop the next attack, is not justifiable. An effective tool for



informing decision making must provide real-time information about the nature, location, and perpetrator of an attack; without this capacity, BioWatch is inadequate. BioWatch cannot provide situational awareness. Situational awareness, which depends on real-time data, is imperative for informed and rapid decision making.

The intelligence community should pursue a better means of gathering intelligence on biological threats, not to count on getting tactical warning of a planned bioterror attack or depend solely on our ability to interdict or thwart such attacks. Focus should be on scientific community with three aspects:

a) To follow and up-to-date advanced bioresearch. We have to make a better coordination between the intelligence community and the scientific health research communities, and provide more resources to the intelligence community for these efforts. There are no easily identifiable footprints marking bioweapons development. The work needed to develop a biological weapon is nearly indistinguishable from legitimate biological science and biotechnology, and such efforts are easily hidden in plain sight;

b) Regularly assess dual-use bioresearch. The transformation of a promising drug candidate into a licensed product typically takes 10 or more years from basic research to approval by the FDA, at a cost of hundreds of millions of

dollars. It is estimated that of every 5,000 “candidate” drugs that look promising on the lab bench, only 5 enter clinical trials, and only 1 of those achieves FDA licensure [4].

c) Should work internationally to bolster bio-surveillance, forensics, training, and biosafety-all measures that could lessen the likelihood of biological weapons development and use. Especially should press ahead with efforts to strengthen microbial forensics capacity. A need to develop the strongest possible scientific capacity to trace back a pathogen to its natural or laboratory origin-an important part of attributing an attack to its source.

Strategy of prevention

A strategy that anticipates a wide range of possible scenarios is necessary. A four levels paradigm of prevention has been proposed [5]. Prevention efforts provide only partial barriers and deterrence against biological attacks. A well-planned, well-rehearsed, and rapidly executed epidemic response can dramatically diminish the consequences of biological attacks. The consequences of a biological attack can be reduced significantly by a rapid medical response to detect, treat, and provide appropriate medical care. The demonstrated capacity to seriously limit the consequences of a biological weapons attack through a rapid and effective response may deter some adversaries from pursuing a biological attack.

References

1. Radosavljević V, Belojević G (2009). A new model of bioterrorism risk assessment. *Biosecurity and Bioterrorism: Biodefense Strategy, Practice, and Science* 7: 443-451.
2. Radosavljević V, Belojević G (2012). Unusual epidemiological event - new model for early orientation and differentiation between natural and deliberate outbreak. *Public Health* 126: 77-81.
3. Dudley JP, Woodford MH (2002). Bioweapons, bioterrorism and biodiversity: Potential impacts of biological weapons attacks on agricultural and biological diversity. *Rev Sci Tech* 21: 125-137.
4. Smith BT, Mair M, Gronvall GK, Matheny J (2009). Developing medical countermeasures for biodefense. *Biosecur Bioterror* 7: 42-43.
5. Radosavljevic V, Jakovljevic B (2007). Bioterrorism - types of epidemics, new epidemiological paradigm and levels of prevention. *Public Health* 121: 549-557.

A New Model of Bioterrorism Risk Assessment

By Vladan Radosavljevic and Goran Belojevic

Biosecurity and Bioterrorism: Biodefense Strategy, Practice, and Science Volume 7, Number 4, 2009



There has been an abundance of different bioterrorist attack scenarios and consequently an unclear biodefense strategy so far. We present a framework for bioterrorism risk assessment that we believe

Table 1. Components and parameters of a bioterrorist attack

Component	Qualitative Parameters	Quantitative Parameters
Perpetrator	Type of perpetrator (government institutions/organizations, terrorist groups, individuals) Sophistication, motivation, ability, capacity Intelligence/secretcy (global and local)	Number of perpetrators Distribution of perpetrators (accessibility to sources of agent and accessibility to the target)
Agent	Type of agent (categories A, B, and C and emerging pathogens)	Accessibility to terrorists Amounts of the available agent
Means and media of delivery	Air Food Water Fomites	Munitions Delivery systems Dispersion systems
Target	Parameters of control: Intelligence/secretcy (global and local) Personal/individual control Control of media (air, food, and water) Control of fomites (office equipment, postal letters, etc.) Parameters of protection (physical, chemical, immunological)	Number of people in the target Distribution of people in the target Location of the target

would be useful for policymakers and understandable without needing to be an expert in this field. We retrieved the Medline database via PubMed (from January 1987 to January 2009) and cross-referenced

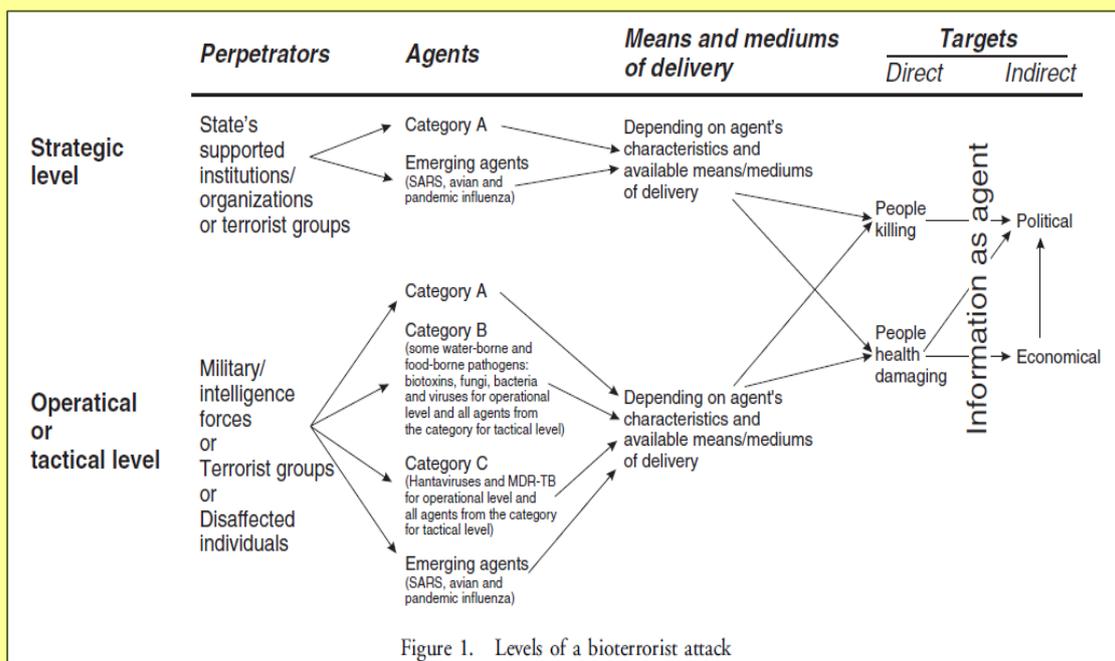


Figure 1. Levels of a bioterrorist attack

and reviewed the terms biological weapons, biological attacks, bioterror, bio(defense), bio(strategy) and epidemiologic models, and risk assessment. Additionally, we conducted an internet search with the same terms and strategy. We divided bioterrorist attacks into 3 categories: strategical (large-scale), operational (middle-scale), and tactical (small-scale).



A bioterrorist attack is presented as a 4-component chain model, including perpetrators, agents, means of delivery, and targets. For any of these 4 components, we propose quantitative and qualitative risk assessment parameters. Here we present a simple scoring system within our model applied to the 2001 U.S. anthrax attacks.

Unusual epidemic events: A new method of early orientation and differentiation between natural and deliberate epidemics

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Public Health 126 (2012)7; pp.77-81

Objective: To develop a model for quick and accurate evaluation of unusual epidemic events (UEE), based on the original model of bioterrorism risk assessment.

Methods: A new scoring system was developed for quick differentiation between a biological attack and other epidemics, using eight qualitative and six quantitative indicators.

Results: A new scoring system was applied to three UEEs: (1) a spontaneous outbreak of a new or re-emerging disease ('swine flu'); (2) a spontaneous outbreak following accidental release of a pathogen (Sverdlovsk anthrax); and (3) a spontaneous natural outbreak of a known endemic disease that may mimic bioterrorism or bio-warfare (Kosovo tularaemia). The disease agent was found to be the most important and the most informative UEE component of the scoring system.

Table 1 – Comparative scoring of three unusual epidemiological events for early detection and quick orientation.

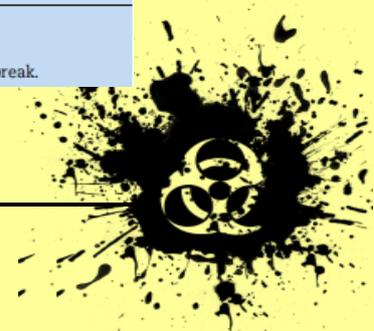
Variables	Indicators	Swine flu	Kosovo tularaemia	Sverdlovsk anthrax
Cases	Qualitative			
	Unusual/atypical disease/manifestation (symptoms/signs) or unexpected fulminant course of disease in humans and/or animals ^a	0 ^a	0	1 ^b
	Failure of patient to respond to usual therapy or illness in a population (human, animal) despite immunizations	0	0	0
	Several unusual/unexplained syndromes co-existing in the same case without any other explanation	0	0	1
	Quantitative			
	Sudden unexplainable increase in the number of cases or deaths in human and/or animal populations	1	0	1
	Morbidity and/or mortality higher than expected	1	1	1
Time distribution	Clustering of patients with fever and/or fever and respiratory symptoms and/or lymphadenopathy	1	1	1
	Qualitative			
	Disease identified in the region for the first time ever or again after a long period of time	1	0	1
	Disease with an unusual /atypical seasonal distribution	1	0	1
	Quantitative			
Simultaneous occurrence of epidemics and/or epizootics	1	0	1	
Spatial distribution	Explosive epidemics and/or epizootics with indicators on a point-source origin	1	0	1
	Qualitative			
	Disease with an unusual geographic distribution	0	0	1
	Occurrence of a non-endemic (imported) or previously eradicated disease	0	0	1
	Epidemiological data suggesting a common exposure	1	1	1
Total ^c	Quantitative			
	Simultaneous epidemics and/or epizootics occur at different locations	0	1	0
		8	4	12

^a Low probability of a deliberate or accidental outbreak.

^b High probability of a deliberate or accidental outbreak.

^c 1–4, natural epidemic; 5–9, probable deliberate or accidental outbreak; 10–14, highly probable deliberate or accidental outbreak.

Conclusions: This new scoring system may be useful for public health institutions and federal civil and military officials responsible for bio-attack investigations.



Escherichia coli O104:H4 outbreak in Germany—clarification of the origin of the epidemic

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In 2011, Germany was hit by one of its largest outbreaks of acute gastroenteritis and hemolytic uremic syndrome caused by a new emerging entero-hemorrhagic *Escherichia coli* O104:H4 strain. The German Hemolytic Uremic Syndrome/Entero-hemorrhagic *E. coli* (GHUSEC) outbreak had unusual

Table 1 Scoring of the GHUSEC outbreak according to a model of Radosavljević and Belojević⁹ for differentiation between natural, accidental and deliberate outbreaks

No.	Epidemiological/infectiological indicators	Score
1	Unusual/atypical manifestation (fulminant course) of a known disease	1
2	Several unusual/unexplained syndromes coexisting in the same case without any other explanation	0
3	A sudden unexplainable increase in the number of cases or deaths in human populations	1
4	Higher than expected morbidity and/or mortality rates	1
5	Clustering of patients with fever only or with fever and other symptoms	1
6	A disease identified in the region for the first time, again after a long period of time or after its eradication	0
7	A new strain of pathogen identified in the region for the first time, after a long period or after its eradication	1
8	A disease with an unusual/atypical seasonal distribution	1
9	One or more explosive epidemics/outbreaks with indicators of a point-source origin	1
10	A disease with an unusual geographic distribution	1
	Total score	8

1=High probability of a deliberate or accidental outbreak.

0=Low probability of a deliberate or accidental outbreak.

Assessment of scores:

1–4 probably natural outbreak.

5–7 possibly deliberate or accidental outbreak.

8–10 probably deliberate or accidental outbreak.

microbiological, infectiological and epidemiological features and its origin is still only partially solved.

Table 2 Scoring of the GHUSEC outbreak according to the model of Grunow and Finke¹² for differentiating between natural and deliberate epidemics

No.	Non-conclusive criterion	Assessment score ^a	Weighting factor ^a	Calculated/maximum number of points ^b
1	Existence of a biological risk	1	2	2/6
2	Existence of a biological threat	0	3	0/9
3	Special aspects of the biological agent	2	3	6/9
4	Peculiarities of the geographic distribution of the biological agent	1	1	1/3
5	High concentration of the biological agent in the environment	1	2	2/6
6	Peculiarities of the transmission mode of the biological agent	1	1	1/3
7	Peculiarities of the intensity and dynamics of the epidemic	2	2	4/6
8	Peculiarities of the time of the epidemic	1	1	1/3
9	Unusually rapid spread of the epidemic	2	1	2/3
10	Limitation of the epidemic to a specific population	2	1	2/3
11	Peculiarities of the clinical manifestation	2	1	2/3
Total				23/54

a: Assessment of a criterion:

0=Criterion ruled out or no data available.

1=Existence of peculiarities or suspicions, but uncertain and indistinct.

2=Existence of obvious peculiarities or indications, causes yet to be clarified for certain.

3=Existence of considerable peculiarities or deviations from expected norm, clear indication or proof of an intentional release.

b: Assessment score × weighting factor.



The aim of this article is to contribute to the clarification of the origin of the epidemic. **Methods:** To retrospectively assess whether the GHUSEC outbreak was natural, accidental or a deliberate one, we analyzed it according to three published scoring and differentiation models. Data for application of these models were obtained by literature review in the database Medline for the period 2011–13. **Results:** The analysis of the unusual GHUSEC outbreak shows that the present official assumption of its natural origin is questionable and pointed out to a probability that the pathogen could have also been introduced accidentally or intentionally in the food chain. **Conclusion:** The possibility of an accidental or deliberate epidemic should not be discarded. Further epidemiological, microbiological and forensic analyses are needed to clarify the GHUSEC outbreak.

Multistate Outbreaks of Shiga toxin-producing *Escherichia coli* O26 Infections Linked to Chipotle Mexican Grill Restaurants

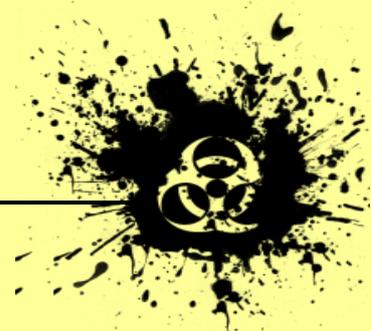
Source: <http://www.cdc.gov/ecoli/2015/O26-11-15/index.html>

What's New?

- One more ill person has been reported from Pennsylvania since the last update. This person did not report eating at Chipotle Mexican Grill in the week before November 14, 2015, when illness started.
- Reports to PulseNet of new illnesses in this outbreak have slowed substantially since the peak of the outbreak in October 2015. The most recent person reporting Chipotle exposure became ill on November 10, 2015.
- CDC is investigating another, more recent outbreak of a different, rare DNA fingerprint of Shiga toxin-producing *E. coli* O26 (STEC O26) linked to Chipotle Mexican Grill. Because it is not known if these infections are related to the larger, previously reported outbreak of STEC O26 infections, these illnesses are not being included in the case count for that outbreak. This investigation is ongoing.
 - 5 ill people have been identified in Kansas (1), North Dakota (1), and Oklahoma (3).
 - The illnesses started on dates ranging from November 18, 2015 to November 26, 2015.
 - All five (100%) reported eating at a Chipotle Mexican Grill in the week before illness started.

Highlights

- CDC, the U.S. Food and Drug Administration, and public health officials in several states are investigating two outbreaks of Shiga toxin-producing *Escherichia coli* O26 (STEC O26) infections.
- As of December 18, 2015, 53 people infected with the outbreak strain of STEC O26 have been reported from nine states.
 - 20 ill people have been hospitalized. There have been no reports of hemolytic uremic syndrome and no deaths.
 - The majority of illnesses have been reported from Washington and Oregon during October 2015.
- The epidemiologic evidence available at this time suggests that a common meal item or ingredient served at Chipotle Mexican Grill restaurants in several states is a likely source of this outbreak. The investigation has not identified what specific food is linked to illness.
 - 46 (88%) of 52 ill people interviewed reported eating at a Chipotle Mexican Grill restaurant in the week before their illness started.
 - Chipotle Mexican Grill is assisting public health officials with understanding the distribution of food items served at locations where ill people ate, and this work is ongoing.
- Investigators are using whole genome sequencing, an advanced laboratory technique, to get more information about the DNA fingerprint of the STEC O26 bacteria causing illness.
 - To date, 29 STEC O26 isolates from ill people in 8 states were found to be highly related genetically to one another.
- CDC is investigating another more recent outbreak of a different rare DNA fingerprint of Shiga toxin-producing *E. coli* O26 (STEC O26) linked to Chipotle Mexican Grill. Because is not known if these infections are related to the larger previously reported



outbreak of STEC O26 infections, these illnesses are not being included in the case count for that outbreak; this investigation is ongoing.

- 5 ill people have been identified in Kansas (1), North Dakota (1), and Oklahoma (3).
- The illnesses started on dates ranging from November 18, 2015 to November 26, 2015.
- All five (100%) reported eating at a Chipotle Mexican Grill in the week before illness started.
- CDC and state and local public health partners are continuing laboratory surveillance through PulseNet to identify additional ill people and to interview them.
- Consumers should contact a health care provider if they recently became ill with diarrheal symptoms after eating at a Chipotle Mexican Grill restaurant.
- CDC will advise the public if specific steps are identified that consumers can take to protect themselves.

December 21, 2015

Case Count Update

Since the last update on December 4, one more ill person has been reported from Pennsylvania. This person did not report eating at Chipotle Mexican Grill in the week before November 14, 2015, when illness started.

Fifty-three people infected with the outbreak strain of STEC O26 have been reported from 9 states. The majority of illnesses have been reported from Washington and Oregon during October 2015. The number of ill people reported from each state is as follows: California (3), Illinois (1), Maryland (1), Minnesota (2), New York (1), Ohio (3), Oregon (13), Pennsylvania (2), and Washington (27).

Among people for whom information is available, illnesses started on dates ranging from October 19, 2015 to November 14, 2015. Ill people range in age from 1 year to 94, with a median age of 21. Fifty-nine percent of ill people are female. Twenty (38%) people reported being hospitalized. There have been no reports of hemolytic uremic syndrome and no deaths.

Illnesses that occurred after November 26, 2015 might not be reported yet due to the time it takes between when a person becomes ill and when the illness is reported. This takes an average of 2 to 3 weeks. Please see the [Timeline for Reporting Cases of *E. coli* Infection](#) for more details.

The most recent person reporting Chipotle exposure became ill on November 10, 2015. Reports to PulseNet of new illnesses in this outbreak have slowed substantially since the peak of the outbreak in October 2015. CDC and state and local public health partners are continuing laboratory surveillance through

PulseNet to identify additional ill people and to interview them.

Investigation Update

State and local public health officials continue to interview ill people to obtain information about foods they might have eaten and other exposures in the week before their illness started. To date, 46 (88%) of 52 people interviewed reported eating at a Chipotle Mexican Grill restaurant. The investigation is still ongoing to identify common meal items or ingredients causing illness.

Investigators are also using whole genome sequencing (WGS), an advanced laboratory technique, to get more information about the DNA fingerprint of the STEC O26 bacteria causing illness. WGS has been performed on STEC O26 isolates from 29 ill people in Washington (16), California (2), Maryland (1), Minnesota (2), New York (1), Ohio (3), Oregon (3), and Pennsylvania (1). All 29 isolates were highly related genetically to one another. This provides additional evidence that illnesses outside the Pacific Northwest are related to the illnesses in Oregon and Washington.

Additionally, 5 people infected with a different, rare DNA fingerprint of STEC O26 have been identified in Kansas (1), North Dakota (1), and Oklahoma (3) and appear to be linked to Chipotle Mexican Grill. The infections started on dates ranging from November 18, 2015 to November 26, 2015. All five (100%) reported eating at a Chipotle Mexican Grill in the week before illness started. All 3 Oklahoma ill people ate at a single Chipotle location in Oklahoma, and the North Dakota ill person traveled to Kansas during their exposure period and ate at the same Chipotle location

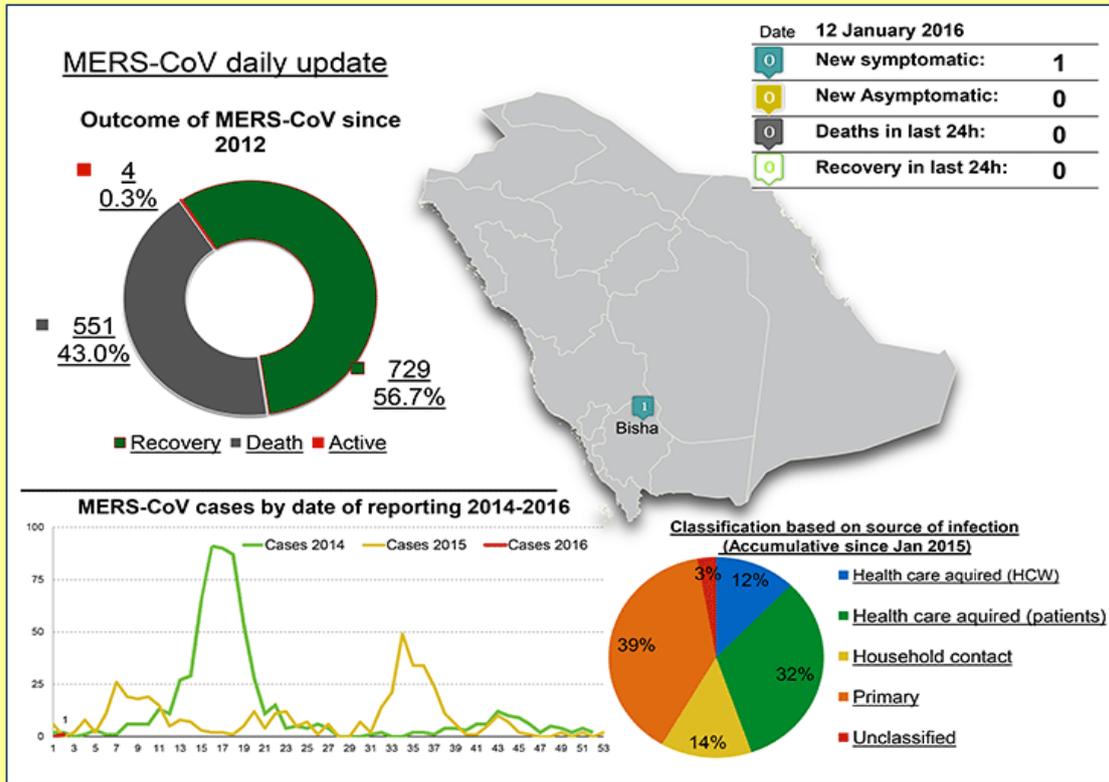


as the Kansas ill person. It is not known if these infections are related to the larger outbreak of STEC O26 infections; this

investigation is ongoing. WGS is being used to determine if this strain is genetically related to the STEC O26 causing the larger outbreak.

MERS-CoV in S Arabia – 2016 update

Source: <http://www.moh.gov.sa/en/CCC/PressReleases/Pages/Statistics-2016-01-12-001.aspx>



Bug from bioterrorism list kills almost 90,000 a year, study warns

Source: <https://www.rt.com/news/328757-melioidosis-disease-kills-thousands/>

Jan 13 – A deadly disease caused by tropical bacteria is responsible for 89,000 deaths each year, many of which are never linked to the actual cause, a microbiology study warned. The bacteria are also much more widespread than previously believed.



Cases of melioidosis, which is also known as Whitmore's disease, are under-reported because its symptoms - including abscesses, fever and sepsis - are quite unspecific. Proper diagnosis also requires laboratory equipment that is scarce in developing countries, where *Burkholderia pseudomallei*, the bacterium causing it, is most commonly encountered, says a new [paper](#) published on Monday in the journal Nature

Microbiology.

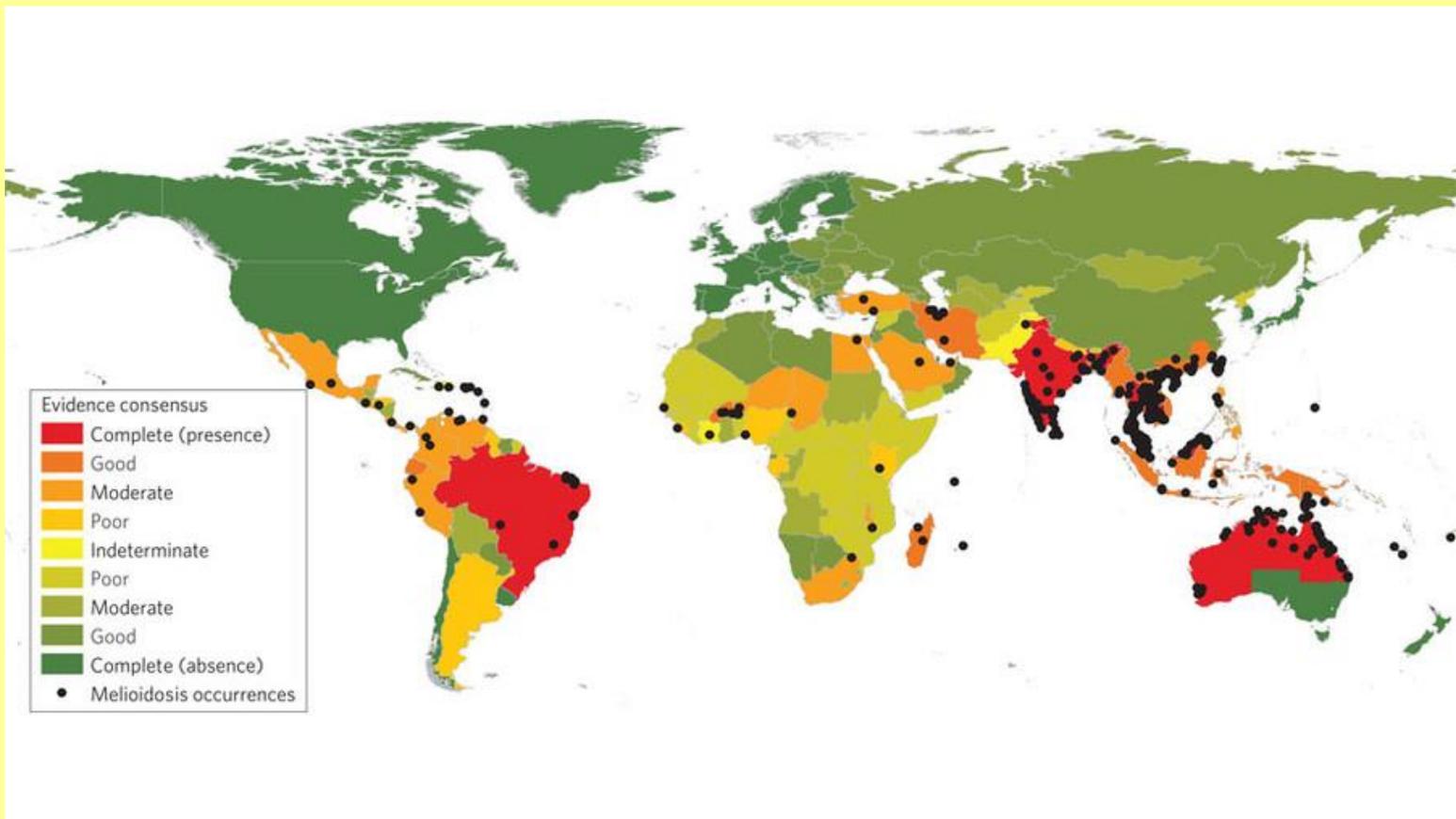
The disease was thought mostly to affect northern Australia and some Southeast Asian countries, particularly Thailand. But the study predicts that melioidosis is actually present



in 79 countries, including 34 that had never reported the disease. In addition to the countries widely known to be affected, it may be found in water and soil in Latin America, Mexico, South Africa, some Middle-Eastern countries and most of South Asia and Oceania.

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At the same time, the bacteria are resistant to many common antibiotics. When accurately diagnosed and treated properly, melioidosis death rates can be as low as 10 percent, but without the right medication they can rise to as high as 70 percent. When untreated, the disease kills up to 9 patients in 10.



The authors of the study say their model predicts that melioidosis killed 89,000 of the 165,000 people who contracted it in 2015. The figure is comparable to global deaths from measles, which kills 95,000 annually, and surpasses the mortality rate from leptospirosis or dengue - two diseases considered a high-priority threat by many international health organizations.

“Although melioidosis has been recognized for more than 100 years, awareness of it is still low, even among medical and laboratory staff in confirmed endemic areas,” said study co-author Dr Direk Limmathurotsakul, an assistant professor at Mahidol University in Thailand.

“Melioidosis is a great mimicker of other diseases and you need a good microbiology laboratory for bacterial culture and identification to make an accurate diagnosis. It especially affects the rural poor in the tropics who often do not have access to microbiology labs, which means that it has been greatly underestimated as an important public health problem across the world,” he added.

Burkholderia pseudomallei was studied as a potential bioweapon during the Cold War. It doesn't spread well from human to human and the usual path for infection is when contaminated water comes into contact with a cut. But if it is spread as an aerosol, it can be highly infectious.



"The organism is much more dangerous when inhaled. The lethal dose drops dramatically if given by an aerosol route. So there are real concerns about bioterrorism use by an aerosol [method]," National Public Radio was told by Dr Donald Woods, who studied the bacterium for decades at the University of Calgary, but was not involved with the study.

A sample of the microbe escaped from a lab of the Centers for Disease Control and Prevention at Tulane University National Primate Research Center in Louisiana last year, infecting a human and also four monkeys, two of which were subsequently euthanized. The lab has since been shut down.

The model developed by Limmathurotsakul and his colleagues predicts that *Burkholderia pseudomallei* could survive in the Louisiana climate, but so far soil and water samples collected there have come back clean.

Ebola convalescent plasma safe to use

Source: <http://www.medicalnewstoday.com/articles/304666.php?tw>

Jan 07 – Until the 2014 outbreak, blood products from Ebola survivors had only been used experimentally for treatment in a small number of Ebola patients.

The **Ebola-Tx trial** was carried out at the Donka Ebola Treatment Center in Conakry, Guinea, run by Médecins Sans Frontières (MSF).

The trial was led by the Antwerp Institute of Tropical Medicine (ITM) and funded by the European Union (EU), and it is the largest ever trial of convalescent plasma (CP) for the treatment of Ebola.

It was the high fatality rate of Ebola that led to the need to identify treatments that directly targeted the virus, such as CP. The World Health Organization (WHO) had prioritized CP due to its success in treating other viral diseases like measles, yellow fever and influenza.

Experimental treatment in a crisis

Researchers did not know what impact, if any, CP might have against Ebola, what might be an effective dose, or whether patients and the community would accept transfusions with a blood product.

The Guinean national blood transfusion center (CNTS) collected blood plasma for the trial, in close collaboration with the French public transfusion services, the Guinean Ebola survivors association from Conakry and a group of anthropologists.

Blood constituents were separated, and any parts not required were returned into the donor's circulation. This provided over 200 plasma units.

A total of 102 patients were enrolled, 84 of whom were then treated with CP. Patients were of any age, including pregnant women. They received two units of 200-250 ml from different convalescent donors within 48 hours of a laboratory-confirmed diagnosis of Ebola.

At the time, the levels of Ebola virus-neutralizing antibodies in the CP were unknown, as tests were not available on site to measure them.

Trial safe despite insignificant impact on survival rates

The 84 CP patients were compared with 418 patients who had been attending the same treatment center in the 5 months before the trial. The primary outcome was survival 14 days after transfusion, adjusted for age, and the level of Ebola virus in the blood at diagnosis.

Patients who died within 2 days of diagnosis were excluded. A 20% lower mortality in the CP group was considered significant.

Mortality from day 3-16 was 31% in the CP group and 37.8% in the comparator group; but the difference was reduced to only 2.6% after adjusting for age and viral load. The treatment as given in the trial did not significantly improve the survival rate, but no severe adverse reactions to CP were observed.

Coordinating investigator Prof. Johan van Griensven, of Antwerp ITM, believes that while a single administration of 2 units of CP does not save lives, a more targeted and concentrated use of plasma, with a different level of



antibodies, could improve outcomes. Despite the study not providing the answer that was hoped for, he says, scientists have gained important information about the role of CP in treating Ebola and the feasibility of organizing this kind of intervention in a crisis situation. CP samples have been shipped to France for analysis; it is hoped that additional findings will indicate whether plasma with different levels of antibodies could be more effective. Researchers envisage a potential role for CP in a different dose and/or in combination with other treatments currently under investigation, such as Favipiravir. CNTS director Dr. Nyankoye Haba says the Ebola survivors made the study possible by offering their plasma and encouraging their peers to do likewise. Long-term benefits of the study, he says, include the opportunity for the

CNTS to use cutting-edge technology, as well as building the capacity of staff.

Dr. Ruxandra Draghia-Akli, director of the European Commission's Health Directorate, commends the achievement of performing a clinical trial under such challenging conditions, adding that it was the people of Guinea, the donors and local community support who made the trial possible.

Marie-Paule Kieny, of the WHO, says:

"This trial has been helpful in establishing the safety of convalescent plasma, and it tells us that the procedure was accepted by the community. While only a first step, it tells us that plasma may be worth exploring as a treatment in the future, potentially by using donations with high-antibody levels."

Study shows high frequency of spontaneous mutation in Ebola virus

Source: <http://www.medicalnewstoday.com/releases/304734.php?tw>

Jan 06 – In late December, nearly two years after the epidemic began, the World Health Organization has declared the African country of Guinea to be free of Ebola virus infections. But, the race to find a cure and therapies to combat the disease are forging ahead as officials warn that inattention could lead to another epidemic.

Texas Biomedical Research Institute scientists have been working on therapies, diagnostics and vaccines for years before the 2014 epidemic, and a recent study by Dr. Anthony Griffiths to be published in the *Journal of Virology* shows a promising mechanism for attacking the virus. The paper will be in Issue 5 March 2016 print edition but is already available online - doi:10.1128/JVI.02701-15.

In the paper, titled Determination and Therapeutic Exploitation of Ebola Virus Spontaneous Mutation Frequency, Dr. Griffiths explains how "typically, RNA viruses have high spontaneous mutation rates, which permit rapid evolution and the ability to adapt to new selection pressures. These selection pressures can include antiviral drugs, the immune system, or even new animal hosts." However, it

was unknown whether filoviruses exhibit high mutation frequencies.

"When we started this work, there was not an appreciation that Ebola virus had any capacity to evolve and if those changes would be well tolerated," Griffiths explained.

Griffiths and his team, that included graduate student Kendra Alfson, used ultra-deep sequencing to reveal that the spontaneous mutation frequency for Ebola virus was high and similar to other RNA viruses. However, **"We found that Ebola virus had very limited ability to tolerate spontaneous changes in the genome, thus it was reasoned that chemically increasing the mutation frequency may decrease the number of viable virions released from a cell."**

Essentially, Ebola virus has the potential to evolve rapidly but the genetic changes result in viruses that are weakened or not viable. Due to the unprecedented numbers of individuals infected in the latest outbreak, we have learned that Ebola virus does evolve in humans. Therefore, a better understanding of the capacity of the virus to evolve could lead to



better diagnostics and potential therapies.

"Any change in a genome can be neutral, negative, or positive to a virus," Griffiths explained. He added that "interestingly, viruses appear to have evolved to have an optimal mutation rate. Increasing the mutation rate could produce a negative effect on the virus and serve as a valuable therapeutic tool."

To determine whether Ebola virus was sensitive to increasing mutation rate, Griffiths' group tested a drug called ribavirin.

Preliminary experiments with mice suggested ribavirin could be a potential

therapy and did cause the desired effect of increasing the mutation frequency enough to make the virus non-viable.

Further testing in monkeys showed ribavirin reduced production of infectious Ebola virus but results were not strong enough to recommend ribavirin as a treatment protocol.

"Now we have shown the potential of modifying mutation rate as a therapeutic tool for Ebola virus infections," Griffiths said. "We plan to test other drugs in the hope of improving the efficacy observed using ribavirin."

Role of mapping in preventing epidemics like Ebola

Source: <http://www.medicalnewstoday.com/articles/304890.php?tw>

Jan 11 – Prof. Tom Koch, of the University of British Columbia, asks how it could be that many of the best minds in infectious disease, epidemiology and disaster medicine missed the early spread of the Ebola disease so that it became a regional epidemic.

While insisting that all parties involved "labored heroically, often at great personal risk, to restrict the original outbreak and treat those affected by it," Prof. Koch believes there are lessons to learn about containing future disease outbreaks in rural areas with minimal resources.

In his review, he focuses on the potential of mapping as a tool to help deal with future disasters.

Prof. Koch points out that limits on data relating to patient location and travel mapping made it harder to contain the Ebola crisis.

At the same time, regional disease protocols were not implemented soon enough, as nobody anticipated such an expansive epidemic.

Records now show that the 2014 epidemic probably began in 2013, when a 2-year-old boy in the village of Meliandou in Guinea's Gueckédo Prefecture first became infected.

Infections need to be appropriately mapped

However, local, national and international health officials assumed that, as in previous cases, this outbreak would be a static, and thus controllable, localized disease event.

Prof. Koch explains that infectious diseases have a spatial structure and that their spread depends on individual features that

either promote or hinder their progress. Based on this, he argues that various forms of mapping could help to contain such diseases.

In the case of the Ebola epidemic, having no maps or census data for the region where the outbreak occurred made it difficult to apply aggressive quarantine programs, which could have isolated the villages where Ebola was active and protected those at risk from villagers who did not display symptoms.

Prof. Koch discusses the need to involve the community in mapping and education.

He says: "Employing community members in the mapping also serves anthropologically, involving community members in the disease response, teaching them about an expanding viral event and its local effects. In areas where there is distrust of foreign or official health workers, this can be critical."

Prof. Koch gives the example of the Nepal earthquake in 2015, where resources of Humanitarian Open Street Map and Digital Globe satellite data enabled 39 volunteers to create Quakemap.org, a crowd-sourced mapping program that enabled correlation of reports of earthquakes in individual villages to help ensure that supplies were directed where they were needed.

In connection with the Ebola crisis, he focuses on a strategy called diffusion mapping. In this approach, smaller scale maps are used in patient interviews to identify travel patterns of patients before they



become symptomatic. This could be helpful in anticipating the number of patients likely to present with symptoms in time.

He describes the approach as "a potentially invaluable, if so far untested, approach that would rapidly characterize local travel patterns

and thus the potential for regional disease expansion."

Prof. Koch hopes that the review will help shape ideas about how mapping could help significantly in future outbreaks by contributing toward a prompt response.

Ebola medical team develops guidelines for treating infected children

Source: <http://www.medicalnewstoday.com/releases/304896.php?tw>

Jan 11 – When the Ebola virus outbreak erupted in West Africa in 2014, children infected with the virus -- particularly those under age 5 -- faced overwhelming challenges. Not only was there a high death rate among young children infected with the disease, they often were isolated from their families, leaving them feeling distressed and without the intensive care they needed.

In the height of the epidemic, exhausted health-care workers found themselves with few options to care for the afflicted, including the virus's littlest victims. Patients with Ebola were given large amounts of fluid to drink to counteract the dehydrating effects of diarrhea and vomiting. Many times, that was all that could be done for them.

As the outbreak waned in the winter of 2015, however, a fresh army of health-care workers at the largest Ebola treatment unit (ETU) in Port Loko, Sierra Leone, began exploring how best to treat children with the virus and improve their chances of survival. **Their aim: to establish a protocol for treating children with Ebola.**

Those guidelines -- a protocol the researchers believe will provide a basis for treating children during future outbreaks -- were published Friday, Jan. 8, in *The Journal of Pediatrics*.

They suggest an aggressive approach that includes giving children fluids intravenously; treating other possible infections; feeding them highly fortified food; and greatly increasing the amount of bedside care they receive.

"We know Ebola is going to come back," said the study's first author, Indi Trehan, MD, an assistant professor of pediatrics at Washington University School of Medicine in St. Louis. "But the next time an Ebola treatment unit is

opened, the physicians, nurses and other health-care providers shouldn't have to start from scratch. Our goal in publishing our findings is so they can have something solid to start with. It may not be perfect -- we invite others to build on it -- but it's from our collective experience. This is how we think children with Ebola should be cared for."

Trehan and his co-authors treated Ebola patients at a 106-bed ETU run by the Sierra Leone Ministry of Health in collaboration with Partners In Health (PIH), a Boston-based nonprofit organization that works to strengthen health systems in poverty-stricken areas. When the outbreak was at its peak, there weren't opportunities or resources to do more than offer minimal care. But as the epidemic ebbed, researchers set their sights on developing a more aggressive approach to treating children with the disease.

The team examined emerging literature and case reports regarding the ongoing outbreak, adapted World Health Organization (WHO) and Médecins Sans Frontières (Doctor Without Borders) guidelines from previous viral hemorrhagic fever outbreaks, compared notes with colleagues throughout Sierra Leone, and pulled from their own clinical experiences to shape a protocol they felt would be effective and feasible.

When resources and manpower allowed, the team applied as much of the protocol as they could in the Port Loko ETU. Trehan's team -- initially led by Shawn D'Andrea, MD, instructor of emergency medicine at Harvard Medical School -- used, when possible, two IVs per patient to administer fluids before the patients' veins could collapse. The staff worked to boost young patients'



electrolytes, targeted other possible infections with antibiotics and antimalarial medication, and provided medicine to reduce vomiting and diarrhea.

Appreciating the importance of good nutrition in children's ability to recover from serious infections, the staff increased the use of ready-to-use therapeutic foods. (Trehan recently was invited to join a WHO committee that focuses on malnutrition.)

In collaboration with colleagues from Sierra Leone and the Cuban Medical Brigade, clinic leaders also ensured that the unit was manned 24 hours a day. Round-the-clock staffing is key for pediatric patients, especially as their small bodies battle the effects of diarrhea and vomiting, Trehan said. But psychological support is also critical, he stressed. In the United States, rarely is a hospitalized child left alone. To allow for such support, the researchers recommend that Ebola survivors -- patients with antibodies to the virus -- be trained to help staff ETUs so that young patients are not alone.

The authors also recommend that future ETUs have pressure bags that allow for IV fluids to be administered faster, and ultrasound machines to help obtain access to veins and determine whether patients are hydrated.

"We ideally would like to get them the same level of care they would get if they were flown back to the U.S.," Trehan said.

Ebola is a disease of health inequity, explained the study's senior author, retired Army Col. Charles W. Callahan, DO, a PIH medical volunteer and vice president of Population Health at the University of Maryland Medical Center in



Baltimore. "Many of these children don't have to die. The mortality has been so high in West Africa because the health-care systems are still so weak and under-resourced."

Callahan, also a professor of pediatrics at the Uniformed Services University of the Health Sciences in Bethesda, Md., tells of a young girl his team treated in Sierra Leone. She survived Ebola but then suffered severe complications of malnutrition. Had the ETU been overwhelmed and the staff been unable to manage her complications, the child would have died, Callahan said.

"She is exactly the kind of patient these protocols are targeting and is a happy success story," he said. "Her care was very challenging to the system in Sierra Leone. But she did survive, and many others probably could have, too. The disease is not gone. When another outbreak occurs, perhaps pediatricians and those caring for children now will have a place to start."

After a few weeks in the ETU, Trehan and another of the unit's clinical leaders encouraged other medical teams to use the protocol whenever possible. However, the researchers' noted, certain conditions and lack of access to some resources prevented any rigorous, evidence-based demonstration of the guidelines' effectiveness.

"It's a distillation of our collective experience," Trehan said. "We want people who've worked with Ebola patients to tell us if we're wrong or right and what else we can do to have a solid approach in place for future outbreaks. Now -- when there are no active Ebola cases anywhere in the world -- is the time to actively and vigorously have this conversation."

Quick screening method identifies promising anti-Ebola drugs

Source: <http://www.medicalnewstoday.com/releases/305008.php?tw>

Jan 12 – **A quick screening method has been used for the first time in a standard open laboratory to identify and test promising anti-Ebola drugs. This approach increases the possibility of finding new therapies faster.**



A team from the Toronto General Research Institute, University of Toronto, Canadian Blood Services, the National Microbiology Laboratory in Winnipeg and the U.S. National Institutes of Health used a mini-genome system to rapidly evaluate candidate drugs that could inhibit the Ebola virus. The team was led by Dr. Eleanor Fish, senior scientist in the Toronto General Research Institute (TGRI) and Dr. Donald Branch, senior scientist in the Centre for Innovation - Canadian Blood Services and TGRI.

Their results, published in *PLOS Neglected Tropical Diseases*, provide details on the procedure for evaluating candidate anti-Ebola drugs and comparing the antiviral effectiveness of eight drugs from three different drug classes. Interferons and anti-HIV drugs showed antiviral activity against the Ebola virus in their studies.

To date, no vaccines, treatments, or post-exposure prophylaxis are available for Ebola.

The screening procedure - used in the U.S. to model and study virus replication - allows for continuing evaluation of new antivirals or anti-Ebola drugs, since there is a likelihood of future Ebola outbreaks. This is the first time this method has been used to test anti-Ebola drugs. Research on new Ebola therapies has been limited by an inability to compare antiviral effectiveness, since cell model systems, treatment regimens and results are so varied that it is difficult to compare effectiveness amongst the compounds, and prioritize which ones are most promising to pursue.

"During this recent Ebola outbreak it became clear that many different experimental drugs were being considered, yet studies to evaluate the effectiveness of candidate drugs are hampered by the limited availability of appropriate safety level labs around the world and the difficulty of comparing results when different model systems were being used, said Dr. Fish. "Prioritizing drugs for further pre-clinical evaluation was difficult."

The method and technology used for this study can be performed in most labs and evaluation of two and three drug combinations can also be examined using this method.

"We tested combinations because lower doses of each drug can be used, potentially decreasing side effects," said Dr. Fish, a

Professor in the Department of Immunology at the University of Toronto. "Using this technology, scientists will be able to measure the inhibitory effects of their experimental drugs on the replication of Ebola virus, allowing us to compare results with confidence. This approach will also decrease the possibility of the emergence of drug resistance."

The team's results were validated using fully infectious Ebola virus in the Level 4 lab in Winnipeg.

Hemorrhagic fevers like Ebola have a high mortality rate and are transmitted from human to human by infectious body fluids. For these reasons, experiments with the Ebola virus are always performed in laboratories with maximum protection and containment - a biosafety Level 4 Laboratory - which has limited the number of labs that can perform antiviral studies.

Because the Ebola virus-like particles used for screening different drugs in this study were not fully infectious, Level 4 was not required. The viral mini-genome generated modifies the Ebola virus to produce virus-like particles that are no longer harmful to humans. The researchers were therefore able to do their work in a biosafety Level 2 Laboratory, which only requires some enhanced measures such as gloves and biological safety cabinets.

Using human cells and this model infection system, the researchers compared how well eight different drugs, in different combinations, at different doses and at times post-exposure, were able to inhibit the virus. Interferon beta, the most potent inhibitor of Ebola which the team identified as a result of the screening, is now part of a clinical trial of individuals who were infected with Ebola during the recent outbreak in Guinea.

"It was found that drugs normally used to treat HIV/AIDS were also effective at inhibiting Ebola, alone, but more so in combination with interferon beta," noted Dr.

Branch, who is also an Associate Professor, Medicine and Laboratory Medicine and Pathobiology, University of Toronto.

As of December 20th 2015, 28,637 cases and 11,315 deaths from Ebola have been reported worldwide, the vast majority of them in West Africa. The high



mortality rate of the disease, estimated at around 60% in the most recent outbreak, made it one of the most deadly infectious diseases in the world. The World Health Organization (WHO) declared the outbreak in 2014-15 a public health emergency of international concern and it is the largest outbreak to date.

At this time, no confirmed cases of Ebola were reported in the week to January 3, 2016. Guinea, Liberia, and Sierra Leone have all now succeeded in stopping human-to-human transmission linked to the original outbreak in West Africa. Outbreaks occur intermittently in tropical regions of sub-Saharan Africa.

Suicide bomber kills 15 outside polio clinic in Quetta, Pakistan

Source: <http://www.homelandsecuritynewswire.com/dr20160113-suicide-bomber-kills-15-outside-polio-clinic-in-quetta-pakistan>

Jan 13 – The Taliban's violent campaign against bringing Western medicine to children in Pakistan, a campaign which focused primarily on disrupting the efforts of the Pakistani government and



international NGOs to fight polio, continues. Earlier today (Wednesday), a suicide bomber has killed at least fifteen people, most of them police, outside a polio eradication center in the city of Quetta in western Pakistan.

The *Independent* reports that the bomb destroyed a police van which arrived at the center to provide escort vaccination workers which are part of the government drive to immunize all children under five years old in the

province of Balochistan.

"It was a suicide blast, we have gathered evidence from the scene," Ahsan Mehboob, the provincial police chief told Reuters. "The police team had arrived to escort teams for the polio campaign."

Polio immunization teams in Pakistan have been targeted by Taliban and other Islamist militants, who claim that the campaign is merely a cover for Western spying, and that at least some of the vaccines used are designed to sterilize Muslim children.

The police estimate the bomb contained about five kilograms of explosives.

Health experts note that Pakistan and neighboring Afghanistan are the only two countries in the world where polio remains endemic.

New test for infectious disease promises quick diagnosis

Source: <http://www.homelandsecuritynewswire.com/dr20160114-new-test-for-infectious-disease-promises-quick-diagnosis>

Jan 14 – McMaster University researchers have come up with a way for inventing molecule probes quickly to identify deadly bacterial strains of infectious disease.

The find, published as a "hot paper" by a German scientific journal because of its importance, shows promise for detecting specific strains of bacteria and tracking their specific trail of illness. "With this new

technology we will be able to develop molecular tools to recognize any superbug down to the specific strain, and there will be many wide-ranging applications," said Yingfu Li, principal investigator and a professor of biochemistry and biomedical sciences for the Michael G. DeGroote School of Medicine at McMaster.



McMaster U reports that the scientists have found a way to make DNAzymes, or single-stranded catalytic DNA molecules from a simple test tube technique that allows for isolation of rare DNA sequences with special functions.

The research team's first success was the development of a molecular probe that precisely recognizes the strain which caused the 2011 Hamilton, Ontario outbreak of *Clostridium difficile* infection. This strain was very infectious, resistant to antibiotics and even fatal to some patients. Instead of having to do several different tests to narrow down to a positive identification of the specific strain, the researchers can now quickly pinpoint this superbug using their new molecular probe.

"This sets up the stage for numerous other applications where we can exploit synthetic DNAzyme probes for diagnosing infectious disease," said Li.

— Read more in Zhifa Shen et al., "A Catalytic DNA Activated by a Specific Strain of Bacterial Pathogen," [Angewandte Chemie International Edition](#) (2015).

The test can be done in less than an hour, compared to the current forty-eight hours, allowing for rapid, more accurate treatment of patients.

"This technology can be extended to the further discovery of other superbug strain-specific pathogens. For example, such technology would prove useful in the identification of hyper-virulent or resistant strains, implementation of the most appropriate strain-specific treatments and tracking of outbreaks", said Bruno Salena, a co-author of the study, an associate professor of medicine for the Michael G. DeGroot School of Medicine and a gastroenterologist with Hamilton Health Sciences.

"This technology is inexpensive, accessible without a lab, and will ultimately be adaptable to identify not just many other bacteria or viruses, but even other diseases," he said.

Egregious safety failures at Army lab led to anthrax mistakes

Source: <http://www.usatoday.com/story/news/nation/2016/01/15/military-bioterrorism-lab-safety/78752876/>

Jan 15 – A brigadier general who led an Army biodefense lab in Utah is among a dozen individuals facing potential disciplinary actions — including loss of jobs — for egregious failures that contributed to the facility mistakenly shipping live anthrax to other labs for more than a decade, according to the military's accountability investigation report that was provided to USA TODAY.

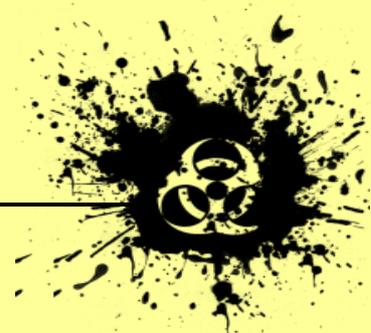
"Over time, you see there is complacency that the leadership should have recognized and taken action to correct," Maj. Gen. Paul Ostrowski, who led the review team, said in an interview.

The review found that top officials at the Dugway Proving Ground southwest of Salt Lake City had multiple warning signs of scientific and safety problems, yet they failed to take action despite earlier, serious incidents in the facility's labs during 2007-2011 involving anthrax, VX chemical nerve agent and poisonous Botulinum neurotoxin A.

"This complacent atmosphere resulted in an organization plagued by mistakes and unable to identify systemic issues in the high-risk, zero-defects world of biological select agents and toxins," the report said.

The [new Army report](#) provides troubling details about lax operations at Dugway as staff worked with some of the world's most deadly pathogens and nerve agents.

Despite being a major testing facility for the Army's chemical and biological defense programs, Dugway had appointed an unqualified biosafety officer who lacked the education and training to do the job. The facility failed to have a program to routinely test surfaces in its labs to ensure contamination hadn't been spread outside special biosafety cabinets. And some staff "regularly manipulated data" in important records certifying that pathogens being shipped to other labs were killed and safe for other researchers to use without special



protective equipment, the report said.

The review harshly singles out Brig. Gen. William E. King IV, who was in command at Dugway as a colonel from July 2009 to July 2011.

“Colonel King repeatedly deflected blame and minimized the severity of incidents,” the report said. It added: “even now, Brigadier General King lacks introspection and fails to recognize the scope and severity of the incidents that occurred during his command at (Dugway).”

King was promoted to general after leaving Dugway. Last February, King was named the commanding general of the 20th Chemical, Biological, Radiological, Nuclear, Explosive Command at the Army’s Aberdeen Proving Ground in Maryland.

In a statement to USA TODAY, King said he can’t comment on the ongoing investigation, but that the safety of soldiers, families and the local community are of “utmost importance” and he supports efforts to address scientific and technical gaps associated with the safe handling of dangerous materials. King said he remains “concerned about the seriousness of the circumstances surrounding” the Dugway anthrax incident and “will continue to fully cooperate with and assist the Army in its ongoing investigation.”

Decisions on any personnel sanctions have not been made by Army leadership. King was the only person facing sanctions named in the report, which was heavily redacted. As a general officer, King is considered a public figure and must be named, the Army said.

The 12 personnel who face potential discipline include two former commanders and three other leaders at the Army post, four workers with oversight responsibilities and three technicians, Ostrowski said. They range from mid-level government employees to King.

As the investigating officer, Ostrowski does not recommend corrective action or punishment. “Let me be clear, these acts in terms of accountability can be anything from counseling to retraining to remove and replace,” said Ostrowski, whose 10-member investigative team interviewed 69 witnesses and reviewed records going back to 2004.

No illnesses resulted from the Dugway anthrax shipments, which were among a

series of high-profile incidents at federal labs since 2014. A USA TODAY NETWORK investigation published last year found hundreds of additional accidents with dangerous pathogens at corporate, university, government and military labs nationwide – and a system of self-policing and fragmented oversight that obscures failings by facilities and regulators.

The review is the latest to examine how a research facility at Dugway could have mistakenly shipped live anthrax specimens — labeled as killed — for more than a decade to unsuspecting researchers developing detection equipment and diagnostic tests against bioweapons. The live anthrax ended up at nearly 200 private, academic and federal labs located in every state plus nine foreign countries.

Dugway’s failures to fully kill anthrax specimens with radiation went undetected for more than a decade by military officials and federal lab inspectors from the Centers for Disease Control and Prevention. It was only discovered last May, when a private biotech firm that received some of Dugway’s purportedly killed anthrax specimens did their own tests and found the spores could still grow. Dugway’s authority to work with any potential bioterror pathogens remains suspended by the CDC. And in an interview with USA TODAY, Lt. Gen. Thomas Spoehr said Dugway will no longer be allowed to produce pathogen specimens for shipment to other facilities.

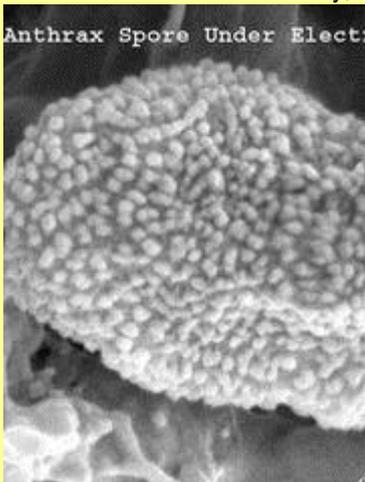
“They will make what they need for their own internal testing purposes,” Spoehr said, “but they will not be an exporter of biological products for the greater world or anybody else other than for Dugway’s internal use.”

The Army’s investigation has found that systemic issues contributed to Dugway’s live anthrax shipments, including gaps in scientific knowledge, poor lab practices and a “culture of complacency.”

Spoehr said all of the Pentagon’s biodefense labs remain under a self-imposed research moratorium while a new, unified lab oversight structure is put in place and protocols for working safely with pathogens are standardized and undergo scientific review. The process, especially creating



verified kill methods for anthrax specimens — plus reliable tests to verify the spores are dead — could take another year, Army officials said. Restarting the biodefense research is critical in developing a wide range of tests and equipment to protect against deadly pathogens, such as those that cause Ebola, plague, botulism and anthrax, said Maj. Gen. Brian Lein, commander of the U.S. Army Medical Research and Materiel Command. “We have to do this to protect our troops going into harm’s way,” he said.



Anthrax spores can be potentially fatal if inhaled.

More than 30 people who had contact with the Dugway specimens were put on antibiotics as a precaution after the live specimens started being discovered last May.

The military’s accountability review was launched last summer to determine if there were any failures of leadership at the Dugway Proving Ground. An initial

Pentagon investigation last year found Dugway’s lab records showed a 20% failure rate when it used radiation kill anthrax specimens and indications that officials at the facility should have known there was a problem.

USA TODAY reported last year that Dugway had previously faced a federal enforcement action in 2007 for improperly shipping live anthrax that was put through a different kill process that treated spores with chlorine dioxide. Records obtained under the Freedom of Information Act showed what **experts said were egregious and cavalier failures by a Dugway lab worker. In testing a batch of anthrax to confirm it had been thoroughly killed, the worker saw that some was still alive and able to grow in a test tube, but simply threw out that tube and issued “death certificates” for the rest of the batch.**

A lab that received the specimens found that some of the anthrax bacteria it received also was still alive.

The new accountability review highlights this mistaken shipment of live anthrax, which

the report said went to the Lawrence Livermore National Laboratories, as one of several red flags that should have triggered wider safety reviews and action years ago by Dugway’s own leadership.

Despite federal lab regulators concluding by 2009 that the live anthrax shipments to Livermore were a serious violation that would have merited a \$500,000 fine if Dugway were not a government entity, the report says Dugway’s commander failed to follow up adequately. The report indicates Dugway staff disputed some aspects of lab inspectors’ findings and that King, as their commander, “had a duty to direct a comprehensive investigation” to resolve the dispute, but didn’t. The report also faults King with missing another opportunity to assess the effectiveness of procedures and staff at Dugway after receiving a report in early 2011 warning of a “relaxed attitude” in a critical chemical laboratory at the facility following an incident with VX nerve agent. The report notes that King and other Dugway leadership took appropriate action in issuing reprimands and removing personnel within the chemical test facility, but didn’t consider that such negligence could extend to other operations.

In addition, the report says King knew about erroneous shipments of Botulinum neurotoxin A, which had caused Dugway to fail a 2011 inspection by the Department of the Army Inspector General. “Instead of considering all of these events as indicators of potential deep-rooted and widespread problems at (Dugway), he attempted to minimize the impact of the events,” the report said. King sent an email to his superiors downplaying the seriousness of the neurotoxin shipping errors, the report said, despite CDC lab regulators and enforcement officials maintaining that the issue “was always considered serious” and carried a potential \$1.5 million fine.

Since 2007, Dugway leadership and management “repeatedly displayed a tendency to question the validity of substantiated claims ... and downplayed the seriousness of incidents and mishaps occurring within the Life Sciences Test Facility,” the report said. Leadership also failed to comprehensively investigate



incidents or take disciplinary action.

The “complacent environment” persisted, the report said, even after federal lab regulators repeatedly identified serious violations in how Dugway handled potential bioterror pathogens and authorized heavy fines, which ultimately were not imposed because Dugway’s is a government entity.

The report also slaps Dugway personnel for “multiple” incidents of sloppy lab practices after

reviewing 90 days of videotape of workers in highly-secure facilities. In one incident in late May, after the anthrax scandal broke, a technician is shown dropping a petri dish to the floor. Instead of alerting the Dugway safety office and reporting the incident to the CDC and Army officials, the woman picks up the sample and puts it in a cabinet to continue working on it. She is also seen touching her face under her air-purification mask.

Protecting drinking water

Source: <http://www.homelandsecuritynewswire.com/dr20160118-protecting-drinking-water>

Jan 18 – We place high demands on the quality of our drinking water. **If pathogens or toxic substances found their way into the piping system, many people could become infected or injured very quickly.** This is why this risk must be kept low. To do this, experts have developed technologies for a comprehensive monitoring, early warning and emergency management system.

Drinking water is indispensable for every human being. Public works and water utilities must not only protect the supply system from impurities, but also from possible manipulation. Every day, they collect probes and analyze drinking water quality in a lab, but such analysis takes time. Preventative methods and tools are needed for continuous monitoring in order to identify contaminations quickly and also catch unexpected toxic substances. Even a few drops could have devastating consequences – toxins that make their way into the water supply reach millions of users within hours.

“In order to protect the population, we have to be able to detect the hazardous substances as quickly as possible and know how they will spread,” explains Dr. Thomas Bernard, a specialist for flow models at Fraunhofer Institute for Optronics, System Technology and Image Exploitation (IOSB) in Karlsruhe.

Fraunhofer reports that in collaboration with partners from industry and research, the scientist and his team from the French-German project [SMaRT-OnlineWDN](#) (Online Security Management and Reliability Toolkit for Water Distribution Networks) have developed tools that enable water utilities to respond quickly and, in an emergency, to initiate

countermeasures to protect the population. The project was supported by the German Federal Ministry of Education and Research (BMBF) and the French National Research Agency (ANR). Berlin’s water utility, BWB Berliner Wasserbetriebe, coordinated the project.

Online simulation calculates water’s path

A mathematical model for simulating the drinking water supply network hydraulics and the distribution of quality parameters in the piping systems carries out several tasks simultaneously. Based on numerous simulations, it can identify the optimum locations for sensors in order to ensure early detection of impurities. Furthermore, if an alarm does go off, the online simulation model can help pinpoint the source of the contamination. The scientists have developed an algorithm for this that localizes the contamination and calculates where the impurity will spread in the next few hours. But calculating and predicting the water’s path — and thus the path of the toxic substance — was no easy task, even for Bernard, because the flow of water in the supply network is not identical everywhere. “It changes depending on the pressure in the pipes, their diameter and geometry, and the number of users. And turbulence and chaotic flows occur in places where the pipe system branches.”

Tests at the Water Technology Center (TZW) in Dresden, where a complex pipe network has been built out of Plexiglas, have helped Bernard and his French partners establish an intelligent detection module. At the center in Dresden, sensors register the



water's movement. Using the measurement values, the physicist was able to optimize his computer simulations. The aim is to calculate the flow of the water in the supply networks of entire cities — in real time. "Such simulations could assist utility companies in making the right decisions in emergencies, but only when they are precise and fast enough," says the group leader.

Alarm only in emergencies

Intelligent software takes current measurement values into account, such as opacity, temperature, pressure, chlorine and oxygen content, pH value and the



amount of bacterial contamination of the water. But when critical values are reached, the system doesn't immediately sound the alarm — instead, it first looks for possible causes. Has a different water source just been tapped? Was a pump opened or closed? "More than 90 percent of all anomalies are caused by changes to operating conditions and are no cause for alarm," explains Bernard.

The new system has already been implemented in Strasburg and monitors the network's water quality in real time. Hydraulic and water quality sensors in the pipe network deliver information for the database; the collected data is then sent to a process control system. In case of emergency, countermeasures can be initiated, such as flushing contaminated water or blocking off parts of the supply network.

Control through monitoring platform

Fraunhofer notes that future models will be able to do even more: In the German-French ResiWater project, IOSB scientists are working on better IT security for drinking water systems and on an improved module for generating alarms. Along with Strasburg, Paris's drinking water system will be monitored in the future. Furthermore, the project partners are focusing on a monitoring platform that takes the myriad of sensor data and clearly represents, visualizes, and stores it. It will also automatically generate reports so that, for instance, fluctuations in water quality can be regularly summarized.

The ResiWater project partners are also driving sensor development. For example, the Fraunhofer Institute for Interfacial Engineering and Biotechnology (IGB) in Stuttgart is contributing its know-how. For many years, they have been working on AquaBioTox (photo), a biosensor made from living cells that fluoresce. When bacteria come in contact with toxic substances, the intensity of the fluorescence decreases. The AquaBioTox prototype will be fully automated as part of the ResiWater project.



Experimental immunotherapy zaps 2 most lethal Ebola virus strains

Source: <http://www.medicalnewstoday.com/releases/305045.php?tw>

Jan 13 – Researchers at Albert Einstein College of Medicine and the U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID) have engineered the first antibodies that can potentially neutralize the two deadliest strains of the virus that causes Ebola hemorrhagic fever. The

findings, made in mice, are a significant step toward immunotherapies that are effective against all strains of Ebola virus that cause human disease. The study was published online in *Scientific Reports*.



"A broadly effective immunotherapy for Ebola virus would be a tremendous advance, since it's impossible to predict which strain of the virus will cause the next outbreak," said study co-leader Jonathan Lai, Ph.D., associate professor of biochemistry at Einstein. The other study co-leader is John M. Dye, Ph.D., branch chief of viral immunology at USAMRIID.

Zaire Ebola virus (EBOV) was responsible for the 2014 Ebola outbreak in West Africa, the largest in history. The next-most pathogenic strain of Ebola virus is Sudan Ebola virus (SUDV). "This strain is also a concern because outbreaks are occurring more frequently, and it has been responsible for large outbreaks in the past," said Dr. Dye.

Although a Zaire-specific vaccine is in clinical trials, no vaccine has yet been approved for preventing infection from any strain of Ebola virus. And therapies for people who become infected are very limited. ZMapp, a cocktail of three monoclonal antibodies, is the most promising of several experimental immunotherapies for Ebola virus now in development. But ZMapp's antibodies are specific for EBOV and would not work against the other two Ebola strains that have caused major outbreaks. (In addition to Zaire and Sudan, the third major strain is Bundibugyo.)

In previous work, Dr. Lai and his colleagues used a technique called synthetic antibody engineering to create the first humanized antibodies against SUDV. Those antibodies were designed to bind to SUDV's surface glycoprotein, which the virus uses to gain entry into host cells. Since SUDV's glycoprotein shares just 55 percent of amino acid

sequences found in EBOV's glycoprotein, antibodies against SUDV do not neutralize EBOV.

In the current study, Dr. Lai's team **engineered "bispecific" antibodies that contain key glycoprotein-binding sequences from both the EBOV and SUDV antibodies. The bispecific antibodies effectively neutralized both EBOV and SUDV in tissue culture studies. In addition, the antibodies provided high levels of protection for mice that had been exposed to lethal doses of either of the viruses.**

The bispecific antibodies must still be tested in larger animals and in humans to know whether they'll be effective. If the new immunotherapy proves safe and effective for people, said Dr. Lai, it might best be suited for preventing local outbreaks from getting out of hand, as happened in the recent West Africa Ebola virus epidemic. "It's also possible," he noted, "that a therapy like this could be used prophylactically, to protect health workers or family members who come into contact with Ebola virus patients."

There are currently no plans to further test the new immunotherapy. But if a pharmaceutical company were interested, said Dr. Lai, "it could probably move the antibody fairly rapidly along the evaluation process." Meanwhile, Dr. Lai has broadened his approach to Ebola virus therapy. He is developing antibodies and antibody cocktails aimed at neutralizing the three most dangerous Ebola virus species (Zaire, Sudan and Bundibugyo) as well as Marburg virus, a deadly pathogen closely related to Ebola virus.

New report: Future pandemics pose massive risks to human lives, global economic security

Source: <http://www.medicalnewstoday.com/releases/305095.php?tw>

Jan 14 – **Infectious disease outbreaks that turn into epidemics or pandemics can kill millions of people and cause trillions of dollars of damage to economic activity, says a new report from the international, independent Commission on a Global Health Risk Framework for the Future.** Few other risks pose such a threat to human lives, and few other events can damage the

economy so much. **The Commission estimated the global expected economic loss from potential pandemics could average more than \$60 billion per year.** Yet, nations devote a fraction of the resources to preparing, preventing, or responding infectious disease crises as they do to strengthening national



security or avoiding financial crises.

The Commission recommended an investment of approximately \$4.5 billion per year - which equates to 65 cents per person - to enhance prevention, detection, and preparedness. The biggest component of this investment is to upgrade public health infrastructure and capabilities for low- and middle-income-countries, which is estimated to cost up to \$3.4 billion per year. The second biggest component of the \$4.5 billion figure is \$1 billion per year to fund accelerated research and development in a wide range of medical products. The balance relates to financing the strengthening of the World Health Organization's (WHO) capabilities and funding WHO and World Bank contingency funds.

"We have neglected this dimension of global security," said Commission chair Peter Sands, former group chief executive officer, Standard Chartered PLC in London, and senior fellow, Mossavar-Rahmani Center for Business and Government at the Harvard Kennedy school in Cambridge, Mass. "Pandemics don't respect national boundaries, so we have a common interest in strengthening our defenses against infectious diseases in every part of the world. Preventing and preparing for potentially catastrophic pandemics is far more effective - and ultimately, far less expensive - than reacting to them when they occur, which they will."

For example, in the past 15 years, the world faced several infectious disease crises, including Ebola, Middle East Respiratory Syndrome (MERS), severe acute respiratory syndrome (SARS), and the influenza virus known as H1N1. The Commission's own estimates suggest that at least one pandemic will emerge over the next 100 years, with a 20 percent chance of seeing four or more.

To protect against these threats, the top priority must be to reinforce the first line of defense against potential pandemics, public health capabilities, and infrastructure at a national level, even in failed or fragile states, because regional or global capabilities cannot compensate for deficiencies at a national or local level. This requires governments to prioritize investment in their health systems, as part of their fundamental duty to protect their

people, the report says. It also requires effective engagement of communities, given the vital role they play in outbreak detection and response. Countries like Uganda have demonstrated that even where resources are scarce, it is possible to strengthen health systems and contain infectious disease outbreaks.

The Commission recommended that WHO lead the development of a definition and benchmarks for core public health capabilities and functions by the end of 2016. WHO should also establish an independent, objective, and transparent mechanism to evaluate country performance against these benchmarks and publish the results. This will enable governments to monitor their own progress, civil society to hold their governments accountable, and financial markets to assess economic vulnerability to infectious disease risk. The Commission emphasized the importance of all countries agreeing to participate in this assessment process and proposes incentives to encourage this, including making World Bank support for strengthening health systems conditional on participation. The Commission also recommended that the International Monetary Fund include pandemic preparedness in its country economic and policy assessments.

The Commission said stronger international coordination and response mechanisms are also essential, given the significant shortcoming revealed during the Ebola outbreak. The Commission concluded WHO must take the lead in the international system to identify, prevent, and respond to potential pandemics, but to play this role effectively, it must make significant changes. By the end of 2016, WHO should create a Center for Health Emergency Preparedness and Response, under the oversight of an independent Technical Governing Board. The Center should be funded through an increase in WHO core contributions from member states. In addition, the Commission called for the United Nations and WHO to establish mechanisms for coordination and escalation for health crises and for WHO to enhance means for cooperation with non-state actors. WHO should also generate a high-



priority watch list of outbreaks that have the potential to become international public health emergencies, which should be shared daily with national authorities and made public on a weekly basis. The Commission supported the proposals for WHO's \$100 million Contingency Fund for Emergencies and the World Bank's \$1 billion Pandemic Emergency Financing Facility. Accelerating research and development across a wide range of medical products - including vaccines, therapeutics, diagnostic tools, personal protective equipment, and instruments - is also vital, the Commission argued. To ensure more effective prioritization and coordination of such efforts, WHO should establish an independent Pandemic Product Development Committee comprised of leading research and development experts from across the world to oversee mobilization and deployment of resources. Furthermore, the

Commission believed additional investment in research and development should be made in this arena. To accelerate deployment of new products, the Commission also recommended significant work on harmonizing clinical protocols and approvals processes.

"This bold report is independent, forward-looking, comprehensive, and timely," said Victor J. Dzau, president of the U.S. National Academy of Medicine, which provided leadership and guidance for the study. "It highlights pandemics as a threat to global security, recommends important changes in global health governance, and addresses essential issues in financing, public health, and R&D. Importantly, it boldly assigns dollar figures and timelines to its recommendations. I believe this report is exactly what is needed to drive progress in this critical issue of global health and security."

WHO: Ebola ends in West Africa, but 'expect new flare-ups'

Source: <http://www.medicalnewstoday.com/articles/305138.php?tw>

Jan 15 – **This is not the first time Liberia has been declared free of Ebola transmission - the World Health Organization (WHO) made a similar announcement in May 2015, but the virus returned twice, once in June and then again in November.**

What makes this occasion different is that the other two countries most affected by the recent outbreak - Guinea and Sierra Leone - have also been declared free of Ebola. The WHO declared Sierra Leone free of Ebola in early November, and Guinea achieved the same status in late December.

For the first time since the start of the epidemic 2 years ago, say WHO, all three countries have reported zero cases for at least 42 days.

To be declared free of Ebola, a country must achieve 42 days (two 21-day incubation cycles of the virus) since the last confirmed patient tests negative for the disease two times.

The recent outbreak in West Africa is unprecedented in world history. It has infected over 28,500 people and claimed over 11,300 lives. It has devastated families and communities and significantly weakened the health systems and economies of all three countries.

Risk of additional outbreaks continues

While praising the monumental efforts of the governments and people of the countries affected, and the organizations that have partnered with WHO in bringing the epidemic to an end, the UN agency warns that "the job is not over" and "strong surveillance and response systems will be critical in the months to come," as it is likely that flare-ups will occur. There is a high risk that small outbreaks of Ebola - like the most recent one in Liberia - will occur.

The WHO say 10 of the flare-ups that have occurred were not part of the original outbreak and were likely a result of Ebola persisting in survivors who have recovered.

There is evidence that while the Ebola virus may disappear from the bloodstream of survivors relatively quickly, it can survive in "niches" in the body. For example, it can survive in men's semen for 7-9 months and in the eye for 2 months after recovery.

Dr. Bruce Aylward, special representative of the director-general for the Ebola Response at the WHO, says the epidemic is in a critical period as countries



move from managing infected patients to managing the risk of new infections.

He notes that the risk of new infections is gradually reducing as the virus clears from the survivor population, but "we still anticipate more flare-ups and must be prepared for them." He adds:

"A massive effort is under way to ensure robust prevention, surveillance and response capacity across all three countries by the end of March." Looking after survivors is an important part of this phase. As well as screening for persistent

virus, they will need medical and psychological care, and support to help them return to normal life in their families and communities, who will also need education and help to reduce stigma and minimize risk of Ebola virus transmission.

One of the factors that appears to have hampered control of the recent Ebola epidemic in West Africa, and made it difficult to apply aggressive quarantine programs, is the lack of maps or census data.

Bleeding Control - The Next Step in Active Shooter Guidance

By Birch X. Barron

Source: http://www.domesticpreparedness.com/Industry/Standards/Bleeding_Control_-_The_Next_Step_in_Active_Shooter_Guidance/



Military methods used for bleeding control on the battlefield can be just as effective on the scene of an active shooter, terrorist attack, or other mass casualty incident. It is time to teach these methods to anyone who may someday find himself or herself in a position to save a life by stopping the bleed.

Jan 20 - "Run. Hide. Fight.®" – the current guidance for surviving an active shooter or terrorist attack – is direct and concise but incomplete. Victims with gunshot wounds and other traumatic injuries may lose blood rapidly, and their lives are dependent on immediate action from those around them. Incorporating basic bleeding control information into active shooter, terrorist attack, and mass casualty guidance can empower bystanders and save lives.

No one should die from uncontrolled bleeding. Simple techniques to slow blood loss have been used for decades, and extensive military research in Iraq and Afghanistan has demonstrated their effectiveness in treating injuries from gun violence and attacks involving improvised explosive devices. Without intervention, severe-but-controllable hemor-

rhage can cause death in as little as five minutes, and many victims may be beyond rescue by the time trained medical teams arrive on scene.

As the United States builds resilience in the face of increasing violence, lessons must be taken from experiences on the battlefield. Following shootings and mass casualty incidents, rapid intervention by bystanders, law enforcement officers, and other non-medically trained responders is critical to patient survival. Techniques to stabilize traumatic bleeding are not complicated to learn, and initiatives to promote bleeding control can be easily incorporated into community and first responder preparedness efforts.

Step 1: Educate



Opportunities to learn bleeding control techniques should be promoted publicly and made available to the entire community. Special emphasis should be placed on training all law enforcement officers and nonmedical first responders to use bleeding control techniques for self-care and the care of others. Essential skills include safely identifying the source of bleeding, packing and compressing a wound, and applying pre-made or improvised tourniquets as necessary to slow the rapid loss

of blood. Educational resources are readily available online.

accessible in high-risk public locations. Emergency medical services (EMS) personnel, law enforcement officers, and other first responders should be equipped with bleeding control supplies to carry in their vehicles or on their person.

Step 3: Incorporate Bleeding Control Initiatives into Existing Policy

Plans and policies that pertain to active shooter and intentional mass casualty events should be

updated to include guidance and support for bleeding control initiatives. To maximize community resilience, bleeding control initiatives should extend beyond government agencies to private sector businesses and professional, community, social, and faith-based organizations.

In the wake of recent mass shootings – in San Bernardino, California; Paris, France; and Colorado

Springs, Colorado – it is increasingly clear that improved survival lies in the hands of the people within close proximity. Bleeding-control initiatives empower bystanders to take action, and the skills learned are applicable to a wide variety of emergencies. A new step is being added to improve survival within the community: Run. Hide. Fight. Stop the bleed.

of blood. Educational resources are readily available online.

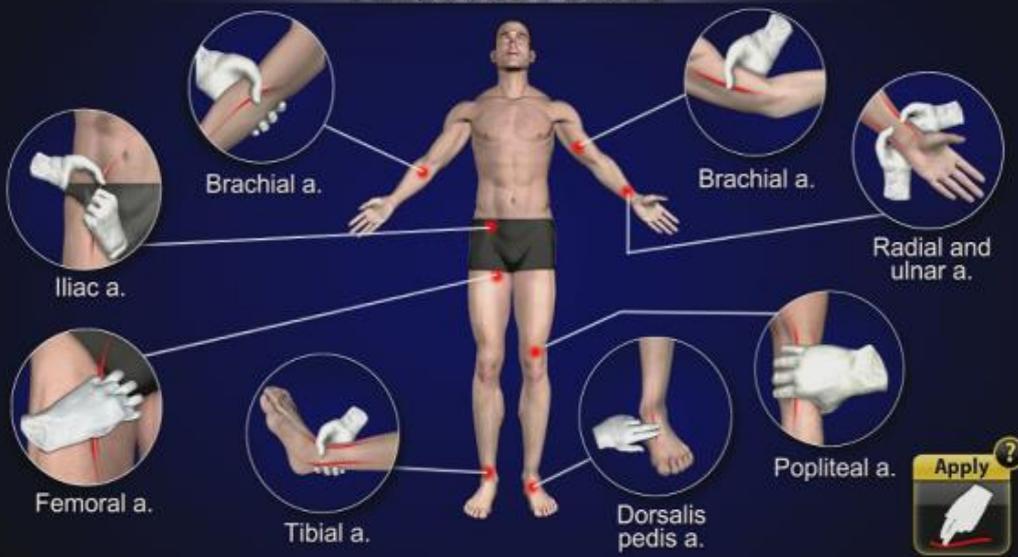
Step 2: Improve Access to Life-Saving Equipment

Essential bleeding control supplies such as gloves, hemostatic gauze, and tourniquets should be purchased and made easily

The DHS [Stop the Bleed](#) initiative is a resource with simple materials for public distribution. Detailed hemorrhage control guidance can be found in the [Hartford Consensus](#) document produced by the Joint Committee to Create a National Policy to Enhance Survivability from Intentional Mass-Casualty and Active Shooter Events.

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PRESSURE POINTS



Hopkins Bloomberg School of Public Health and a BA in Psychology from Linfield College.

ISIS 'plans to contaminate Turkish water with tularemia'

Source: http://www.ansamed.info/ansamed/en/news/sections/generalnews/2016/01/21/isis-plans-to-contaminate-turkish-water-with-tularemia_a4de822a-0ac9-485a-8eb8-074eda9d6039.html

Jan 21 – The Islamic State (ISIS) is planning to contaminate Turkey's water supplies, according to a 'confidential' intelligence report. The report was sent to the deputy governor of Istanbul on Friday and revealed Thursday by the media. The country's intelligence services say that ISIS - which has previously carried out chemical attacks in Syria and Iraq - aims to spread several types of contagious bacteria including tularemia, also known as 'rabbit fever', which is difficult to diagnose as its symptoms resemble those of several types of flu.

Water as Source of *Francisella tularensis* Infection in Humans, Turkey

Emerging Infectious Diseases (CDC); Volume 21, Number 12—December 2015

By Selcuk Kilic, Dawn N. Birdsell, Alper Karagöz et al.

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Source: http://wwwnc.cdc.gov/eid/article/21/12/15-0634_article

Abstract

Francisella tularensis DNA extractions and isolates from the environment and humans were genetically characterized to elucidate environmental sources that cause human tularemia in Turkey. Extensive genetic diversity consistent with genotypes from human outbreaks was identified in environmental samples and confirmed water as a source of human tularemia in Turkey.

► Read the full paper at source's URL.

Genomic analyses of *Francisella tularensis* strains confirm disease transmission from drinking water sources, Turkey, 2008, 2009 and 2012

Euro Surveill. 2015;20(21)

By A Karadenizli¹, M Forsman², H Şimşek³, M Taner³, C Öhrman², K Myrtenäs², A Lärkeryd², A Johansson⁴, L Özdemir¹, A Sjödin²

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Source: <http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=21136>

Waterborne epidemics of tularemia caused by *Francisella tularensis* are increasingly reported in Turkey. We have used whole genome sequencing to investigate if *F. tularensis* isolated from patients could be traced back to drinking water sources. Tonsil swabs from 33 patients diagnosed with oropharyngeal tularemia in three outbreaks and 140 water specimens were analyzed. *F. tularensis* subsp. *holarctica* was confirmed by micro-agglutination and PCR in 12 patients and five water specimens. Genomic analysis of three pairs of patient



and water isolates from outbreaks in Sivas, Çorum, and Kocaeli showed the isolates to belong to two new clusters of the *F. tularensis* B.12 genetic clade. The clusters were defined by 19 and 15 single nucleotide polymorphisms (SNPs) in a multiple alignment based on 507 *F. tularensis* genomes. One synonymous SNP was chosen as a new canonical SNP (canSNP) for each cluster for future use in diagnostic assays. No SNP was identified between the genomes from the patient–water pair of isolates from Kocaeli, one SNP between the pair of isolates from Sivas, whereas the pair from Çorum differed at seven SNPs. These results illustrate the power of whole genome sequencing for tracing *F. tularensis* patient isolates back to their environmental source.

► Read the full paper at source's URL.

