



Swedish Civil  
Contingencies  
Agency

# Safe and Sound

Ten Years of Research and Development Cooperation  
between United States and Sweden





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Safe and Sound – Ten Years of Research and Development Cooperation  
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Swedish Civil Contingencies Agency (MSB)

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**Ten years of Research and  
Development Cooperation  
between United States  
and Sweden**

## 2017 – Ten Years of Research and Development Cooperation between United States and Sweden

In 2007 DHS Secretary Michael Chertoff and Swedish Defence Minister Mikael Odenberg signed the bilateral agreement on research and development in homeland security between the United States and Sweden. Since then, an active research and development cooperation between the countries has developed. The agreement has created opportunities to share knowledge and experiences and to develop networks that enhance our countries' efforts to make a more secure and more resilient society.

The purpose of the bilateral cooperation is to eliminate potential barriers that hinder research and development cooperation. The cooperation should instead facilitate and nurture research and development possibilities for both countries' universities and other research institutions, as well as their national authorities. The knowledge and experiences that are shared should lead to a more effective use of our combined resources. The year 2017 marks ten years of success for this bilateral agreement.

### The agreement enables a number of areas for cooperation:

- Research and development projects.
- Seminars, symposiums, conferences and workshops.
- Case studies and the exchange of experiences.
- Exercises, training and courses.
- Visits, exchange of experts, short term positions.
- Use of laboratory facilities and exchange of methods.
- Exchange of information, equipment, material, legal framework, etc.

The ten year anniversary was commemorated throughout the year by holding a series of open seminars and round-tables among high level experts under the heading *Safe and Sound*. This was a collaboration between DHS S&T, MSB and the Embassy of Sweden in Washington D.C.



The grand opening of the *Safe and Sound* series was highlighted by the presence of Swedish Minister Åsa Regner, DHS Under Secretary for Science and Technology Dr. Robert Griffin, MSB acting Director General Nils Svartz and Swedish Ambassador Björn Lyrvall.

**THE POSSIBILITIES ARE GRAND AND THE SCOPE IS WIDE**

The focal points are:

**USA:** DHS Science and Technology Directorate

**Sweden:** MSB (Email: [transatlanticcooperation@msb.se](mailto:transatlanticcooperation@msb.se))





*"It is important to protect our fundamental values of free, open and secure societies. This bilateral agreement contributes to this shared objective. This agreement is of high priority to the Swedish government."*

*Ambassador Björn Lyrvall*



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A woman with dark, curly hair, wearing glasses, a red blazer, a black top, a pearl necklace, and a pearl earring, is looking to her right. She is holding a brown paper cup with green leaves on it. The background is dark with a vertical light-colored pillar.

**Strengthened Security  
and Resilience – Research  
and Development**

# Strengthened Security and Resilience – Research and Development

HOUSE OF SWEDEN, WASHINGTON D.C. MARCH 16, 2017

*The 2017 year theme Safe and Sound kicked-off on March 16th with a seminar on Strengthened Security and Resilience – Research and Development, which was held in connection with the ten year anniversary of the bilateral Science & Technology Agreement on Homeland/Societal Security between the U.S. and Sweden. The two executive agents for the Agreement, the Swedish Ambassador to the U.S., and some 30 participants attended the half day seminar.*



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Ambassador Lyrvall opened the seminar by emphasizing the long history of a strong relationship between U.S. and Sweden.

MSB’s acting Director General, Mr Svartz, highlighted the many risks and security challenges that the two nations share and the fruitful cooperation made possible by this agreement.

Dr Griffin of DHS S&T used House of Sweden’s photo exhibition “Where the Children Sleep” by Magnus Wennman to provide a backdrop for the day – ‘it is for these children’s safety and security that we are working.’

*“Our two nations share many of the same risks and security challenges. Resilience is a national responsibility, but it is also a shared responsibility across societies and governments. This fact makes the importance of international cooperation most urgent today. Our successful bilateral cooperation in the Homeland/Societal Security domain is a crucial instrument for facilitating research and development that strengthens the safety and security of our nations. The cooperation between our countries engages many public agencies, universities, institutes and businesses, as it builds upon a whole-of-society approach.”*

Nils Svartz



Keynote speakers shared their experiences from four areas of long standing and successful cooperation:

1. Mr. Cotter of DHS S&T: Next Generation First Responder.
2. Dr Maughan of DHS S&T: Progress in the area of cyber security.
3. Dr. Deshane of DHS S&T: Recent developments within radiological forensics.
4. Ms. Fox of FEMA: The outstanding collaboration in the field of Societal consequences of extreme space weather.



**Looking ahead – crucial areas in science and technology cooperation for enhanced societal security:**

- A balanced portfolio - short and long term. This is especially important when identifying knowledge and technology gaps and setting priorities for research needs.
- Cyber security - Continued focus on cyber security issues, and in particular in relation to the private sector. Cyber threats are not cross border, as no borders exist in cyberspace.
- Larger private sector – Expert analysts predict that the private sector will take over larger parts of the functions of the public sector. We need to examine the implications this would have for our capacity to govern under stress and for the resilience and integrity of the public sector.



- Arctic region – This region will bring a whole set of challenges regarding trade, natural resources and security related issues.
- Exercises – Exercises are an important tool to enhance our capabilities. More benchmarking and lessons learned from national exercises was stressed.
- Information campaigns - Effective information campaigns are crucial tools for raising public awareness and individual preparedness.



**Joining Together to  
Strengthen Resilience  
at Multiple Levels**



## Joining Together to Strengthen Resilience at Multiple Levels

HOUSE OF SWEDEN, WASHINGTON D.C. MAY 16–17, 2017

*MSB and DHS FEMA organized this two-day event on how the U.S., Sweden and other nations deal with the obligations of building resilience in the face of varied threats and risks. A mix of researchers on the topic attended the event, including the Red Cross and representatives of national authorities from U.S., Sweden and Norway. Bengt Sundelius and Åsa Kyrk Gere from MSB moderated.*



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FEMA





**The first day of the seminar focused on raising risk awareness and improving preparedness**

Cecilia Nyström of MSB explained that empowering citizens starts with knowledge. Lack of personal experience presents a challenge. Katherine Rowan of George Mason University discussed the use of storytelling to help people emotionally connect to risks. According to Per Brekke of DSB Norway, emotions can cause people to focus on the wrong risks. The messaging from government and other sources such as media needs to be presented properly.

Multiple talks were given on the importance of resilience on the individual and local levels. Christi Collins stated that FEMA only gets engaged if an incident cannot be handled on the local or state levels, and this scope shapes their messaging to the public. Michael Sharon shared examples from private citizens after the Boston bombing.

The participants provided concrete examples for addressing these issues. Kevin Kelley from the Red Cross spoke about community preparedness programs such as “The Great Shakeout”, which encourages

individuals to practice earthquake preparation online. Christi Collins described how the website “ready.gov” is used to drive campaigns and to communicate FEMA’s three main messages: 1) Sign up for alerts and warnings, 2) Make a family plan, 3) Make a kit, and then help others in your community do the same thing.

## **The second day of the seminar focused on strengthening resilience at the local and national levels**

International cooperation strengthens resilience. Jess Bratton, FEMA, stated that cooperation is improving amongst organisations such as NATO and the EU. A recent NATO meeting of experts provided a shared definition of resilience, stipulating that it is a capacity to absorb, adapt, transform and recover. Sara Myrdal, MSB, described how resilience is providing new opportunities for EU-NATO collaboration such as the EDREX 2017 exercises. The European program for critical infrastructure protection, EPCIP – provides member states with a common framework for building resilience.

One of the goals addressed was the revitalisation of the total defence concept, covering both military and civil defence. Anna-Carin Svensson of MoJ Sweden, stated that civil defence provides the fundamental, inherent robustness of society, requiring a joint effort and complex coordination among many stakeholders, including civic organisations and businesses. Per Brekke also stressed the challenge of this civil defence coordination. A report from the Norwegian Utöja incident of 2011 found that there was not a lack of resources, but that there was a limited knowledge about each other. The available resources were not in the right place at the right time.

Anna-Karin Svensson and Katherine Fox concluded the seminars by examining how the safe and sound cooperation can strengthen our scientific understanding of resilience. Sweden wants to import successful initiatives and programs as well as learn from conducted research. The U.S. can get validation for their practices in a different setting. Through this exchange the two nations can understand why approaches or tools work here but not there.



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Our mission  
- to strengthen and develop



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Global Health  
Security – Cross Border  
Health Threats

Embassy of Sweden – 2015 theme 'Safe and  
Global Health Security – Cross border health  
Agency of Sweden (PHAS) together with  
Embassy of Sweden organizing a round  
table at House of Sweden, 29  
and coo

# Global Health Security – Cross Border Health Threats

HOUSE OF SWEDEN, WASHINGTON D.C. SEPTEMBER 28, 2017

*The US Department of Health and Human Services (HHS), the Centers for Disease Control and Prevention (CDC) and the Public Health Agency of Sweden (PHAS) organized this round table event on challenges and common actions for an improved global health security. A mix of representatives from national authorities and the Swedish Police, MSB, etc attended the round table. Gigi Kwik Grönvall from Johns Hopkins Center for Health Security moderated.*



USA and Sweden are both working with International Health Regulations (IHR) and the Global Health Security Agenda (GHSA). Dr Anders Tegnell from the Public Health Agency of Sweden (PHAS), and José Fernandez from the HHS Office of Global Affairs both shared what they are working on nationally and internationally, as well as possibilities for future collaboration.

### **Experiences shared in the area of “Cross border health threats and the global health emergency workforce”**

- Case scenarios, the role of the CDC and the different systems and authorities they have at their disposal to carry out their mandate.
- How the CDC international border team grew as a result of the ebola response.
- The global health emergency workforce and how PHAS is working on developing a rapid response capacity.
- The CDC’s massive effort during the ebola response, and how the lessons learned there was the start of the global response team.
- The development from the epidemic intelligence service (EIS) into field epidemiology training programs (FETP) around the world.

### **Experiences shared in the area of “High Consequence Pathogens and Capacity Building Initiatives”**

- High consequence pathogens, and the work that PHAS is doing in this area.
- The CDC’s influenza program.
- The work of the Viral Special Pathogens Branch of the CDC.
- Preventive work in the area of global disease detection and the strengthening of surveillance and laboratory capacity.

## **Experiences shared in the areas of antimicrobial resistance (AMR) surveillance and implementation of the global antimicrobial resistance system (GLASS)**

The aim of GLASS is to harmonize global standards to monitor AMR trends, detect emerging resistance and estimate the burden of AMR globally. Panel members shared their experiences of implementing GLASS in the US and experiences from the international infection control program.

The panel agreed that many parallel initiatives provided momentum and drummed up interest for AMR. There were also interesting discussions on obtaining better data, making sure that support given to other countries is sustainable and providing career pathways to increase sustainability.

## **Dr Anders Tegnell ended the meeting by proposing a list of areas for possible future collaboration**

- Shared leadership for some items on the future global health security agenda.
- Border control of infectious diseases for humans and animals AMR surveillance data.
- Emergency medical teams (courses and training, specific resources/shared rosters).
- Evaluating interventions to draw robust lessons and gain data.
- Collaboration in selected third party countries, coordination of interventions.

*“The purpose of the meeting is to find areas for collaboration within global health security. PHAS has many international commitments, which include being the national focal point for WHO/IHR and assignments within ECDC and the Health Security Committee, as well as GHSA.”*

*Dr. Anders Tegnell, State Epidemiologist*



# Future Incident Scene and Future First Responder



## Future Incident Scene and Future First Responder

HOUSE OF SWEDEN, WASHINGTON D.C. OCTOBER 3–4, 2017

*MSB and DHS S&T organized this two-day event focused on new and challenging issues in the area of the future incident scene and the future first responder. The objective was to strengthen our future first responders by identifying opportunities and challenges for strategic development. Participants included a mix of researchers, practitioners from the police, fire and rescue services and training institutions, as well as representatives of national authorities from U.S., Sweden and Norway. Christian Uhr from Lund University and Dan Cotter from DHS S&T moderated.*



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The discussion generated a number of questions that were deemed interesting for further development:

- Perceptions are very hard to change, but what does that mean in the context of public safety? Mitigation and preparedness is probably more about perception, while response and recovery might be more about managing people’s expectations.
- How do we implement what we know about human behaviour in leadership training and exercises?
- Regarding the ability of organizations to change and adapt in the face of disaster, we should use research to inform policy and how to shape our organizations.
- What traits do leaders need to have to handle the issues we have discussed here today? How do we build the trust needed for leaders to gain acceptance in crisis management? How do we help leaders become flexible and imaginative?
- How do we counteract infobesity? How do we synthesize information to make it useful for disaster management professionals?



Day two provided a public seminar that consisted of a keynote speaker and three panels. Craig Fugate, who served as Administrator for FEMA under President Obama, was the keynote speaker. The long history of collaboration between FEMA and MSB was highlighted. He stressed the importance of viewing the public as part of the first responder team. He also emphasized that we must adapt to the risks of the future, not the past.

The three panels addressed the following issues:

- **Panel one:** Future incident scene and response from a strategic perspective.
- **Panel two:** Leadership and systems for multi-organizational response management.
- **Panel three:** Technical advances and innovation.

*"We hoped to gain further insights into modern challenges with emergency and disaster response management, but I think we achieved more. Among other things, the meeting led to very interesting discussions on broader perspectives on management issues as well as identification of distinct development areas and potential forms for collaboration."*

*Christian Uhr*

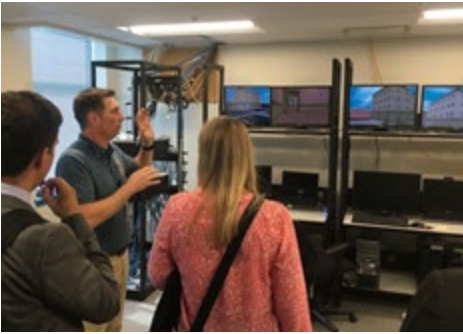
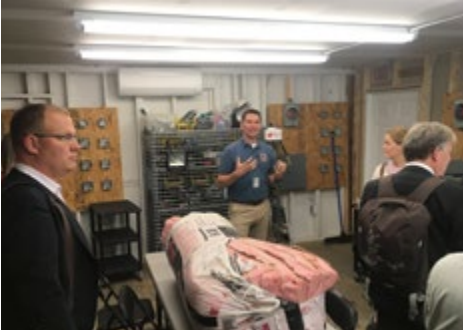


**Panel one: Future incident scene and response from a strategic perspective**

We need to use collaboration and creativity to create exercise scenarios that reveal system breakdowns. The strategic leadership challenge is to change the speed in which leadership works. We must be more agile and quicker to implement the necessary changes that exercises reveal. It may be that the leadership skills required for the acute handling of a situation are not the same as those required to build preparedness.

**Panel two: Leadership and systems for multi-organizational response management**

Assumptions are made about how people are affected by disasters. We need to bring all of the social and behavioural science results that we have into the disaster management field and integrate these perspectives into our training. We try to influence people’s decisions by providing them with more knowledge, but science tells us this does not work. Therefore, we need social scientists to translate their findings into tools that disaster managers can use.



### Panel three: Technical advances and innovation

Before the panel began, a team delivered samples of a new ensemble of personal protective equipment that was created by a collaboration project between DHS S&T and MSB.

The panel discussed information flow. Research is needed on how we can generate actionable outcomes from all of the information we can collect. Another rich field for research concerns sharing information with the public. The needs for security (working on a need to know basis) have to be balanced against the needs of public safety (that require information sharing). The Swedish Police want to be able to interact with the public at the scene of an incident, going from passive to active communication as part of the response.



**Safeguarding Democracy  
and Preventing  
Violent Extremism**

# Safeguarding Democracy and Preventing Violent Extremism

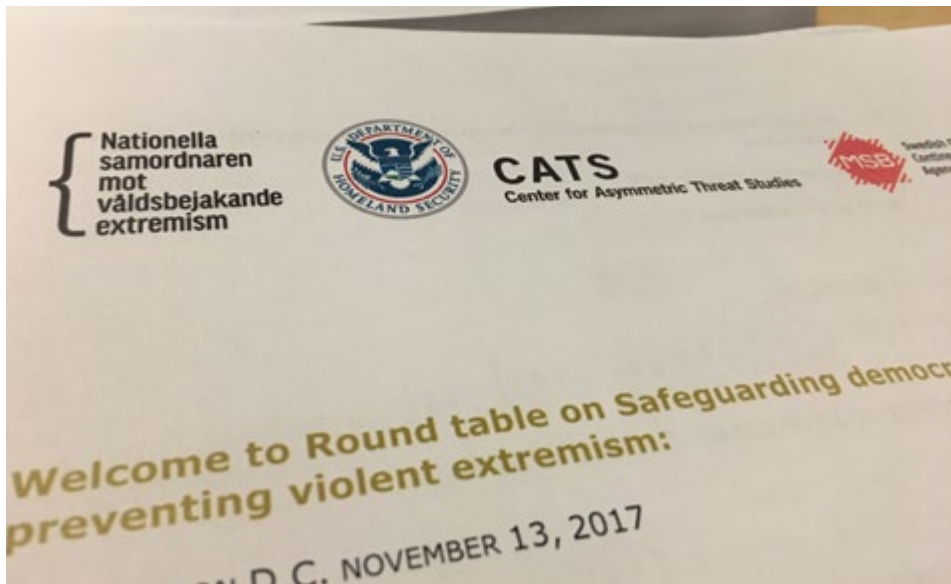
HOUSE OF SWEDEN, WASHINGTON D.C. NOVEMBER 13–14, 2017

*The Coordinator to Safeguard Democracy Against Violent Extremism, the Swedish Defense University – FHS, the Center for Asymmetric Threat Studies – CATS and DHS S&T organized this two-day event focusing on preventing violent extremism. A mix of researchers, as well as representatives of national authorities from U.S., Sweden and Canada attended the event. John Picarelli from DHS, Jerzy Sarnecki from University of Gävle and Anna Hedin Ekström from the Coordinator to Safeguard Democracy Against Violent Extremism moderated.*



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Center for Asymmetric Threat Studies





Magnus Ranstorp from CATS and David Gersten from the DHS office of community partnerships set the scene on day one. Magnus Ranstorp from CATS and Miles Taylor, counselor to the secretary of DHS addressed the panels as keynote speakers on day two.

**Six panels, three on each day, engaged in the following topics:**

- Long-lasting measures – research, policy and intervention.
- Understanding and preventing terrorist violence – parallel societies, societal risks and the crime-terror nexus.
- International cooperation, the way forward to raise societal security.
- What measures seem to work? Experiences from Canada, US and Sweden.
- How to understand and prevent terrorist violence, organized violence, parallel societies, social risk and the crime-extremism nexus.
- Benchmarking – ways forward to building common knowledge about safeguarding democracy and preventing violent extremism.





Magnus Ranstorp provided a North European perspective.

Foreign fighters present a complex and transboundary issue, involving questions of migration, returnees and reintegration. One third of the foreign fighters have returned to their home countries.

All types of extremism are on the rise. There is a triple helix of violent extremism, with right wing, left wing and jihadist groups triggering and fueling each other.

Miles Taylor gave a U.S. perspective about the state of the terrorist threat, how DHS views the threat and why international engagement is a force multiplier.

The threat of violent extremism is changing. Terrorists can now operate at the speed of a tweet, and lay out plans in safe havens on the web. ISIS is the largest convergence of Islamist terrorists in modern history, larger than the coalition that we put together to fight them.



Lessons learned are speed and realism. If they franchise terrorism, we have to franchise the response; working at the speed of broadband, not at the speed of bureaucracy. We need to remain realistic and stay connected, and be strict in deciding what we fund. The best CVE policy is to make the enemies look like they are losing, because that will dry up their bases of support.

*“Violent extremism is a global threat, which does not evolve in a vacuum, but is connected to other societal risks such as organized crime, social unrest and gang-related activities.”*

*Ambassador Karin Olofsdotter*



The panel on understanding and preventing terrorist violence stated that the challenges of violent extremism are changing. There is a nexus of traditional crime and extremism, which often feed off each other in terms of capacity such as financial gain and recruitment. There are many similarities between different milieus but also differences and in order to improve the preventive work we need to understand the factors that unite and differ. Otherwise, we might miss out on possible synergies, or miss the target for our preventive measures.

The panel on benchmarking and ways forward stated that extremism is local and global at the same time. A challenge in this domain is that media and the public debate often want to compare different types of extremism and judge, which one is worst. It is important to know that extremisms are interlinked and feed off each other. We must work with the whole portfolio, since the environments interact and generate each other. We also need to combine repressive and preventive measures, finding a good balance between the two tools.



**Craig Fugate**

## Craig Fugate, FEMA Administrator from May 2009 to January 2017

HOUSE OF SWEDEN, WASHINGTON D.C. OCTOBER 2, 2017

*Craig Fugate, former Administrator of the U.S. Federal Emergency Management Agency (FEMA), meet with a Swedish delegation for dialogues on challenges, critical issues, lessons learned from years of experience. The Swedish delegation consisted of MSBs Emergency Management Development Department, National Board of Health and Welfare, Center for Advanced Research in Emergency Response at Linköping University, Swedish Defense University, Regional Alliance of Södertörn as well as the Greater Gothenburg Fire and Rescue Services, Swedish Research Institute.*

*MSBs leadership initiated collaboration with Administrator Fugate and FEMA in 2009 with an investment in the area of extreme space weather. FEMA and MSB have co-arranged many events since then as well as connected the U.S., EU and NATO. MSB invited Fugate to Sweden as keynote speaker at the national event, 'Mötesplats – Samhällssäkerhet' in November 2017.*

### FEMA after Katrina

Fugate has a background as a paramedic in the fire service. He knows that you need to act fast in emergencies to change the outcome. Fugate realized that at FEMA people were so scared of being wrong, they would rather do nothing. Time is the most precious commodity, not accuracy and certainty.

During his years at FEMA, Fugate replaced the whole leadership level and rewarded action. He told his staff that mistakes could be made for the right reasons, but failure to act is not acceptable. The choice between action and passivity is a question of leadership.

### The seven deadly sins

Fugate presented what he refers to as the seven deadly sins of emergency management:

- We plan for what we are capable of responding to.
- We plan for our communities by placing the hard to do in an annex (elderly, disabled, children, pets).
- We exercise to success.

- We think our emergency response system can scale up from emergency response to disasters.
- We build our emergency management team around government, leaving out volunteer organizations, the private sector and the public.
- We treat the public as a liability.
- We price risk too low to change behaviour, and as a result, we continue to grow risk.

### **Fugate elaborated on planning**

You need to use the science of the hazards you face, figure out the worst plausible scenario you might encounter (we call this the maximum of maximums), and plan for that. Plan for a catastrophic event, not an emergency. Otherwise, you will respond to what you are used to and you cannot scale up.

### **Fugate elaborated on exercising**

President Obama gave Fugate the mandate to use scenarios that break the system, to exercise to the point of failure. Fugate introduced unprepared exercises at FEMA. Unprepared exercises need to include the top level officials, to prepare them for crisis leadership. The president led by example by showing up to the exercises, as did Governor Bush in Florida.

### **Fugate elaborated on the public and private sector**

If you cannot get the private sector up and running it will eat up your resources very quickly. Give the private sector a seat at the table. FEMA has done this, and the major private partners (such as distributors of food and gas) now have a seat at the table at the operations centers with FEMA.

What we found is that in acute emergencies, businesses are not looking for competitive advantage. They just want information about the situation so they can start up their business again, and that frees the first responders up to help other people.

The public is often considered a liability, and not a resource. This is probably the last piece of the puzzle. It is important to remember that many first responders are neighbours helping neighbours, and they are often the fastest available response. Emergency managers



find it difficult because people do not do as they are told. However, we need to learn to live with the chaos. We need to understand that being able to control the public is a luxury. We need to give the public good information and let them make informed decisions. The faster we can get them back into control of their lives, the better.

We have taught people that they are not part of the team, and they should stay out of the response. People have been taught to be passive. But if people are shooting, you need to stop the killing and stop the dying! (Most people die of blood loss, and you can help buy time by applying pressure. All you need is a steady hand.) Educate people to engage. People need to understand that in a large scale situation, calling 911 and waiting for the authorities is not enough. You might be the only one who can help. A simple message to put out there is “After you are ok, check on your neighbour.”

*“After you are ok, check on your neighbour.”*

*Craig Fugate*

2017 is the year that established ten years of research and development cooperation between United States and Sweden for a safer, more secure and resilient society. The Swedish Civil Contingencies Agency and the US Department of Homeland Security highlighted this cooperation with a ten year-anniversary. In close cooperation with the Embassy of Sweden in Washington D.C., the Swedish Civil Contingencies Agency highlighted this milestone with a series of open seminars and expert round tables throughout 2017 under the heading of *Safe and Sound*:

- Strengthened Security and Resilience – Research and Development
- Joining Together to Strengthen Resilience at Multiple Levels
- Health Security – Cross Border Threats
- Future Incident Scene and First Responders
- Safeguarding Democracy and Preventing Violent Extremism



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In cooperation with:



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