

The Hoosier Responder

October 2014 ■ Volume IX, Issue X



3 Cleaning Personal Protective Equipment



5 2014 EMAI Conference



6 Halloween Safety



7 \$1 Million so far for January Storms

1 *The new I-BEAM communications trailer is a prototype designed by an Indiana company. The self-sustaining unit can generate solar and wind energy.*

2 *The earthquake exercise trained 60 individuals to conduct building assessments, practice emergency procedures, and tested new equipment September 22-26 in New Harmony.*

3 *“We have people who want to be a part of the program,” said I-BEAM’s Dave Smith, talking about the exercise’s personnel, many of whom are unpaid. “There’s no lack of volunteers.”*

I-BEAM Practices Deployment Sep. 22-26 Exercise Recap

The Indiana Building Emergency Assessment and Monitoring (I-BEAM) team, in partnership with IDHS District 10 and member states of the Central United State Earthquake Consortium (CUSEC), trained 60 individuals to conduct building assessments, practiced emergency procedures, and tested new equipment during its September 22-26 exercise which took place in and around New Harmony, Indiana.

“These exercises are important because there’s no other way to understand damaged structures without conducting assessments on real buildings, but it’s also important to understand all the

associated paperwork, record-keeping, and the deployment of assets,” said Jim Hawkins, assistant director of Fire and Building Code Enforcement at the Indiana Department of Homeland Security (IDHS). “Every time we set up, we get better.”

I-BEAM is comprised of volunteers from around Indiana and personnel from IDHS who have a background in building safety. After any man-made or natural event which may destabilize buildings, I-BEAM can perform structural assessments to determine whether or not buildings are safe to be returned to.

While I-BEAM works to build an in-state network, it also partners with the Central United States Earthquake Consortium (CUSEC) to build a network among neighboring states. CUSEC is made up of eight states surrounding the New Madrid Seismic Zone: Alabama, Arkansas, Illinois, Indiana, Kentucky, Mississippi, Missouri, and Tennessee. The exercise included 10 out-of-state CUSEC members who were observing and learning from I-BEAM’s practices.

“We’re trying to get all of our eight CUSEC states involved in this type of program, and we do have some that are

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very involved,” said Mike Calvert, CUSEC, “But Indiana is leading the pack.”

New Harmony’s location within the Wabash Valley Seismic Zone and the New Madrid Seismic Zone, along with the variety of building structures in town made it an ideal location for inspectors to test their assessment skills.

“New Harmony is an old town with many different types of structures,” said Dave Smith, I-BEAM exercise leader. “We can get several different scenarios in a relatively small area here, which is important because different buildings are affected differently by an earthquake.”

Each day of the exercise, four teams of

3-4 participants – building inspectors, structural engineers, and design professionals – visited seven building sites within 50 square miles of New Harmony to perform building assessments. Each team worked from 8 a.m. to 8 p.m. and finished with a

“We’re trying to get all of our eight CUSEC states involved... but Indiana is leading the pack.”

debriefing the following morning

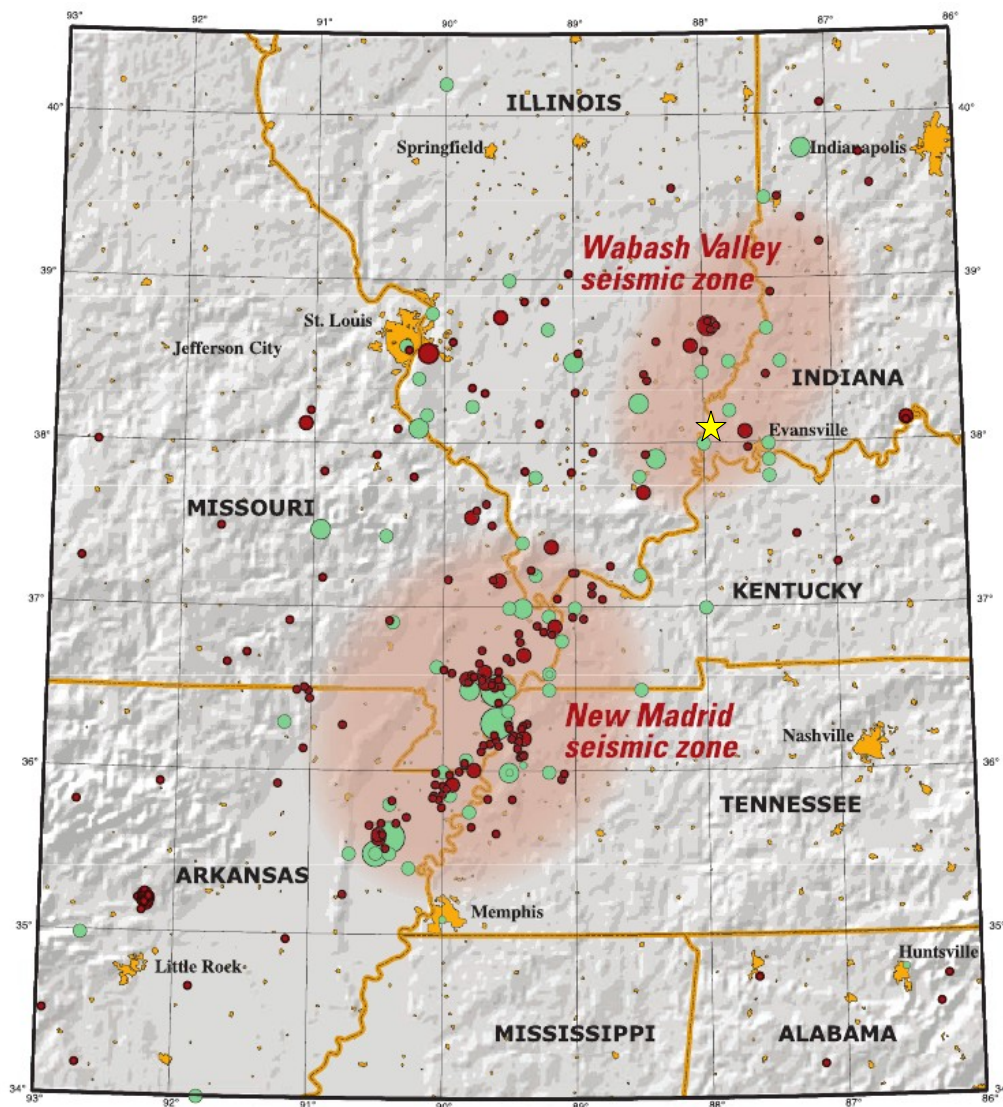
before leaving the exercise and being replaced by a new group of participants. Over the course of five days, more than 60 individuals received training in building inspection.

I-BEAM’s training program is certified by the California Science and Engineering Corporation (CALSEC), which has nationally recognized standards for building safety as it relates to earthquakes. I-BEAM is also CALSEC-certified to train trainers on the material, which helps I-BEAM’s efforts to build a team of qualified inspectors ready to respond in the aftermath of a disaster.

“The whole point is to have a very large roster, not knowing where a disaster is going to happen,” said Smith. “We can’t have personnel coming from just one area because a disaster may happen in that area. We have to have a network around the state.”

According to geology experts from Purdue University, Indiana is near two faults that will eventually fail.

“I hope [an earthquake] never happens, and we never have to deploy,” said Smith, “But if it does, we will be ready.” ♦



This map of the New Madrid and Wabash Valley seismic zones shows earthquakes as circles. Red circles indicate earthquakes that occurred from 1974 to 2002 with magnitudes larger than 2.5 located using modern instruments. Green circles denote earthquakes that occurred prior to 1974. Larger earthquakes are represented by larger circles. The on the map indicates the location of New Harmony.



How to Rid Firefighting PPE of Contaminants

By Jeffrey Stull (This article originally appeared on www.firerescue1.com and is reprinted with permission.)

Every emergency response represents a possible contamination event. If there is exposure to gases or vapors, liquids, or particles, these substances will get onto clothing. In many cases, they will remain on the clothing until adequately cleaned.

While we cannot wipe out cancer, understanding its nature and the special risk to firefighters allows us to take steps to reduce its occurrence and severity

We have previously described the manner in which this contamination occurs, but there are some subtleties worth going over.

Gases and vapor generally easily penetrate any textile component. Coated or laminated materials such as trim or moisture barriers together with hard surface items such as helmet shells will physically retard gases and vapors, but many of the substances can still permeate materials on a molecular basis.

This is also true for leather and rubber materials. While leather is porous like fabric, many chemicals are soluble in rubber.

Point of Entry

Liquids will enter any gap in the material or clothing, particularly through interface areas. For textile fabrics, once the outer surface is wet, the liquid will penetrate.

Moisture barriers, coated materials, and rubber prevent liquid penetration, but many non-water liquids will penetrate gaps more easily than water. Liquid that soaks a material will spread to other areas of the clothing by wicking, spreading contamination beyond the point of entry.

Particulates can range from asbestos fibers to drywall dust, but the largest contributor of particulate contamination



The largest contributor of particulate contamination at the fire scene is the carbon particles from incomplete combustion.

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from incomplete combustion. Carbon particles adsorb and hold fire gases, making them more dangerous than plain carbon.

While many particles are visible, many are submicron sized and easily get into any porous surface or gaps in the clothing ensemble where there is no barrier.

Like a Magnet

Longer exposures produce higher levels of contamination. Yet the extent of contamination is also heavily dependent on the nature of the substances involved. For example, oily, tarry substances created by high heat will tend to bond to clothing materials more readily, particularly as the clothing cools.

Soiled clothing picks up more contamination. Clean clothing may offer more surfaces for contamination, but many forms of contamination on clothing offer compromised materials that can become more soiled or readily pick up other forms of contamination.

This is most often seen when soot in fabrics continues to pick up gases and vapors from the fire environment. In essence, it is easy for dirty clothing to be more soiled than clean clothing.

The soils on clothing often negate whatever repellent properties a clothing fabric might have. The finishes placed on clothing fabrics and some other components can also wear down over time, making soiling more likely to occur.

Routine Cleaning

After being exposed it essential to clean your gear before continuing to use it. This is not the easiest process as firefighters are generally tired from the response and just want to move on. Also, unless your department provides a second set of gear, this approach can be difficult if you still need your gear and it is wet.

NFPA 1851, which is the standard that governs selection, care, and maintenance of turnout clothing prescribes "routine cleaning," which is principally hand washing. Some organizations will hose down gear after an incident; others have employed the Hazmat decon showers at the site to get rid of the worst of the contamination.

Of course, these processes require time for the gear to dry. However, the alternative is equally problematic — wearing dirty gear continues your exposure to whatever stays on and in your gear.

So, to avoid exposure, some cleaning has to take place as soon as possible after the event and preferably before you have to wear the gear again. Remember, it not just your clothing that has to be cleaned, but also gloves, helmets (including the ear covers), footwear and especially hoods.

Station Wear

It is important to recognize that your

(Continued on page 4)



Longer exposures produce higher levels of contamination. Yet the extent of contamination is also heavily dependent on the nature of the substances involved. For example, oily, tarry substances created by high heat will tend to bond to clothing materials more readily, particularly as the clothing cools.

station uniform and underclothes also have become contaminated by any substance that may have bypassed your turnout clothing. This clothing must be removed and cleaned.

Generally, use the cleaning methods prescribed by the clothing label unless some known substance has penetrated to your work clothing. Nevertheless, in all cases wash this clothing separate from other personal items to prevent cross contamination.

Lastly, while your skin is a good barrier to many substances, it too will be contaminated. Unfortunately, wearing of heavy clothing under hot, humid conditions only enhances how some chemicals can be absorbed through your skin.

Thus, taking a shower immediately after the fire event is critical in getting totally clean and preventing any continued contamination exposure.

Advanced Cleaning

NFPA 1851 also defines advanced cleaning as form of clothing care. This type of cleaning must be done at least once a year and whenever gear is exposed to soiling at a fire. The

frequency for cleaning is a judgment call, but if the clothing is visibly soiled or contaminated, then it must be cleaned.

In addition, if your clothing has been exposed where there is any concern about continued contamination, it must be cleaned. Laundering is not necessary decontamination, but most laundering processes specified by clothing manufacturers are designed to remove soils, which include soot particles and many chemicals.

This does not mean that all chemicals will be removed. There is active work to learn just how effective current procedures are, but prior research has shown that a great deal of contamination can be removed using appropriate washing procedures or an independent service.

In some cases, fire departments realize that they have encountered particularly hazardous substances and specialized cleaning is needed. This form of cleaning is not defined. It may be a presoak, spotting treatment, or special detergent. It also may be an entirely different process altogether.

Current Research

Here, the matter becomes even more difficult because industry offers very little guidance on this topic. Such decisions for how to clean and whether the cleaning itself will be effective are made on a case-to-case basis. In some cases, the knowledge of the contaminant and the potential dangers for reuse will warrant disposal.

But the problem in making that decision is how to assess the cleaning as providing decontamination. This problem has existed for some time and is now being addressed through current NFPA committee work and related research.

Firefighters find themselves in the most dangerous of conditions. While the most obvious hazards are burns and physical injuries, the more incipient hazard of exposure to contaminants that include carcinogens is an equally serious threat. Hopefully, the fire service, with the assistance of groups like the Firefighter Cancer Support Network, can consistently apply these practices and promote other forms of protective clothing design and care technology improvements to further create reductions for cancer-causing agent exposures. ♦

► What's Going On

2014 EMAI Conference From October 29 — October 31

The state's emergency management professionals from across the state will be coming to the Indianapolis Marriott Hotel to attend the annual Emergency Management Alliance of Indiana (EMAI) Conference, which will begin Wednesday, October 29 and run through Friday, October 31.

The EMAI conference is designed to train and educate professionals in mitigation, preparedness, response and recovery. The vision for EMAI is to become a widespread network of emergency management professionals, and an organization that promotes a collaborative and supportive professional environment.

The topics covered at the conference are designed to give valuable insight, education and tips to emergency managers to take back to their

communities. Below are some of the sessions, along with presenters, that will be at the EMAI conference.

Wednesday

—Emergency Management Agency Workshop (HSEEP) – IDHS Executive Director John Hill
 —Overcoming organizational and operational diversity: How NIMS can be applied – Amir Mousari
 —Project 25/FirstNet – Steve Skinner
 —I-MARP – Timm Schabbel & Mike Brubaker
 —National Guard – Doug Rapp & Stephanie Railey

Thursday

—IPAWS/Amateur Radio update – Don West

—Fulton County Full Scale Exercise – Gail Karas
 —Indiana National Guard (INNG) – Joe Lockett
 —Indiana University Active Shooters – Bill Smith
 —IERC Update – Dean Larson

Friday

—National Weather Service (NWS) Weather Ready Nation and Weather Decision Support for Public Officials – Dave Tucek
 —IAEM USA President – Jeff Walker
 —Vibrant Response Lessons Learned— Jon Snell

For more information about the EMAI conference, visit <http://www.indianaema.com/>.

5K Run Offers Unique Preparedness Opportunity

The Henry County Office of Emergency Management (HCOEM) wants Hoosiers to be prepared for disasters by preparing for a potential zombie outbreak.

HCOEM hosted an event called "Prepare for Zombies and Other Disasters" on October 11 in Knightstown, Indiana. The goal was to use preparing for zombies as a way to encourage Hoosiers to prepare for potential disasters.

The purpose of the program was to encourage Hoosier families to be prepared for 72 hours or more, since

emergency responders may be unable to immediately assist everyone during a catastrophic situation.

The program has three parts: First, participants will build their preparedness kit. Second, participants will visit the vendors at the event and get their sheet stamped. Third, participants will bring their completed kit and vendor form to the Henry County Emergency Management sign-in booth. Completed preparedness kits qualify participants to win prizes and raffle items.

The Center for Disease Control and Prevention (CDC) created the Zombie Preparedness campaign in 2011 in the midst of the renewed pop-culture interest in the undead. Various television shows and movies have played with the idea of a 'zombie apocalypse,' where zombies would take over the world. The tongue-in-cheek campaign's logic is that if citizens are prepared for zombies, then they will also be better prepared for real disasters, too.

Ayers Fills Training Role

Natasha Ayers is the new emergency management training program manager for the Indiana Department of Homeland Security. Ayers has been part of IDHS for more than a year, previously working in the agency's exercise section. In her new role, Ayers will manage the Professional Emergency Manager (PEM) program. In addition, she will develop a

comprehensive statewide emergency management training program. Ayers will also be the interim online training manager for the Learning Management System (LMS).

Natasha studied at Indiana University-Purdue University Indianapolis where she earned a bachelor's degree in Public

Emergency Management Program Manager

Safety Management. She is currently pursuing a master's degree in occupational safety at Indiana State University. Natasha's email is nayers@dhs.in.gov.

Trick-or-Treat Safely This Halloween

Halloween is fast approaching and it is important to keep important safety tips in mind when celebrating.

When trick or treating it is important to see and be seen. For greater visibility during dusk and darkness, decorate or trim costumes with reflective tape that will glow in the beam of a car's headlights. Bags or sacks should also be light colored or decorated with reflective tape. Reflective tape is usually available in hardware, bicycle, and sporting goods stores.

Due to the number of children out on the street on Halloween evening, motorists should be especially careful driving along city streets, especially in neighborhoods, during designated trick-or-treat hours. Trick-or-treaters should use sidewalks instead of the street whenever possible and always cross at crosswalks.

People expecting trick-or-treaters should remove anything that could be an obstacle from lawns, steps and porches. Check outdoor lighting and replace burned out bulbs. Wet leaves should be swept away from sidewalks and steps to avoid slips.



Pets can also get excited, so restrain them to prevent them from inadvertently jumping on or biting children.

Paying attention to costumes is also important to ensure they are safe to wear in the many environments they may be worn in. When purchasing costumes, masks, beards and wigs, make sure the

label says "flame resistant." While this doesn't ensure these items won't catch fire, it does indicate the items will resist burning and should extinguish quickly. To minimize the risk of contact with candles or other sources of ignition, avoid costumes made with flimsy materials and outfits with big, baggy sleeves or billowing skirts.

Tips for Haunted House Fun

As Halloween approaches, the Indiana State Fire Marshal and the Indiana Department of Homeland Security Fire and Building Safety Division are reminding Hoosiers to keep safety in mind when visiting haunted houses and enjoying other spooky activities.

"Haunted houses should be scary, but not dangerous," says Indiana State Fire Marshal Jim Greason. "Inspectors are dedicated to working with haunted house owners and operators to keep these venues safe, compliant with state laws and open to the public."

The Fire and Safety Division inspects all haunted houses in Indiana and issues certificates of compliance. This signifies that the haunted house is authorized to operate and that the facility is compliant

with all Indiana building codes.

Choose a haunted house that appears to be run in a neat, orderly fashion and is not overcrowded. There should be no open flame devices or temporary heaters used in the building.

Never smoke inside a haunted house. While inside a haunted house there should always be exit signs or other markers indicating the way out. Exit pathways should also be free



from obstructions. Watch for extension cords, open wiring, overloaded outlets or any other suspicious looking electrical issues.

January Snowstorm Grants Surpass \$1 Million

Governor Pence Says More to Come

Governor Mike Pence announced on September 17 that more than \$1 million in federal grants had been obligated so far to help local and state government and other organizations that provide public services to recover from the January 5-9 winter storm.

“Dollars are beginning to flow to replenish local and state government,” said Governor Pence. “While it will take months for the federal accounting process to be complete and provide funds to the 30 counties that qualified for assistance, this year that started with a rough winter is looking a bit brighter today.”

The Indiana Department of Homeland Security and the Federal Emergency Management Agency have been working with applicants in eligible counties to document and distribute the funds. As of mid-September, \$1,130,340 had been processed for reimbursement to applicants in the eligible counties.

In all, 30 counties were granted federal public assistance and/or snow assistance.

Public Assistance will pay 75 percent of eligible expenses for damage to roads, bridges, utilities, debris removal, buildings’ contents and equipment, water control facilities, parks and recreational facilities, and others, as well as emergency protective measures like traffic control and rescue operations. Snow Assistance will cover



Governor Pence in the Emergency Operations Center during the January 2014 winter storm.

all eligible costs associated with snow removal for the 48-hour or 72-hour period with the highest costs.

LaGrange, Lake, Marion, Madison, Montgomery, Morgan, Newton, Noble**, Owen*, Parke, Putnam, Sullivan, Tipton, Vanderburgh*, Vigo, Wabash, White and Whitley**.

“ This year that started with a rough winter is looking a bit brighter today. ”

Counties granted public assistance include: Allen, Blackford, Boone, Clay, Clinton, Fulton, Hamilton, Hendricks, Huntington, Jasper, Johnson, Kosciusko,

All counties in the previous list except Owen and Vanderburgh (designated by an asterisk) are receiving at least 48 hours of snow assistance. Noble and Whitley counties (designated by two asterisks) are being provided with 72 hours of snow assistance, because they exceeded 150 percent of their record snowfall. Snow Assistance grants cover all eligible costs associated with snow removal for the 48-hour or 72-hour period with the highest costs.

Space Heaters Cause Most Heating Fire Deaths

Some meteorologists are already predicting another rough winter for a large part of the United States and certainly for the Hoosier state – record-breaking snowfall, below-zero temperatures, propane shortages, power outages and more. Unfortunately, with rough winters come more house fires and casualties, oftentimes due to the use of secondary heating sources.

The National Fire Protection Association released a report showing space heaters cause about one-third of all winter house fires and 80 percent of all winter heating fire deaths. The culprit, in about 70 percent of those fires, is combustible materials placed too close to a heating unit. The report also says space heaters account for more than 70 percent of all winter fire injuries and half of all

property damage caused in heating fires.

The solution is simple: Keep a 36-inch radius around a space heater at all times, plug electric-powered space heaters into an outlet with sufficient capacity and never into an extension cord, and turn off space heaters before going to bed or leaving a room for any amount of time.

SBA Loans Deadline is Approaching

November 2013 Tornadoes

The U.S. Small Business Administration is reminding small businesses, small agricultural cooperatives, small aquaculture businesses and most private non-profit organizations in Indiana of the deadline to submit disaster loan applications for damages caused by severe storms, straight-line winds and tornadoes on Nov. 17, 2013. The deadline to apply for an economic injury disaster loan is Nov. 5, 2014.

Low-interest disaster loans are available in Carroll, Cass, Clinton, Daviess, Dubois, Fountain, Grant, Greene, Howard, Knox, Martin, Miami, Montgomery, Parke, Pike, Tippecanoe,

Tipton, Vermillion and Warren counties in Indiana.

Working capital disaster loans up to \$2 million are available at 2.625 percent for private non-profit organizations and 4 percent for small businesses, with terms up to 30 years. The loans are intended to pay fixed debts, payroll, accounts payable, and other expenses that could have been paid had the disaster not occurred. To be considered for this assistance, eligible entities need to apply by the deadline.

Applicants may apply online using the Electronic Loan Application (ELA) via

SBA's secure website at <https://disasterloan.sba.gov/ela>.

Applications and program information are available by calling the SBA's Customer Service Center at 1-800-659-2955 (1-800-877-8339 for the deaf and hard-of-hearing), or by sending an email to disastercustomerservice@sba.gov. Loan applications can also be downloaded from the SBA's website at www.sba.gov/disaster. Completed applications should be mailed to: U.S. Small Business Administration, Processing and Disbursement Center, 14925 Kingsport Road, Fort Worth, TX 76155.

District 1 Practices Water-to-Land Tactics

D1 Strike Team

On August 29, the IDHS District 1 Task Force Strike Team practiced water tactics in response to emergency situations.

The District 1 Strike Team, comprised of officers from District 1, Jasper, Lake, LaPorte, Newton and Porter Counties. The team practiced boarding techniques out on the water. Traveling side by side at speeds of up to 25 knots (approximately 29 mph), team members practiced boarding boat to boat.

The team also practiced approaching the scene of an incident from water to land. The incident simulated a suspect with a bomb attached to him while firing a weapon. In addition to the District 1 Task Force, members of the Lake County Emergency Management Agency and Newton County Emergency Management Agency were on hand for the practice.

This training, which used no district funds, is important because District 1 has eight miles of critical infrastructure along

the Lake Michigan shoreline, including steel mills and an oil company. With the vast amount of critical infrastructure along a significant shoreline, the District 1 Task Force is practicing for the potential for an emergency situation or other unfortunate event, should either take place.

District 1 Coordinator Angie Cloutier stated the drill was one of, if not the most exciting drill she has attended to date.

Video on New Approach to Firefighting Penn Township FD

A video produced by the Penn Township Fire Department in Mishawaka and the Indiana Firefighter Training System is now available on YouTube for all firefighters to view.

The video details the SLICE-RS strategy to fight fires, which stands for:

Size up (a 360° walk around)

Locate the fire

Isolate the flow path

Cool from a safe location

Extinguish the fire

Rescue

Salvage

Individuals from Underwriters Laboratories worked in conjunction with

the Penn Township Fire Department and the Indiana Firefighter Training System for this video. Temperature sensors were placed throughout a house used for a test fire, to show the real-time effectiveness of the SLICE-RS system.

The video, designed for all firefighters, can be viewed here: <https://www.youtube.com/watch?v=4drMzFO-Guk>.

Mission

The Indiana Department of Homeland Security will provide statewide leadership, exemplary customer service, and subject matter expertise for the enhancement of public and private partnerships and the assurance of local, state and federal collaboration to continually develop Indiana's public safety capabilities for the well-being and protection of our citizens, property and economy.

Contact

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