Hoosier Responder

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STATE FIRE MARSHAL:TALK TO CHILDREN ABOUT FIRE SAFETY

The National Fire Protection Association reported more than 50,000 fires in 2008 resulting from children playing with fire. The fires caused more than $279 million in property damage. Most of these fires began with children playing with lighters or matches. The Indiana State Fire Marshal is reminding all Hoosiers of the importance of proper child fire safety education.

"Children are often very curious of the world around them, and may experiment with fire without understanding the consequences of these actions," said Indiana State Fire Marshal Jim Greeson. "It's extremely important to talk to your child and educate them on the dangers of playing with fire. Taking a few minutes to speak with your child about fire safety can help keep them safe and avoid an accidental disaster." The Indiana State Fire Marshal's Office is a division of the Indiana Department of Homeland Security (IDHS).

Here are a few tips to keep children safe from fire accidents:

- Keep all matches and lighters out of the hands of children. Consider buying only "child-proof" lighters and keep them in locked drawers. Children as young as two years old can strike matches and start a fire.
- Never leave children unattended near operating stoves or burning candles.
- Teach children not to pick up matches or lighters they may find. Instead, they should tell an adult immediately.

Even with the best preparation, accidents can happen. That is why it is also important to speak to your child about how to react to a fire. Practice a home evacuation plan multiple times at different times of the day and year. A fire inside the home is a scary situation for anyone, but especially for children. By practicing a home evacuation plan, children will be more prepared for a fire, and will be able to properly respond.

For information visit the IDHS Preparedness page at getprepared.in.gov. ▪

In This Issue:

From the Director's Chair-Executive Director Joe Wainscott

The Great Central United States ShakeOut is Nearing

By now I'm sure most of you are aware that next month Indiana will participate in the largest earthquake drill in central U.S. history. Not to be confused with the National Level Exercise in May, the Great Shakeout is a multi-state public earthquake drill intended to raise citizen awareness about earthquake safety and preparedness. While most participating states are conducting their earthquake drill the week of April 25, Indiana will be conducting its earthquake drill early, on April 19, to avoid conflicting with ISTEP testing the following week.

Even though April 19 is still more than a month away, there is already much we at IDHS are doing to prepare for the Great Shakeout; and we need your help to get these earthquake preparedness messages into every Hoosier community.

Under the leadership of the Indiana Department of Education, all Indiana public schools are aware of the drill scheduled for April 19 at 1015 EDT.

To support these efforts, I am asking all emergency management agencies to identify at least one school in their county to visit before that date and talk with safety officials and school leaders about earthquake related hazards such as emergency actions, power outages, doors blocked, fallen objects, communication with parents, etc. Encourage school officials to do a walk around survey to see if there are easy things they can do that might prevent injuries, such as moving heavy band equipment off of upper shelves onto lower shelves and others.

Additionally, in an effort to engage local business communities in earthquake awareness and preparation, I have asked all IDHS district coordinators to give at least one presentation to a business or community group in their district. Coordinators will be reaching out to county EMAs to help orchestrate these presentations soon.

I have also instructed the IDHS public information office to plan a media awareness campaign to begin in late March. The campaign

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ADVANCES IN WIRELESS TECHNOLOGY OFFER MANY BENEFITS TO PUBLIC SAFETY AGENCIES

Advances in technology have allowed consumers to have immediate access to information through cellular phones with high speed data capabilities. This technology can also be used by public safety officials to communicate a large amount of information in a short period of time.


LTE Antenna Tower

According to the Federal Communications Commission (FCC), "Broadband technologies will give first responders new tools to save American lives. The nation needs a nationwide public safety broadband wireless network that allows first responders nationwide to communicate with one another at all times and without delay."

The fourth-generation of mobile telecommunications, often shortened to "4G", provides data speeds that are sufficient to send large files to mobile devices in the field in a short period of time.

FCC Chairman Julius Genachowski said the proposal finally advances recommendations made by the 9/11 Commission nearly seven years ago to provide first responders with interoperable communications.

"First responders would be able to send critical information back to hospitals, including on-site scans and diagnostic information, improving success rates by taking advantage of every second," said Genachowski. "And all these communications would be interoperable. They could be shared by first responders across agencies and jurisdictions, a critical communications element not possible today."

The FCC recently endorsed long term evolution (LTE) as the required standard for the nationwide wireless interoperable communications network. LTE is a mobile network technology which provides data transfer capabilities to wireless devices with speeds of at least 100 Mbps during downloads and 50 Mbps during uploads.

Broadband technology is particularly critical to public safety because it can provide enhanced situational awareness from first responders in emergency situations. Through broadband use, public safety entities can access medical records, site information and other video and data information useful for emergency responses.

Broadband will also improve the nation's current 9-1-1 system by establishing the foundation for the transmission of voice, data or video to Public Safety Answering Points (PSAPs) during emergency phone calls. ▪

BILL IN INDIANA STATEHOUSE WOULD PROVIDE LEGAL PROTECTIONS FOR INTERSTATE MUTUAL AID

Sharing of resources is essential to providing the best protection and response to the citizens of Indiana. However, geographic factors can make moving these resources from one area to another difficult at times. For communities near state boundaries, the closest available resources may be across state lines.

Indiana Senate Bill 6, introduced by Senator Joe Zakas (R-11), and co-authored by Senator Jim Arnold (D-8), would authorize local governments to enter into agreements with units of government from another state to offer mutual aid during emergencies that do not rise to the level requiring a state or local declaration of a state of emergency or disaster.

When a disaster strikes, Indiana emergency responders' first thought is what they can do to help. However, their willingness to help their neighbors may expose them to potential lawsuits for damages if those neighbors are across state lines.

The bill also "recognizes certain out-of-state professional licenses, certifications, or other permits when the state or political subdivision requests mutual aid from jurisdictions outside of Indiana."

"We are currently engaging in mutual aid across state lines," said George Thompson, general counsel for the Indiana Department of Homeland Security (IDHS), "but whenever we do so we're placing those individuals in those fire departments, police departments and ambulance services at some kind of risk of legal liability."

Some emergency responders, such as emergency medical technicians, are certified in Indiana, but not in neighboring states where they may be called upon to respond in the event of a disaster. Without this legislation, these responders could be without legal protections granted to them through their Indiana certifications.

"There's been a renewed appreciation for first responders, especially since 9/11," Zakas said. "Our firefighters and police officers and other first responders put their lives on the line every day to protect us."

Currently, the bill has passed through the Indiana Senate and has been referred to the House of Representatives where it is awaiting its first reading and assignment to a committee. The House sponsors are Representative Timothy Neese (R-48) and Representative Timothy Wesco (R-21). ▪

MODELING SOFTWARE SIMULATES IRRATIONAL BEHAVIORS

Predicting how large groups of people will react to a major disaster is a difficult task. Each individual will react to the incident based on numerous variables. Assuming that everyone will react properly to a disaster is unrealistic, and exercises using this assumption will provide improbable results.

Joshua Epstein has helped launch the Johns Hopkins University Center for Advanced Modeling in the Social, Behavioral and Health Sciences. This center will provide "agent-based" simulation modeling, which creates virtual worlds populated by "agents" that act like real people.

Agent-based models build artificial worlds which are populated by virtual people, or "agents." The agents within this software are programmed to respond to real or imagined threats, such as an infectious disease outbreak or toxic spill, just as real people would. Each agent will react independently based on the exact situation that is presented to them.

In reality, decisions are often made based on fear, poor judgment, or inaccurate information. The model factors these variables into each agent to provide a reaction that is much more realistic than previous modeling software. The simulations can help predict how societies and health systems might respond to a given incident and what the ripple effects could be as the incident unfolds.

According to Gabor Kelen, Chair of the Johns Hopkins Department of Emergency Medicine, the center will "integrate the latest research findings in emergency medicine, disaster health, and the behavioral and social sciences to develop sophisticated agent-based models for pandemics, chronic diseases, natural and man-made disasters, civil unrest, economic turbulence and other social challenges that could potentially affect large numbers of people and crucial segments of the economy." This information can be used to develop creative solutions to issues faced today by hospitals, government agencies, and other large organizations.

The modeling approach has been used to show how many scenarios could play out on a large scale. The model was used to show how the H1N1 virus could potential spread across the United States and the world, and how restrictions on international travel could help mitigate the spread of the virus.

It was also used to simulate how agents would react to a slow-moving toxic cloud in Los Angeles. According to **The Johns Hopkins University Gazette**, the simulation "shows that as more and more people get into cars to evacuate the city, traffic throughout the metro area becomes gridlocked, increasing exposures. Better protective strategies—hardening of buildings, shelter in place, adaptive traffic-aware routing, car pooling—can then be optimized using this unique tool."

With the use of this software, Epstein hopes that emergency responders will have a better grasp on how large groups of people will realistically respond to emergency situations. If used properly, this information has the potential to save countless lives and reduce the impact of a major disaster in the future. ▪

STATE FIRE TRAINING DIRECTOR: CURRICULUM MUST MATCH STATE STANDARDS

In order to adequately prepare our firefighters, we must make sure that what is taught is aligned with what is assessed. An aligned instructional system would include curriculum that addresses the Board of Firefighting Personnel Standards and Education's content standards, instruction that is based on the curriculum, and assessments that identify the opportunities for students to demonstrate what they have learned.

Mike Schmoker writes in The Real Cause of Higher Achievement, "We can't expect most students to do well on exams for which their preparation has been spotty or inadequate." In too many cases, students are not properly prepared to meet state standards. In some of our programs, there is a mismatch between the real world, what is taught, and the standards that are assessed by the state.

Despite our so-called "common" curriculum, very little has been done to ensure that the teaching and testing of the curriculum are aligned. Additionally, little has been done to ensure the certified instructors understand their responsibility to the curriculum, the student, and the board.

Instructors teach a self-selected "jumble" of topics. Because of this, getting fire instructors to align to the common standards is, perhaps, the toughest challenge we face with training. Thus, after having achieved certification, the station captain where the newly certified firefighter is assigned quickly tells the individual to forget what he or she was just taught in training, but, instead, to do it "our" way.

A major shift for instructors in a standards-based system is the loss of autonomy in teaching what they determine to be important topics. Instructors are responsible for ensuring their students achieve proficiency on the Board of Firefighting Personnel Standards and Education content standards. Consequently, instructors must re-examine their program to make certain that classroom tasks and assignments meet the standards that are expected and assessed by the state.

If instructors walked through classrooms to examine the work done by students, they would see that some, if not many, activities are not yet aligned with state standards. Achieving proficiency is a challenging task, and with instructional time at a premium, efforts need to be made to ensure time is used wisely. Aligning curriculums with state standards will allow instructors a reason to sort out some tasks and assignments that are not related to state standards. The state provides the minimum curriculum to instructors free of charge for a variety of certification courses.

Non-scientific polling has shown that instructors often use their own presentations, and not the curriculum that includes the course outline, sample tests, and homework assignments. This type of education may not fully prepare students for assessments or in the field. Analyzing assignments and assessments by the instructor can reveal what cognitive level of thinking is utilized by the students and their level of performance. If students were given more challenging assignments, they would, for the most part, deliver higher quality work and perform better on cognitive examinations.

If the amount of passing scores on cognitive and practical skill examination is to improve, the instructor must do a better job of preparing the student. The best way to improve students' ability is to use the curriculum provided by the state to the fullest extent. Adding your own personal stories and experience can provide a great benefit to students, but should not be used in place of the curriculum.

John M. Buckman III, CFOD, GiFire
State Fire Training Director ▪

FCC ANNOUNCES PLANS FOR UPDATED EMERGENCY ALERT SYSTEM

The Federal Communications Commission (FCC) has recently announced plans to upgrade the national Emergency Alert System (EAS). The new plans call for Presidential alerts to be added to the EAS for the first time. While a specific date for the test has yet to be set, it will help determine the reliability of the system and its effectiveness in notifying the public of emergencies and potential dangers nationwide.

The FCC voted to facilitate the federal government's efforts to conduct a national EAS test by transmitting a Presidential Alert from Washington, D.C. to television and radio broadcasters, cable systems and satellite service providers who will then deliver the alert to the American public.

According to Lisa Fowlkes, deputy chief of the Public Safety and Homeland Security Bureau of the FCC, "The primary goal is to provide the President with a mechanism to communicate with the American public during times of national emergency." The test will assist the FCC, in coordination with the Department of Homeland Security's Federal Emergency Management Agency (FEMA) and the National Weather Service (NWS), with assessing the current system and better determining what improvements need to be made to further strengthen the nation's EAS, particularly as broadband technologies continue to emerge.

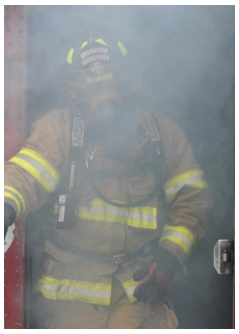
"There's never been a test from top to bottom where it's issued by FEMA and it goes straight down to all the different levels of EAS to the American public," said Fowlkes. "So this is a way for us to glean, okay, if there were an actual emergency and the federal government needed to activate the Presidential EAS, making sure that it actually works the way it's designed to." As the upgraded EAS systems continue to be developed and become operational in the next few years, additional public alert and warning systems will help to complement the system. FEMA's Integrated Public Alert and Warning System (IPAWS) and the Commercial Mobile Alert System (CMAS) will enable consumers to receive alerts through a variety of media platforms on their smart-phones, blackberries and other mobile broadband devices.

The FCC plans to build a text messaging alert system called the Commercial Mobile Alert System (CMAS), which would allow for three types of text message alerts to be sent. These include Presidential alerts, imminent threat alerts, and child abductions emergency/AMBER alerts. This system is set to be deployed by April of 2012. ▪

HYDROGEN CYANIDE POSES A MAJOR RISK TO FIREFIGHTERS

The National Fire Protection Association (NFPA) reported nearly 2,500 injuries to firefighters as a result of smoke and gas inhalation. Hydrogen cyanide is a common chemical found in many household items that can cause serious injury and potentially death.

Hydrogen cyanide is a colorless, extremely poisonous liquid that boils slightly above room temperature at 79 °F (26 °C). It is a gas at temperatures above 79 °F and has a faint, bitter, burnt almond-like odor that some people are unable to detect. Hydrogen cyanide is a precursor to many chemical compounds ranging from polymers to pharmaceuticals and can be found in household items such as polyurethane, nylon, insulation, furniture cushioning, carpets and other building materials and home furnishings.



This chemical poses a serious threat to firefighters, and its effects on the human body are still being studied. Due to the symptoms of hydrogen cyanide poisoning being very similar to those of carbon monoxide, the dangers were not recognized immediately. However, it is known that hydrogen cyanide is an extremely dangerous chemical and firefighters need to make sure they are taking all proper precautions to limit their exposure.

Early symptoms of hydrogen cyanide exposure include: rapid breathing, dizziness, weakness, nausea/vomiting, eye irritation, pink or red skin color, rapid heart rate, and perspiration. Exposure to large amounts of the chemical can result in loss of consciousness, respiratory arrest, cardiac arrest, coma, and seizures.

In 2003, a fire at a nightclub in West Warwick, Rhode Island caused 100 deaths from hydrogen cyanide poisoning. The polyurethane installed on the walls of the building released large amounts of hydrogen cyanide into the nightclub. Many of the victims that were not immediately overcome from the chemicals in the air were unable to leave the building due to the effects of the poison and were trampled by others.

According to Dr. David Penney, Professor of Physiology and Adjunct Professor of Occupational and Environmental Health at Wayne State University and Director of General Surgical Research at Providence Hospital, "A number of long-term effects of hydrogen cyanide poisoning have been identified. These include alteration of brain metabolites, demyelinating lesions of the brain, encephalopathy such as a Parkinsonian-like syndrome, neuropsychological sequelae, ultrastructural changes of the myocardium, and goiter. Every time you breathe smoke, you chip away at your heart and brain – not to mention allow your body to be invaded by thousands of other cancer producing toxicants."

Firefighters need to be aware of the risk of breathing smoke during an emergency. Even when the flames are extinguished, hydrogen cyanide may still be present in the air in high enough concentrations to affect firefighters. The best protection in this situation is to continue to wear a self-contained breathing apparatus (SCBA) until the air inside the building can be tested to ensure it is free of any dangerous chemicals.

Even if the chemical is no longer present in the air, it is possible for it to be in the dirt and soot covering a firefighters clothing. A webinar currently available on the Indiana Firefighter Training System stresses the importance of proper maintenance and cleaning of equipment to prevent exposure. Symptoms may not be present immediately after exposure, so preventative measures are the best way to avoid hydrogen cyanide poisoning.

Further information about hydrogen cyanide and ways to reduce the risk can be found on the Indiana Firefighter Training System at www.in.gov/dhs. ▪

GREAT CENTRAL UNITED STATES SHAKEOUT IS NEARING (continued)

will include public service announcements, media pitches, columns and other information for the media. These pitches, press releases, etc., will be provided to district coordinators and EMA directors prior to circulation to the media, so local emergency management will have the first opportunity to contact their community media directly.

While Shakeout activities are being coordinated through the county EMA directors, the assistance of other public safety professionals (other EMA staff, firefighters, EMS, law enforcement) is imperative to the success of this public awareness campaign. I strongly encourage fire, EMS, law enforcement and other local emergency public service providers to reach out to their emergency management agency (and vice versa) to assist in making all these outreach efforts possible!

As a first step, make sure you and your organization are registered as a Great Shakeout supporter at www.in.gov/dhs/shakeout.htm, and spread the word in your community. Encourage your staff and other local agency staff to participate in the drill too. With nearly 300,000 registered participants, Indiana is leading all other participating states by a significant margin and we want to stay ahead!

I know there's a lot going on with the Shakeout and NLE 11, which are all in addition to the demanding responsibilities you already juggle on a daily basis. If you have questions, concerns, resource needs, etc. relating to Shakeout activities, please contact John Erickson or Emily Norcross in the IDHS public information office at PIO@DHS.in.gov. We at IDHS are here to support your efforts and truly want to help. Together, we can help make sure all Hoosiers are as prepared as possible for the various natural and manmade disasters that threaten our state.

For more Great Shakeout and earthquake preparedness information and resources, visit www.in.gov/dhs/shakeout.htm and www.getprepared.in.gov. ▪

TRAINING OPPORTUNITIES LISTED ON IDHS ONLINE TRAINING CALENDAR

Providing training opportunities to emergency responders throughout Indiana is a priority for the Indiana Department of Homeland Security (IDHS). These courses are listed on the IDHS Consolidated Training Calendar which is continuously updated as new courses become available. To access this calendar visit the IDHS Training Division webpage and click the Consolidated Training Calendar link at www.in.gov/dhs/tngbranch.htm or click here.

ICS Position Specific All Hazard Finance & Administration Section Chief
April 18-20, 2011
8:00am-5:00pm
Air National Guard
4080 IN State Road 342
Terre Haute, IN 47803
This course is designed to provide local and state-level emergency responders with a robust understanding of the duties, responsibilities, and capabilities of an effective FSC on an All-Hazards Incident Management Team. These responsibilities fall into two categories: FSC duties 1) managing the Finance/Administration Section personnel and 2) managing the finances and administrative responsibilities during an incident. Exercises, simulations, discussions, and a final exam enable students to process and apply their new knowledge.
Target Audience

- Finance and Admin Section Chiefs of All Hazard Incident Management Teams
- Emergency Management Directors
- Responders charged with functioning as a Finance & Admin Section Chief for their agency.
- Agency/jurisdictional fiscal and human resource personnel

Prerequisites
Students must BRING copies of their completed ICS 100, 200, 300, and 700 certificates to class with them in order to receive credit for the course.

ICS Position Specific All Hazard Logistics Section Chief
April 4-8, 2011
8:00am-5:00pm
Seymour Police Department
205 N. Ewing
Seymour, IN 47274
This course is designed to provide local and state-level emergency responders with a robust understanding of the duties, responsibilities, and capabilities of an effective LSC on an All-Hazards Incident Management Team. These responsibilities fall into two categories: Logistics Section Chief duties (1) responding to the incident and (2) effectively fulfilling the position responsibilities of a Logistics Section Chief on an All-Hazards ICS Incident Management Team. Exercises, simulations, discussions, and a final exam enable students to process and apply their new knowledge.
Target Audience

- Logistics Section Chiefs of All Hazard Incident Management Teams.
- Emergency Management Directors
- Responders charged with functioning as a Logistics Section Chief for their agency.

Prerequisites
Students must BRING copies of their completed ICS 100, 200, 300, and 700 certificates to class with them in order to receive credit for the course.

District Response Task Force (DRTF) Mobilization and Deployment North
April 14-15, 2011
8:00am-5:00pm
Grace College Orthopedic
Capital Center
200 Seminary Drive
Winona Lake, IN 46590
This course teaches the students the process and fundamentals of District Response Task Force preparation, alert, notification, mobilization, convoy, integration of operations, and demobilization during a State activation. Also covered are Mobile Support Unit guidance, legal issues, and administration and logistics of District Response Task Forces.
Target Audience

- District Response Task Force Commanders and Deputy Commanders
- District Response Task Force All Hazard Incident Management Team members
- District Response Task Force Service and Support Personnel
- District Response Task Force Element Leaders

Prerequisites
ICS 100 & 700

Contact information for each course is listed on the calendar. Any general training questions about the Consolidated Training Calendar may be directed to Ashlee Grisel at agrisel@dhs.in.gov or Robert Puckett at Ropuckett@dhs.in.gov. ▪

NATIONAL FIRE ACADEMY ANNOUNCES EMS COURSES

The National Fire Academy has recently finished the development of two new Emergency Medical Service (EMS) courses in response to the U.S. Fire Administration Reauthorization Act of 2008. This act called for the National Fire Academy to develop advanced EMS training courses.

The National Fire Academy is operated by the United States Fire Administration in Emmitsburg, Maryland.

The new EMS courses are Emergency Medical Services Quality Management (EMS QM) and Emergency Medical Services Functions in the Incident Command System (EMS FICS). EMS QM is a six-day course held at the Emmitsburg campus, while the two-day EMS FICS can be held on campus or locally through partnerships with state and metropolitan fire service training organizations.

"In recognition of the value that fire-service based EMS provides American communities, the USFA's NFA is revising and improving the EMS program to meet the needs of EMS agencies," said NFA Superintendent Dr. Denis Onieal. "The EMS curriculum now offers courses specifically identified as gaps in EMS education that prepare today's EMS leaders to better manage their system's response abilities and organizational quality control."

Information about these new courses can be found on the USFA website at www.usfa.dhs.gov. ▪

FEMA OFFERS FREE INDEPENDENT STUDY COURSES

The Federal Emergency Management Agency (FEMA) Independent Study (IS) website has a variety of free online courses available for emergency managers, public works, law enforcement, volunteers, health care personnel, schools, citizens, and other public safety personnel/emergency support functions.

A wide variety of courses are available in subjects such as incident command, animal issues, special events planning, debris operations, damage assessment, disaster mitigation and planning, disaster resources, school and workplace safety, diversity, and infrastructure protection, among others.

FEMA has introduced several new courses in recent months. Additionally, most ICS courses have been updated to meet new guidelines. For a comprehensive list of courses, descriptions, or to complete a course, visit FEMA's Independent Study (IS) website at http://training.fema.gov/IS/crslist.asp.

COURSE NAME	CODE
Animals in Disasters: Awareness and Preparedness	IS-10.a
Animals in Disasters: Community Planning	IS-11.a
Diversity Awareness	IS-20.11
Guide to Points of Distribution	IS-26
Military Resources in Emergency Management	IS-75
Introduction to Unified Hazard Mitigation Assistance	IS-212
Planning for the Needs of Children in Disasters	IS-366
Exercising Continuity Plans for Pandemics	IS-522
Introduction to Individual Assistance	IS-403
Devolution Planning	IS-551
The Public Works Role in Emergency Management	IS-552
Workplace Security Awareness	IS-906

Click to view IDHS Agency Calendar

Click to view IDHS Training Opportunities

Indiana Department of Homeland Security

Leadership for a Safe and Secure Indiana

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The Hoosier Responder is a publication of the Indiana Department of Homeland Security.
Please direct any questions or comments to the
IDHS Public Information Office at 317.234.4214 or pio@dhs.in.gov.