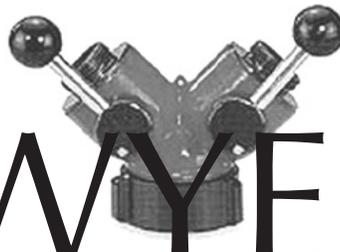


GATED WYE



October 2010 · Oregon Office of State Fire Marshal · 4760 Portland Road NE · Salem Oregon 97305-1760 · No. 321

Live fire demonstrations with children....just don't do it.

In an attempt to make learning about fire safety fun, some fire departments have allowed children to put out live fire using a garden hose, a fire extinguisher, and while holding a booster line. Does this behavior send the right fire safety message?

A recent edition of Hot Issues, the OSFM quarterly newsletter focusing on youth fire prevention and education, featured the following series of articles written by nationally recognized fire educators who responded to this question.

The Fireproof Children Team, a research-based training and educational development team with more than 28 years of experience in fire education had this response:

“Allowing children to put out a live fire raises three concerns. First, it does nothing to teach fire safety. Second, it contradicts one of the key messages that firefighters should give citizens: don't try to fight the fire. (According to a 2008 NFPA study, 37% of civilians injured in a structure fire were trying to fight the fire.) Third, successfully putting out a fire under highly controlled conditions can give children a sense of empowerment and control over fire.

Children who feel such a sense of control and are confident in their ability to extinguish a small fire, are more likely to engage in fireplay. A study of children's fire experience found that children ages 6 to 11 who felt a sense of control were more than three times as likely to have played with fire as those who did not have that feeling of control. For 8- and 9-year-olds, those who felt a sense of control played with fire five times more than those who did not. One of the strongest factors relating to this sense of control was supervised experiences with fire – experiences similar to those that let children extinguish controlled fires. (*Playing With Fire: A Developmental Assessment of Children's Fire Understanding and Experience*, Grolnick, Cole, et al, *Journal of Clinical Child Psychology* 1990).

For younger children, the most important fire safety message is that fire and ignition materials are tools for adults only (an example for preschoolers is the *play safe! be safe!* program.) This message goes for elementary school children too. No matter how smart they are, until around age 11 children don't have the ability to anticipate what might go wrong. They may be able to handle the mechanics

of a stove, but they don't know how to respond if something goes wrong, such as when cooking grease catches fire.

Babysitting training courses sanctioned by the American Red Cross and the National Safety Council are designed for 11-to-15-year-olds, setting a national standard for the age of responsibility. Think about it—if you wouldn't let an 8-year-old babysit your children, why would you let them think they can handle fire?”

Nancy Trench, Assistant Director for Research, Fire Protection Publications at Oklahoma State University and recipient of the Home Safety Council's Award for Leadership in Fire Safety Education, writes:

“Young children are very concrete learners. Children cannot distinguish putting out a fire with a garden hose for 'fun' from putting out a fire with a garden hose in an 'actual fire' situation. I would not recommend this practice. We want children to know the RIGHT thing to do and not confuse their decision-making with dangerous choices such as trying to put out the fire with water.

see **Demonstrations** page 3

From the desk of the State Fire Marshal



“When complete in July 2011, the Oregon Garden Fire Safety House will be one of the best examples in the nation on how any home can be retrofitted to improve fire prevention and safety.”

Oregon partnerships continue their groundbreaking work

I am very excited to announce our partnership with the Oregon Department of Forestry (ODF) in developing the first full-scale fire prevention and safety house in the nation to be located on the grounds of the Oregon Garden in Silverton.

Malcolm Hiatt from ODF had the original idea several years ago to remodel a 70s era house located on Oregon Garden property as a staged example of what homeowners living in the interface could do to make their homes less vulnerable to wildfire and to demonstrate to all homeowners proper steps for fire prevention and safety inside the home.

Malcolm and ODF were kind enough to ask the OSFM to join the effort to construct a fire safe education plan for the home's interior, which will include residential fire sprinklers.

ODF and the Office of State Fire Marshal collaborated to receive a \$600K grant from the Federal Emergency Management Agency to help fund the project. Corporate sponsorship is also in the works.

When complete in July 2011, the Oregon Garden Fire Safety House will be one of the best examples in the nation on how any home can be retrofitted to improve fire prevention and safety. It will also serve as a shining example of an accomplishment through partnership and collaboration.

Of course, this project could not go forward without other integral partners such Moonstone Properties, which oversees management of the garden, and the Oregon Garden Foundation.

Also joining the effort is the Oregon State University Extension Service. Forestry Extension Specialist Stephen Fitzgerald will be overseeing the fire-resistant landscape design and plant selection for the property.

This is an extremely exciting venture and I hope when completed, all fire service members, their families, and friends make an effort to visit the garden and the fire safety house.



State Fire Marshal Randy Simpson

Office of
State Fire Marshal

Oregon State Police
4760 Portland Rd. NE
Salem Oregon
97305-1760

www.oregon.gov/OSP/SFM
503-373-1540

Administration
ext. 211

Codes & Technical
Services
ext. 269

Community Education
ext. 236

Community
Right-to-Know
ext. 214

Data Services
ext. 273

Emergency Planning &
Response
ext. 227

Emergency Response
ext. 238

Fire & Life Safety
ext. 204

Firesetter Intervention
ext. 230

License & Permits
ext. 264

The Gated Wye is published monthly by the Oregon Office of State Fire Marshal. For submissions or suggestions contact Rich Hoover at 503-934-8217 or e-mail richard.hoover@state.or.us. In compliance with the Americans with Disabilities Act, alternative formats of this publication are available.

Simpson photo courtesy of ODOT Photo and Video Services.

Demonstrations

continued from page 1

The second concern is that we teach children that firefighters wear special clothing to protect them when putting out a fire. The live fire with no protective clothing also communicates a conflicting message for children.

I do not support portable fire extinguisher training for children of any age. Fire extinguishers are heavy and difficult to manipulate. One that is small enough for a child, is too small to extinguish a fire without an expert adult operator. Portable extinguisher training may have a place with older teens in vocational or technical training, such as auto mechanics or welding, as part of their educational objectives. Older teens may also be involved in scouting with a course of study that includes fire extinguishers along with a more comprehensive study of fire behavior.

All fire safety activities must support 'GET OUTSIDE and STAY OUT.' Activities that contradict or confuse this message should not be used."

Douglas County Fire Marshal Joseph Pedrola prepared a Technical Opinion paper and submitted it to the Office of State Fire Marshal. In the paper, Pedrola writes: "It can be reasonably argued that having children fight fires inside of a burn trailer or on a metal training pan outdoors, even when supervised by firefighters, is in direct conflict with the key safety messages and common goals of most public fire education programs. Unintentionally, such practices risk confusing children about the desired safe behavior in a fire emergency, placing them at risk and exposing fire agencies that engage in these practices to litigation."

Read more: [winter issue](#) and [spring issue](#).

USFA - emergency vehicle best practices

The United States Fire Administration and the International Association of Fire Fighters have published [*Best Practices for Emergency Vehicle and Roadway Operations Safety*](#).

The document covers training, policy development, education, and technology to enhance emergency vehicle and roadway safety operations.

Oregon fallen firefighters honored

This year's ceremony honoring the sacrifice of Oregon's fallen firefighters saw another name added to the roll of honor.

The September ceremony added the name of Coquille Volunteer Fire Department Captain Leland R. Marshall to the memorial. Marshall, a volunteer for eighteen years, died August 7, 1969, after a training exercise.

Applications to include the name of a fire service member on the memorial may be submitted at any time to the [Oregon Firefighters Memorial Committee](#).

The criteria to include a name on the Oregon memorial are identical to that used for the [National Fallen Firefighters Memorial](#) in Emmitsburg, Maryland. Having the same criteria allows Oregon's fallen firefighters to be honored on both the state and national memorials.



Members of the [Oregon Fire Service Honor Guard](#) pay their respects during the [Oregon Fallen Firefighter Memorial Ceremony](#).

The addition of Marshall's name brings the total number of firefighters listed on the Oregon memorial to 162.

During the ceremony, the combined honor guard placed two wreaths at the memorial, one representing firefighters who died and one signifying those who have survived.

Guest speakers at the event included Sisters Fire Chief, and President of the Oregon Fire Chiefs Association Taylor Robertson and Coquille Firefighter Richard Hopkins.

LEPC Highlights

by Planning and Training Assistance Coordinator
Terry Wolfe

The Mid-Valley LEPC

Established in January 2009, the Mid-Valley Local Emergency Planning Committee (LEPC) consists of Linn and Benton counties which have worked cooperatively on emergency preparedness for many years. Joining to form a single LEPC was a natural course of events. These two counties also provide staffing and support for the Office of State Fire Marshal's Region 5 Hazardous Materials Emergency Response Team.

Currently, Mid-Valley LEPC has more than 50 members including individuals from public and private facilities possessing extremely hazardous substances, city, county, and state level officials, and occasional participation from federal representatives.

In September, the Mid-Valley LEPC conducted a table-top exercise using the scenario of a derailed tanker car leaking chlorine in the heart of the south Albany rail yard and industrial district. Exercise participants discussed general problems, challenges, and procedures related to the scenario. The exercise focused on roles, procedures, communication, and responsibilities rather than response.

"Just the fact that we wanted to do a table-top exercise rather than 'needed' to do a table-top exercise struck me as an important accomplishment from this diverse group of individuals and organizations," said Mid-Valley LEPC Chairman Darrel Tedisch.

To enhance this project with public outreach, the LEPC invited community members and businesses located within the perimeter of the 'release.' This helped to increase understanding about what they could expect from the emergency response community and how to protect themselves, their employees, and their businesses during an actual release.

For more information on [Oregon's LEPC program visit this link](#), or contact Terry Wolfe at 503-934-8219 or terry.wolfe@state.or.us.

Uniform tsunami warning adopted in Oregon

The [Oregon Military Department](#) announced a uniform tsunami warning is now in place for the Oregon coast. Local communities have up to five years to transition to the new standard signal.

Under the direction of [Oregon Emergency Management](#) (OEM), a team of specialists reviewed existing research and best practices on tsunami warning systems and decided on a uniform state signal that provides the necessary consistency to reduce potential conflicts and confusion. The new standard signal is the up-and-down wail that lasts for three minutes.

Tsunami warning sirens will be tested on the first Wednesday of every month at 11 a.m., which roughly coincides with the weekly National Oceanic and Atmospheric Administration [weather radio tests](#).

For more information, contact Jim Kusz at 541-407-0801 or [TsunamiReady, TsunamiPrepared](#) Program Manager James Roddey at 971-673-1543.

Forest Grove fireworks enforcement efforts

For the first time, a [Forest Grove Fire & Rescue](#) (FGF&R) inspector teamed with a Forest Grove police officer to patrol the city for fireworks violators, reports Fire Inspector Matt Johnston.

They issued four code violations and twenty verbal warnings. Illegal fireworks were also confiscated.

FGF&R also deployed two brush rig crews, not only for quick fire response but also to increase visibility and advise citizens of fireworks rules and safety. The two units were able to deliver fire safety messages to around 50 groups of citizens.

Only one fire was reported (caused by improperly discarded legal fireworks), causing minor damage to a home's exterior. In 2011, FGF&R plans to increase its presence before and during July 4th with different prevention and enforcement efforts.

DATA Connection

News & technical tips from the Data Unit

Smoke alarm presence and performance in Oregon fires

We've come a long way since 1970, when battery-powered smoke alarms were first introduced. According to one survey, 96% of U.S. homes have at least one smoke alarm.¹ However, fire incident data indicates not all those smoke alarms are operational. There is still work to be done in promoting smoke alarm installation and maintenance.

In Oregon, during the last five years, four of ten residential fires were in homes with no smoke alarm or where a smoke alarm failed to operate. These fires resulted in 46 fatalities, 283 injuries, and \$117 million in property loss.² These casualties and property loss might have been prevented if these homes had working smoke alarms.

More than one-third (37%) of Oregon fire fatalities had no smoke alarm in their home. An additional 15% had an alarm, but it did not operate.

When smoke alarms fail to operate, it is typically because batteries are missing, disconnected, or dead. In Oregon, 62% of alarm failures were due to missing or disconnected batteries, and 17% were due to dead batteries. People are most likely to remove or disconnect batteries because of 'nuisance activations'. The nuisance may be false activations because the alarm is installed in an inappropriate location, or it may be the chirping sound that warns of a low battery.

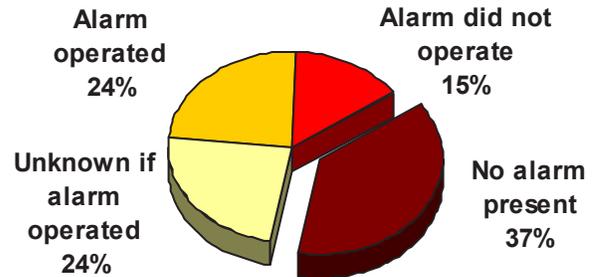
All 'ionization only' smoke alarms sold in Oregon are required to have a hush feature to allow silencing without removing the battery. If that alarm is solely battery powered, it is required to have a long-life battery designed to last ten years. Hard-wired ionization and combination smoke alarms do not require a ten-year battery.

Smoke alarms should be tested monthly to ensure they are working. Replaceable batteries should be replaced in accordance with manufacturer instructions. Smoke alarms have a useful life of about ten years. At that age they should be replaced, even if they seem to be working.

¹Telephone survey of 1000+ households conducted by Harris Interactive, for the National Fire Protection Association, 2008.

²All Oregon statistics in this article are based on 2005-2009 incidents reported to the Office of State Fire Marshal.

Smoke Alarm Performance in Residential Fires with Fatalities, 2005-2009



Based on 88 Oregon fatalities with reported smoke alarm data.

In Oregon, 62% of alarm failures were due to missing or disconnected batteries, and another 17% were due to dead batteries.

The Office of State Fire Marshal (OSFM) and Oregon fire agencies need to continue to educate the public about proper smoke alarm installation and maintenance. Our efforts will pay off in saved lives, reduced property loss, and firefighter safety. Visit the OSFM [smoke alarm program](#) for more information and resources.

Reporting smoke alarm data

During the last five years, 2005-2009, Oregon fire agencies responded to more than 26,000 residential structure fires. Smoke alarm data is available for less than half (44%) of these fires.

Some of the missing data is due to the difficulty of gathering smoke alarm data. Fire damage may make it impossible to determine if smoke alarms were present, and often the only way to determine if a smoke alarm sounded is to interview building occupants, bystanders, or responding firefighters. However, some of the missing data is due to inattentive reporting. Your attention to reporting smoke alarm presence and performance data *as complete as possible for every incident* ensures we have accurate information to gauge progress in smoke alarm campaigns and education efforts. Thank you for continuing to report your incidents.

Questions? Contact the Data Unit at 503-373-1540, extensions 234 or 237.

ICS Command & General Staff course offered free

Oregon Emergency Management and the Department of Public Safety Standards and Training are cosponsoring a NIMS-ICS Command & General Staff course November 1 – 5, 2010, at Hillsboro Fire & Rescue Training Facility, Station Six.

This course is one of only two offerings in Oregon this year.

The five-day course is a required pre-requisite to the [Federal Emergency Management Agency's](#) Type III All Hazard position specific certification courses. Focus is on the use of the [Incident Command System](#) (ICS) in managing large-scale/complex incidents.

The course incorporates instructor-driven lecture, class participation, active contributions to activities, and simulations.

Upon completion, students will be able to demonstrate knowledge of the ICS and Command & General Staff functions as they affect planning and implementation of the ICS for an incident at the local level.

Target audiences include emergency response personnel from multi-disciplines. These include (but are not limited to), fire, law enforcement, emergency medical services, public health, emergency management, public works, local/county government, and those seeking All Hazard Certification for Type III position specific incident management team training.

Pre-requisites include successful completion of ICS 100, 200, 700, and 800. No exceptions are permitted.

Classes are 8:00 a.m. – 5:00 p.m. daily, lunch is provided. [Pre-registration is required and forms are available online.](#)

Hillsboro Fire & Rescue Station Six is located at 21880 NE Cherry Hill Lane, Hillsboro, Oregon.

For more information, contact Thelma Denny at 503-378-2408 or thelma.denny@state.or.us.

Fire grant update

by Hines Lieutenant/Grant Writer
Jonathan Manski



The 2010 Staffing for Adequate Fire and Emergency Response (SAFER) grant program has ended. Even though funding for this program has increased, submissions appear to be down nationally.

Oregon bucked the downward trend by submitting 48 proposals, 18 applications under 'Hiring,' and 30 applications for 'Recruitment.' These 48 submissions represent projects from two associations and 42 Oregon fire departments.

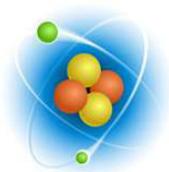
In 2009, Oregon submitted 41 proposals, three of which were funded. In 2008, there were 22 projects submitted with seven eventually funded and in 2007, 23 applications had eight successfully awarded. Peer review of the SAFER applications should occur in the first full week of October.

The 2010 Assistance to Firefighters Grant program (AFG) has seen recent movement and has started the release of 1199a's and additional project cost reductions, which of course is a very promising step in the grant award process.

Although a cost reduction alone is not a guarantee of an award, receipt of an 1199a is nearly always a precursor to an award. The remaining AFG peer reviews should also take place during the first few weeks of October. I'll go out on a limb and say that we should be seeing some award releases later this month.

Awards for 2009 Fire Prevention, SAFER, and AFG programs continue to trickle through, although Oregon has not seen many late round successes.

[Visit the FEMA website](#) for the latest grant information.



Natural Gas

Description:

- Synonyms: fuel gas, marsh gas
- Natural gas is an odorless, colorless gas
- An odorant is added to give a rotten egg, garlic, or skunk odor
- Liquefied natural gas (LNG): natural gas that has been cooled to about -260° F for ocean transport
- Natural gas may be stored as LNG at peak shaving facilities
- Natural gas is transported in pipelines (interstate, intrastate, and distribution)
- Natural gas: About 85-97% methane and small amounts of ethane and propane
- CAS No.: 74-82-8 (methane)
- EPA Section 112_p: 236,113 cu ft/10,000 lbs/2,175 gallons (methane)

NFPA 704 Information:

- Health: 1
- Flammability: 4
- Reactivity: 0
- Special: None

Reactivity and Fire Risk:

- Flammable gas, LEL: 5.0%; UEL 15%
- Flash point: -306° F
- Boiling point: -259° F;
- Gas density: 0.6, air = 1
- Dangerous fire or explosion hazard when exposed to heat, sparks, or flame
- Explosive reactions can occur between natural gas and oxidizing agents
- Spontaneous ignition with chlorine dioxide, liquid oxygen, and liquid fluorine

Health Hazards:

- May cause asphyxiation by displacing air
- Exposure to liquid may cause frostbite

Fire Fighting Measures:

- Isolate hazard area, deny entry
- Withdraw immediately if there is a rising sound from the venting of a safety device
- Extinguishing media: dry chemical, halon, carbon dioxide, water to cool the fire
- Shut off source and allow gas to burn out
- Be aware of the possibility of a BLEVE

- Vapors or gas may ignite at distant ignition source and flash back

2008 Emergency Response Guidebook:

- DOT Flammable gas, Hazard Class 2.1
- UN/NA: 1971 Natural Gas; Guide # 115

2010 Oregon Fire Code: Table 2703.1.1(1)

- Flammable gas, Class: Gaseous or liquefied
- Maximum Allowable Quantities (MAQ) per control area:
 - Unprotected by sprinklers or approved storage cabinets: 1000 cu ft (gas), 150 lbs (liquefied gas)
 - In sprinklered building, not within approved storage cabinets: 2000 cu ft (gas), 300 lbs (liquefied gas)
 - In unsprinklered building, within approved storage cabinets: 2000 cu ft (gas), 300 lbs (liquefied gas)
 - In sprinklered building, within approved storage cabinets: 4000 cu ft (gas), 600 lbs (liquefied gas)

Group when the maximum allowable quantity is exceeded: H-2

Incident Reporting and Information:

- Facilities currently reporting natural gas on the Hazardous Substance Information Survey: 37 (on-site storage is reportable)
- Hazardous materials incidents reported in Oregon since 1986: 168 (48 in 2010)
- [Links for incidents nationwide: pipeline and hazardous materials](#)

References and resources include:

- Natural Gas MSDS Northwest Natural Gas Co.
- Natural Gas MSDS El Paso Corp.
- [Regulatory agency](#)
- [Naturalgas.org](#)
- NFPA 54 National Fuel Gas Code 2009
- NFPA 59A Standard for the Production, Storage and Handling of Liquefied Natural Gas (LNG) 2009 Edition

For questions or suggestions contact Alec Carte at 503-934-8262 or e-mail aleta.carte@state.or.us

Fire & life safety recognition



Photo by Kate Stoller

Supervising Deputy State Fire Marshal Dave Jones presents Clackamas Fire District # 1 Deputy Fire Marshal Lt. Kari Shankin with her Oregon Fire Marshal Certificate with Fire Plans Examiner Endorsement.

Rogue Valley Cooperative updates website

The Rogue Valley Fire Prevention Cooperative (RVFPC) has completed an update of their [website](#) to better serve local residents and fire agencies.

“The Rogue Valley Fire Prevention Cooperative is continuously looking for different ways to serve both the fire departments we represent as well as the public,” said cooperative President Charlie Chase. “One of our ideas is to have local member fire departments send us photos and stories to post on the website. These add variety as well as introduce different fire departments and their activities to those who visit our website. We encourage everyone to visit our website for fire prevention news and information.”

For more information, contact RVFPC spokesperson Carey Chaput 541-899-1050 or cchaput@apgatefd.com.

DCFPC hosts 2nd annual fire safety event

The Douglas County Fire Prevention Cooperative is hosting its second annual Fire Prevention Week celebration. This year organizers have added a fourth day to the popular event that takes place at the Roseburg Home Depot store.

According to Oregon Deputy State Fire Marshal Chris Lyman, Wednesday and Thursday, October 6 & 7 are reserved for county school groups while the following Friday and Saturday will focus on families.

There will be free refreshments and a large variety of fire and public safety agencies taking part. Attractions and activities include a live-fire multi-hazard house, home sprinkler demonstrations, outdoor fire safety, emergency helicopters, marine patrol water rescue, the Oregon State Police Arson and Bomb Truck, animals from Wildlife Safari, a Ferris wheel and more.

“Because last year was such a tremendous success, said Lyman, we are excited about adding a fourth day to allow more families to attend to learn about fire prevention and safety.”

October 2010, GATED WYE, page 8

New Oregon plate honors fallen firefighters and police

Oregonians can now request specialized license plates from the [Department of Motor Vehicles](#) honoring the state’s firefighters and police who have died in the line of duty.

Money raised from the purchase of the license plate will support families and escorting offi-



cers as they attend the national memorial honoring fallen public safety officers.

The [Police Memorial Trust Fund](#) along with a special committee comprised of law enforcement, fire department, and citizen representatives will manage monies received from the sale of the plate.

Each license plate costs an additional \$8 per year. Thus, a two-plated vehicle would cost \$16 for a one-year registration and \$32 for a two-year registration.