GATED WYE

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Red Cross enhances Fire Prevention Month with alarm installation effort

On October 11, with the help and partnership of the Oregon Office of State Fire Marshal, American Red Cross volunteers installed 165 smoke alarms in homes in targeted ZIP codes in Salem and Grants Pass. It is all part of a nationwide Home Fire Safety Campaign, launched by the American Red Cross.

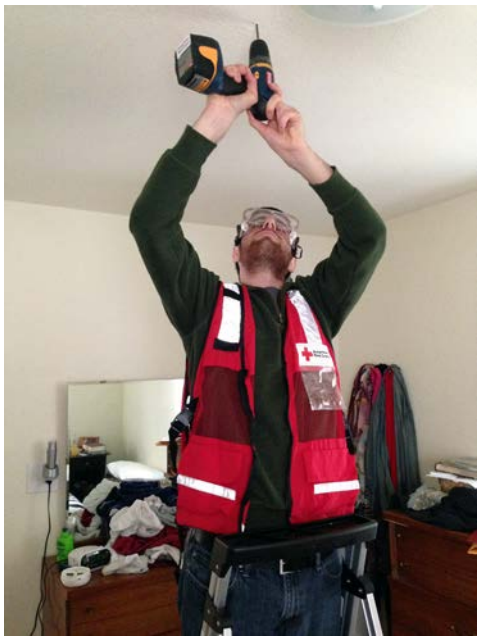
The campaign focuses on community outreach to educate families about fire safety and reduce home fire deaths and injuries by 25 percent over five years.

Red Cross volunteers were trained by members of the OSFM to install alarms and review a fire safety and home-hazard checklist with residents. Smoke alarms for the campaign were provided by the OSFM at no cost to residents.

Home fires are the number one disaster the Red Cross responds to, amounting to nearly two per day in Oregon and southwest Washington. Kelsey Decker, an AmeriCorps member serving as a Red Cross preparedness coordinator, says that participating in the campaign really makes a difference.

"The ability to spend one-on-one time with residents and help them map out the necessary steps of an evacuation route can be the difference between life and death," said Decker.

The American Red Cross Home Fire Preparedness Campaign will continue throughout



Red Cross Volunteer Alex Hofstetter works to install a smoke alarm in Salem.

2015 with outreach and smoke alarm installations planned for additional communities in Salem, and in the top fire-risk ZIP codes in Springfield, Gresham, Portland, Eugene, Roseburg, and Lebanon.

"We know that nearly three-fourths of all fire-related deaths occur in homes that have no functioning smoke alarms," said State Fire Marshal Jim Walker.

"We appreciate our partnership with the American Red Cross, which allows volunteers to install the much-needed smoke alarms in homes that lack them."

New Alfalfa Fire District needs equipment

Alfalfa is an unincorporated rural area of 1,100 residents located 12 miles east of Bend. The Alfalfa Fire District was approved by voters in November 2013 and hopes to be in service by November 2015.

They are seeking donations of surplus fire equipment. Specifically looking for PPE, hose, appliances, ladders, tools, and rolling stock.

Contact Steve Stenkamp at sstenkamp@afdist.org or 541-388-2654

From the desk of the state fire marshal

> "A better understanding of each organization will help build strong partnerships and alliances . . ."
>
> – Jim Walker

A lot to be thankful for

Traditionally, November is a month where our thoughts turn to identifying things we are thankful for. As I consider the past year, one of the things I am thankful for is the growing leadership in many Oregon fire service associations and the effort they have made to increase their partnerships. We are a stronger fire service because of it.

At many fire service association meetings, I see representatives from other associations delivering reports and updates, which advances the understanding for everyone.

Examples include OFCA President Gary McQueen's monthly communication to the Oregon fire service, the recent OFCA roundtable which focused on all areas of the fire service and included tracks on fire marshal and volunteer issues, and OFMA's work on their strategic plan.

A better understanding of each organization will help build strong partnerships and alliances when working on legislative efforts and the overall improvement of the Oregon fire service.

So, in this month of Thanksgiving, I would like to thank the following associations and their leaders for their positive efforts in moving the fire service forward:

- Oregon Fire Chiefs Association - President Gary McQueen, Estacada Fire
- Oregon Fire Marshals Association - President John Rinier, Hillsboro Fire
- Oregon Volunteer Firefighters Association - President Rex Park, Cloverdale Fire
- Oregon Fire Service Office Administrators - President Susan Shepard, Polk County Fire Dist. #1
- Governor's Fire Service Policy Council - President Greg Keller, Salem Fire Department, retired
- Oregon Fire District Directors Association - President Don Trotter, Clackamas Fire Dist. #1
- Oregon Fire Instructors Association - President Jason McKinnon, Sandy Fire Dist. #72

State Fire Marshal
Jim Walker

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State Fire Marshal

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Codes & Technical Services
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Fire & Life Safety Education
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503-934-8264

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503-934-8240

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November time change is a chance to update your smoke alarm messaging: "Change your clock, test your battery"

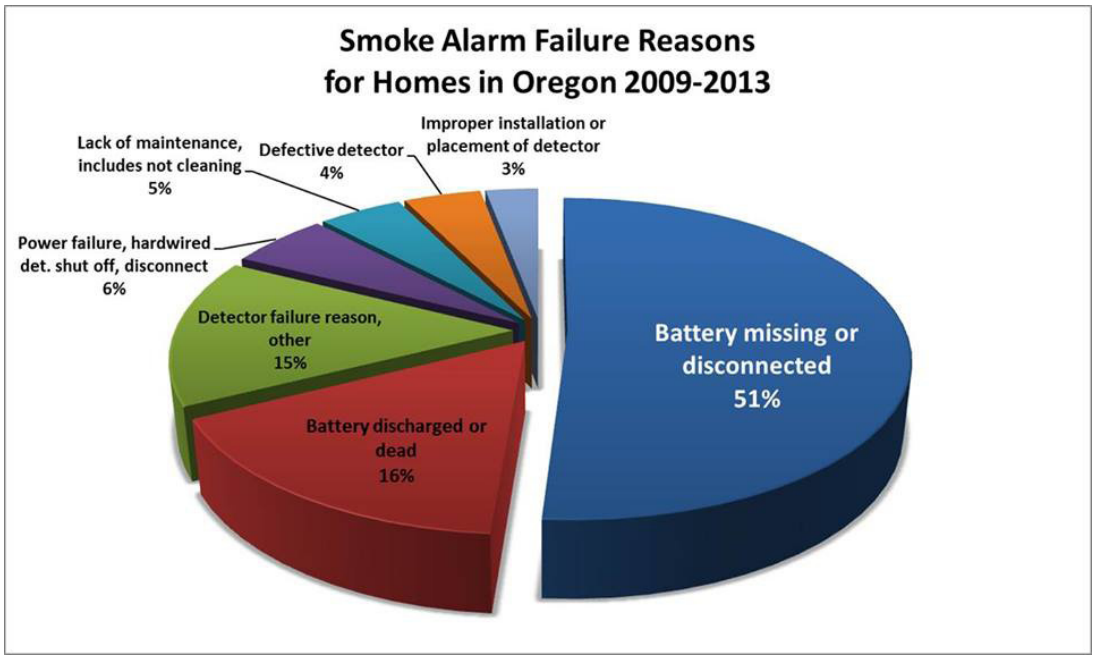
Since 2002, Oregon law has required all ionization-only smoke alarms that are solely battery powered to come equipped with a 10-year battery and a hush mechanism. Some alarms with 10-year batteries are made to be tamper-resistant. Because of these requirements, the historical national slogan of "Change your clock, change your battery," may not apply to many Oregon households that have alarms with 10-year batteries. Similar but alternative messages can reflect Oregon's law and the growing presence of long-life batteries.

Oregon State Fire Marshal Jim Walker urges Oregonians to remember that smoke alarms are a vital component of home fire safety, stating that, "Working smoke alarms save lives." He goes on to ask "Is your smoke alarm tested and maintained to save you and your family?" This question highlights the importance of helping Oregonians to become more knowledgeable about both the type of alarm they have and the type of battery required to keep it working.

Additionally, data submitted to the OSFM indicates that the leading cause (51%) of smoke alarm failure is missing or disconnected batteries, further reason for updating smoke alarm messaging to reflect Oregon's 10-year battery and hush mechanism requirements for ionization-only smoke alarms. Pushing the hush mechanism to silence nuisance alarms rather than removing batteries and the concept of a 10-year battery that does not need replacing are educational points that can address this leading reason for smoke alarm failure.

The OSFM and the Oregon Life Safety Team are encouraging all Oregon fire agencies to update their smoke alarm safety messages to reflect this difference in Oregon law.

- "Change your clock, test your battery." Test smoke alarms before automatically changing the battery.



- Follow manufacturer's recommendations for the type of battery to use in your smoke alarm.
- Smoke alarms older than 10 years should be replaced.

The OSFM has several resources available free to any Oregon agency to enhance their smoke alarm public education efforts. Visit the OSFM Fire and Life Safety Education webpage to view, order, or download fire safety materials.

For questions, contact the Fire and Life Safety Education Branch at osfm.ce@state.or.us or 503-934-8228.

2,500 pounds of confiscated fireworks destroyed

In partnership with the Oregon State Police Explosives Unit, Portland Police, and Tualatin Valley Fire and Rescue, the OSFM destroyed approximately 2,500 pounds of confiscated fireworks in three separate burns since October 10th.

There will be one more burn on October 31st which will bring the total amount destroyed to 3,250 pounds. The OSFM appreciates the cooperation of our partner agencies in this effort.

NFPA announces second national Wildfire Community Preparedness Day

The National Fire Protection Association has scheduled Saturday, May 2, 2015, as the next Wildfire Community Preparedness Day.

This year in Oregon, 846,945 acres were burned by wildfire, affecting thousands of lives, damaging homes and other structures, and costing approximately $278 million dollars. During national Wildfire Preparedness Day, communities are encouraged to participate in local mitigation projects to help reduce the risk of wildfire damage to their homes and neighborhoods.

Projects on May 2 can range from a short time commitment up to an entire day and can be undertaken by individuals, families, or groups. Potential projects include hosting a chipping day, distributing wildfire safety information to neighbors, organizing brush clean up, and more. A list of project ideas is available on the NFPA website.

More information about the 2015 national Wildfire Community Preparedness Day is available online.

Best practices for crude oil rail transportation emergency response operations

The Pipeline and Hazardous Materials Safety Administration (PHMSA), in partnership with the Federal Railroad Administration and the U.S. Fire Administration's National Fire Academy, have been working to develop incident management "best practices" reference materials for emergency responders to prepare them to safely and effectively respond to crude oil transportation incidents. By leveraging the knowledge, expertise, resources, and information available from public and private sector response agencies, emergency responders can implement a coordinated and effective response operation to safely and effectively mitigate the consequences of an incident.

The result of this partnership is the Commodity Preparedness and Incident Management Reference Sheet. This document contains incident management best practices for crude oil rail transportation emergency response operations that include a risk-based hazardous materials emergency response operational framework. This framework provides first responders with key planning, preparedness, and response principles to successfully manage a crude oil rail transportation incident. The document also assists fire and emergency services personnel in decision-making and developing an appropriate response strategy to an incident, (i.e., defensive, offensive, nonintervention).

For more information on response to crude oil transportation incidents, visit the PHMSA website.

Interim guidance for EMS providers on patient management for Ebola virus

The U.S. Centers for Disease Control and Prevention (CDC) recently made available interim guidance for EMS providers and Public Safety Answering Points on patient management for known or suspected Ebola virus disease.

Visit the CDC website to read the interim guidance. Download the CDC's checklist for EMS providers on Ebola preparedness.

DATA *Connection*

News from the Analytics & Intelligence unit
by Program Coordinator Dave Gulledge

Reporting firefighter injuries

The scene in the photo above demonstrates one of the dangers faced by those in the fire service. According to the National Fire Protection Association (NFPA), nationally there were 4,190 firefighters injured while responding to or returning from incidents in 2012 (the most recent data available). Another 44,250 firefighters were injured while performing duties on-scene and 20,960 were injured during non-incident related activities.

Between 2010 and 2013, Oregon fire service agencies reported five firefighter injuries that occurred while responding to or returning from an incident. During this same period, 255 firefighters were reported to be injured while performing duties on-scene and 15 were injured in non-incident related activities such as training or station duties.

Although these numbers seem low, we know that firefighter injuries in Oregon are under-reported. Many fire service personnel involved with incident reporting in Oregon have shared that they were unaware of the National Fire Incident Reporting System (NFIRS) standards on reporting firefighter injuries. Let's take a look at what those standards are.

Under the NFIRS standards, the Fire Service Casualty Module should be used to report **all** injuries, deaths, or exposures to fire service personnel. This includes casualties that occur during incident responses **or** during non-incident events such as station duties or training.

Does this mean that a report should be filed for every minor injury such as a paper cut? No.

An injury is defined as physical damage to a person that requires (or should require) treatment by a registered EMT or someone of higher medical training, or that results in at least one day of restricted activity immediately following the injury.

It is just as important to track why and how firefighters are being injured while working emergency scenes as it is to track non-incident related injuries. Doing this helps prevent future injuries and keeps staff safe. The nature of what the fire service does makes it critically important that every staff member, paid or volunteer, is healthy and able to perform their duties to the fullest. Every firefighter that is injured and not able to perform his or her duties is one less resource available to a department. This can easily result in overtime costs in career agencies and in volunteer agencies this means one less person available to respond to incidents in your community.

By reporting firefighter injury information through NFIRS, not only is your agency able to easily identify what is causing your staff to be injured, but that same information is shared at the state and national level. This cooperative approach yields huge dividends to the fire service as a whole. In contrast, by not providing this information, our collective ability to know what is causing firefighter injuries is hampered. In turn, the ability to properly and effectively prevent those injuries is also hampered.

If you have questions or concerns about reporting firefighter injuries please contact us via one of the methods below.

Questions? Please contact the Analytics & Intelligence unit at 503-934-8250, toll free at 877-588-8787, or email osfm.data@state.or.us.

CSB Recommends Safety Improvements to U.S. DOT Emergency Response Guidebook

The U.S. Chemical Safety Board (CSB) is recommending critical safety improvements to the widely-used Emergency Response Guidebook published by the U.S. Department of Transportation for emergency responders to use when confronting chemical fires, explosions, and releases of hazardous materials.

The CSB noted that while the manual is provided for responders to use in transportation incidents, CSB investigators have found over the years that the guidebook is often used by emergency responders dealing with chemical accidents at fixed facilities. However, the CSB found some of the directions given in the manual are vague. The CSB document specifically cites guidebook changes needed for handling ammonium nitrate fires such as the one that led to a massive explosion at a fertilizer storage facility in West, Texas last year.

The CSB recommendations are contained in a seven-page response to a formal Request for Information (RFI) the transportation department issued as it seeks comment on a proposed revision issued on August 29, 2014, for an edition scheduled for public release in 2016. The current guidebook was released in 2012. The guidebook – jointly produced with Canada and Mexico and in use in those countries as well – is used across the country by emergency responders who can quickly look up correct responses to a myriad of chemical accidents. The department's website states that, "DOT's goal is to place an ERG in every emergency service vehicle nationwide."

CSB Chairperson Rafael Moure-Eraso said, "We have respectfully submitted our comments to the DOT, based on years of our incident investigations, which show that responders are often not aware that this important manual is intended only for responding to chemical releases or fire incidents in transportation accidents, such as railroad tankers or truck-hauled containers, and not fixed facilities. Directions on how to respond to incidents at fixed chemical or manufacturing facilities may be much different."

NFPA launches expanded electric vehicle training for the fire service

The National Fire Protection Association announced its expanded, free online training for the fire service: Electric/Hybrid/Fuel Cell Safety Course for Trucks, Buses, and Commercial Fleet Vehicles. The new course provides response training for incidents involving these advanced electric drive vehicles and builds on NFPA's electric vehicle (EV) training program that focuses on electric and hybrid passenger vehicles.

Estimates point to more than 13 million electric/hybrid vehicles on the world's roadways within five years. To help emergency responders handle the unique challenges from this new technology across vehicle types, NFPA developed the new training as a second course following its passenger vehicle training: Electric/Hybrid Vehicle Safety for Emergency Responders Online Course. In approximately four hours, the two self-paced programs train responders through engaging videos, animations, simulations, and review exercises.

The new online curriculum covers high voltage vehicle and safety systems, basic electrical concepts, and identification techniques for electric, hybrid and the latest fuel cell vehicles. The course also covers immobilization and power-down procedures, extrication challenges, current recommended practices and tactics for dealing with vehicle and battery fires, and incidents involving charging stations.

Upon completion of the five modules, emergency responders will be able to:

- Safely conduct emergency scene size-up and management
- Identify an electric, hybrid and fuel cell truck, bus, fleet, or passenger vehicle
- Effectively immobilize the vehicle for scene safety
- Disable the vehicle's High Voltage and SRS systems
- Conduct occupant rescue more safely
- Execute EV recovery and disposal safely

Chemical of the month by Aleta Carte

Ethylene C_2H_4

Description:
- Synonyms: Ethene, acetene, olefiant gas
- May be gaseous or liquefied, colorless with a sweet odor
- CAS No.: 74-85-1
- EPA Section 302 EHS: Not listed
- EPA Section 112R : 10,000 pounds
- EPA Section 304 EHS: Not listed
- OSHA PSM: Not listed

NFPA 704 Information:
- Health: 0-2
- Flammability: 4
- Reactivity: 0-2
- Special: None

Uses and Occurrences:
- Polymerized to make polyethylene
- Oxidized to make ethylene oxide,
- Used in the production of many other chemicals
- Industrially produced and is found in nature as a plant hormone

Reactivity and Fire Risk:
- Peroxidizable compound
- Highly flammable
- Flash point: -213 to -148° F
- LEL: None; UEL: 2.7-36%
- Autoignition temperature: 842-914° F
- Vapor density (air = 1): 0.97-1.0
- Boiling point: -155° F
- Forms explosive mixtures with air and oxidizing agents
- Incompatibles include acids, oxidizing agents, metal salts, peroxides, chlorine, halogens
- May react with mineral-based and clay-based absorbents, dirt/earth

Health Hazards:
- IDLH: Not listed
- OSHA PEL: Not listed
- Asphyxiant

Fire Fighting Measures:
- Extinguishing media: Dry chemical, carbon dioxide, water spray, appropriate foam
- Do not extinguish a leaking gas fire unless leak can be stopped
- Cylinder temperature should not exceed 125°F

2012 Emergency Response Guidebook:
- Shipping name: Ethylene or Ethylene, compressed
- Hazard Class: Flammable gases (2.1)
- UN/NA: 1962; Guide # 116P Gases-Flammable (Unstable)
- Substances with a P may polymerize explosively when heated or involved in a fire
- Fire - Tank, railcar isolate 1 mile all directions

2014 Oregon Fire Code: Table 5003.1.1(1)
- Flammable gas
- Maximum Allowable Quantities (MAQ) per control area:
  - Unprotected by sprinklers or approved storage cabinets: Liquefied 150 pounds
  - In sprinklered building, not within approved storage cabinets: Liquefied 300 pounds
  - In unsprinklered building, within approved storage cabinets: Liquefied 300 pounds
  - In sprinklered building, within approved storage cabinets: Liquefied 600 pounds
  - Notes d and e
  - Group when MAQ exceeded: H-2

Incident Reporting and Information:
- Facilities reporting ethylene on the Hazardous Substance Information Survey: five
- Hazardous materials incidents reported in Oregon since 1986: none

References include:
- Cameo chemicals – Ethylene
- Airgas Inc. - MSDS Ethylene
- Sigma-Aldrich – MSDS Ethylene (Link select download MSDS)
- Matheson Tri-Gas, Inc. - Ethylene
- Praxair, Inc. – Ethylene
- EPA List of Lists, October 2012

For questions or suggestions, contact Aleta Carte at 503-934-8262 or aleta.carte@state.or.us.

Firewise in the frontier: eastern Oregon's first Firewise Community

Tucked in the heart of the Blue Mountains of eastern Oregon, Grant County has achieved a significant milestone with the creation of eastern Oregon's first Firewise Community in the greater Pine Creek area. Grant County has a population averaging 1.6 people per square mile – a density described as "frontier" by the U.S. Department of Health and Human Services.

Emergency services are limited and staffed almost exclusively by volunteers. Bringing individuals and neighbors together to engage with Firewise in a county where independence is prized and self-reliance is the creed was challenging.

Grant County received a significant amount of funding in 2009 through the Secure Rural Schools program to update the Community Wildfire Protection Plan and to help homeowners implement Firewise Communities.

Pine Creek Firewise Community members, from left to right: Pete DeRosier, Heather Appelhof, Lola DeRosier, Jack DeRosier, Chuck Wright, Kathelene McGee, Marg Wright, Norb McGee, Irene Jerome (holding sign post), Dave Abarr, Howard Gieger, Marcia Gieger, Roy Walker, Leslie Walker.

"Although there really aren't any rules to it, our population is so sparse and so scattered it is difficult to form a group that can fulfill the few small steps necessary to get the Firewise recognition," said former county forester and local resident Irene Jerome.

The Pine Creek area became a natural place to start due to the community interest from the beginning. Howard Gieger, a retired arson investigator from the insurance industry, led the charge and is the chair of the Pine Creek Firewise board.

"Without Howard it never would have happened," Irene says.

The Pine Creek Firewise Community is unique in many ways. The Prairie City Rural Fire Department provides structural fire protection in the northern portions of the community while the southern portion of the community has wildland fire protection only. The topography, vegetation, aspect, and fuel types vary dramatically from north to south as the terrain transitions from the valley bottom up into the Strawberry Mountains. About 55 dwellings, a third of those owned by absentees, are present in the Pine Creek Firewise Community.

During the summer of 2013 some of the residents began discussing the idea of forming a Firewise Community and the following February made the commitment and formed a board for the future building of their Firewise Community. A spring Firewise Day was held May 3, on national Wildfire Preparedness Day, and neighbors joined together to assist an elderly couple in reducing fuel around their home. The feeling of accomplishment and camaraderie that working together toward a common goal brought to the group has them hooked.

A formal dedication was held September 26 to celebrate the achievement. Thanks to the pioneers in Pine Creek, the opportunities for additional Firewise Communities in Grant County have been greatly increased.