

ARCHDIOCESE OF INDIANAPOLIS

Safety and Loss Control News

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Michael J. Witka, Director of Parish Financial Services and Risk Management Archdiocese of Indianapolis • (317) 236-1558 Prepared by Gallagher Bassett Services, Inc.

Smoke Detector Safety Tips from the NFPA

The following article is excerpted from the National Fire Protection Association (NFPA) Fact Sheet: "Smoke Alarm Safety Tips." It provides helpful information for selecting, setting up and maintaining a smoke detector.

Smoke alarms save lives. Almost twothirds of home fire deaths resulted from fires in homes with no smoke alarms or no working smoke alarms. When there is a fire, smoke spreads fast and you need smoke alarms to give you time to get out.

- Install smoke alarms in every bedroom, outside each separate sleeping area and on every level of the home, including the basement. Interconnect all smoke alarms throughout the home. When one sounds, they all sound.
- An ionization smoke alarm is generally more responsive to flaming fires, and a photoelectric smoke alarm is generally more responsive to smoldering fires. For the best protection, both types of alarms or a combination alarm (photoelectric and ionization) should be installed in homes.
- Test alarms at least monthly by pushing the test button.
- Smoke rises; install smoke alarms following manufacturer's instructions high on a wall or on a ceiling. Save manufacturer's instructions for testing and maintenance.
- Replace batteries in all smoke alarms at least once a year. If an alarm

- "chirps", warning the battery is low, replace the battery right away.
- Replace all smoke alarms, including alarms that use 10-year batteries and hard-wired alarms, when they are 10 years old or sooner if they do not respond properly.
- Be sure the smoke alarm has the label of a recognized testing laboratory.
- Alarms that are hard-wired (and include battery backup) must be installed by a qualified electrician.
- If cooking fumes or steam sets off nuisance alarms, replace the alarm with an alarm that has a "hush" button. A "hush" button will reduce the alarm's sensitivity for a short period of time.
- An ionization alarm with a hush button or a photoelectric alarm should be used if the alarm is within 20 feet of a cooking appliance.
- Smoke alarms that include a recordable voice announcement in addition to the usual alarm sound, may be helpful in waking children through the use of a familiar voice.
- Smoke alarms are available for people who are deaf or hard of hearing. These devices use strobe lights. Vibration devices can be added to these alarms.
- Smoke alarms are an important part of a home fire escape plan.

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Replace batteries in all smoke alarms at least once a year. If an alarm "chirps," warning the battery is low, replace the battery right away.

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Maintenance of Battery-Operated Emergency Lights



The following information is excerpted from the Minnesota Department of Health. The information contained in this article is applicable on a national level and only covers unit equipment (also known as battery-operated emergency

lights) and EXIT signs provided with a battery-operated emergency illumination source.

Local, State and National Codes, along with insurance company requirements, dictate that all assembly, business, educational, industrial, institutional, healthcare and certain multi-family residential facilities have appropriate means of egress marked with readily visible signs installed and properly maintained. In certain cases, emergency lighting of the means of egress must also be provided. Additionally, a facility owner is required to inspect the fixtures monthly, arrange for annual testing and maintenance, and have equipment maintenance records available.

Testing Requirements

- 1. To help ensure their reliability, battery-operated emergency lights must undergo the following tests [see NFPA 101(00), Sec. 7.9.3]:
 - A 30-second monthly functional test, and
 - A 90-minute annual test.
- 2. By exception, self-testing/self-diagnostic, batteryoperated emergency lighting equipment that
 automatically performs a test for not less than 30
 seconds and a diagnostic routine not less than once
 every 30 days and indicates failures by a status
 indicator are exempt from the monthly functional test,
 provided a monthly visual inspection is conducted.
- 3. These requirements also apply to EXIT signs provided with a battery-operated emergency illumination source [see NFPA 101(00), Sec. 7.10.9.2].

Test Methods

Manufacturers' documentation should include instructions for proper maintenance and testing of their equipment. That said, there are several ways to perform the required tests:

 Many battery-operated emergency lights and EXIT signs are equipped with a test switch or test button that simulates a power outage and activates the battery. The downside of using this method, however,

- is that, on older lighting units, the circuitry that's supposed to interrupt the normal AC power can fail. In such cases, the use of the test switch or test button really only serves to test the lamps, but does not serve as a valid test of the batteries.
- 2. The Electrical Code allows flexible cord-and-plug connections for battery-operated emergency lights, provided the cord doesn't exceed 3 feet in length. Testing of this kind of installation can be performed by simply unplugging the unit for the required amount of time. Obviously, care needs to be taken to ensure that the units are plugged in again immediately after the test, so as to avoid what's called a "deep discharge" of the batteries (i.e., a discharge below 80% of the batteries' initial rated voltage), which can be damaging to the life of the batteries.
- Another option is to shut off the breaker controlling the normal AC power to the emergency lights and/or EXIT signs. While probably the most effective way to test both the lamps and batteries, the downside here is obvious—throwing the breaker will also cut power to everything else on that circuit.

While holding a test switch or test button for 30 seconds isn't much of a problem, holding it for 90 minutes is a completely different matter. This has led to inquiries about whether or not it's acceptable to install a switch at each individual light that can be used to interrupt the normal AC power for the required 90 minutes. The simple answer is **no**, installation of such a switch would be a violation of the *Electrical Code*. Some things to keep in mind include:

- 1. The Electrical Code requires that the branch circuit feeding unit equipment be the same circuit as that serving the normal lighting in the area and that it be connected ahead of any local switches. For example, units located in a corridor or stair enclosure must be connected to the branch circuit supplying the normal corridor or stair enclosure lighting ahead of, or on the line side of, any switches. If power is lost to the branch circuit for any reason, the batteries automatically take over and restore illumination to the corridor or stair enclosure.
- It must be further noted that it is not acceptable to provide a separate branch circuit for unit equipment. This is because, in the example given above, failure of the normal corridor or stair enclosure branch circuit wouldn't necessarily affect the unit

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- equipment, leaving the corridor or stair enclosure in darkness.
- 3. That leaves is up to facility personnel to devise a way to hold the test switch/button in the test position for the required 90-minute test period. It is recommended that the equipment manufacturer be contacted for guidance on acceptable ways to accomplish this without damaging the equipment.

Batteries

Like automobile batteries, which are continually discharged and recharged during normal vehicle operation, proper testing extends the life of batteries serving emergency lights or EXIT signs. Still, it must be remembered that these batteries have a limited service life. Because there are many factors that affect battery life (i.e., changing temperatures), it's not possible to set a hard and fast rule on how long a specific battery should last.

The two most commonly used battery types for emergency lighting are lead acid and nickel cadmium. While the equipment manufacturer would be the best source for information on battery life, a maintenance-free lead acid battery might be expected to have a service life somewhere between 5-10 years and a maintenance-free nickel cadmium battery an estimated service life of between 10-15 years.

It is important to note that some dimming of the lamps may occur during testing. However, the minimum lighting levels specified in the code [see NFPA 101(00), Sec. 7.9.2.1 or MSCFC(07), Sec. 1006.4] must be maintained for a minimum of 90 minutes.

Document Your Tests and Battery Replacements

NFPA 101(00), Sec. 7.9.3 requires that written records of the testing of your battery-operated emergency lights and EXIT signs be kept for inspection by the AHJ.

It's important that at least two people in your facility know where your logs are kept to increase the likelihood that they can be readily provided if requested during an inspection. It is recommended that these logs be maintained for at least three years.

-Information excerpted from

http://www.health.state.mn.us/macros/search/index.html?q=maintenance+of+battery +operated+emergency+plans&cx=001025453661958716519%3Aj2323tveixc&cof=F ORID%3A10&ie=UTF-8&submit=Search and

http://www.health.state.mn.us/divs/fpc/Battery_opliting2.pdf

Proper Snow Removal

Winter snow showers and storms make it necessary to clear walkways and parking lots to ensure that pedestrians and drivers are able to maneuver safely along these areas. The following tips will help parish personnel to remove snow safely.



Snow Shoveling

If the area of snow to be cleared is small, or if a snow thrower is not available, someone will have to shovel it by hand. Only someone who is in good physical condition and general health should do this work.

First, the person shoveling should mentally divide the area into sections and clear one part, then the rest before going on to the next section. Whenever the snow begins to feel especially heavy, the shoveler should take a rest break. Persons shoveling snow should keep the following information in mind.

- Wet snow is much heavier than dry snow—govern the rate of shoveling accordingly.
- Push or sweep as much of the snow as possible.
- If an icy crust has formed on top of several inches of snow, shovel the snow in layers.
- Make use of small quantities of rock salt or other ice-melting materials to make the job as easy as possible.
- Dress warmly while shoveling snow because cold itself can pose a strain on the body's circulation.
 Don't bundle up so heavily however, that movement is difficult.
- Don't shovel snow right after eating or drinking alcohol, and don't smoke right before, during or after shoveling snow.
- If chest pain, weakness or other signs of physical stress occur, stop shoveling at once and seek medical attention.

Snow Throwers

All snow throwers are potentially dangerous. Their large, exposed mechanism, which is designed to dig into the snow, is difficult to guard. However, with proper handling, snow throwers offer a service that is safer than the back breaking, heart-straining shoveling method. Safer snow throwers have guards on the drive chains, pulleys and belts.

The auger at the front of the snow thrower presents the greatest hazard. Some also have an additional auger for extra throwing power. These, along with moving gears, drive chains, and belts can be sources of danger to anyone tampering with a snow thrower when it is running. Injuries usually occur when the operator

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Gallagher Bassett Services, Inc.

If there are any subjects you would like to see addressed in this newsletter, or questions about a topic presented, please contact Ms. Amanda Weller, Gallagher Bassett Services, Inc., Two Pierce Place, Itasca, IL 60143, Telephone: 815-236-5170, Email: Amanda_Weller@qbtpa.com.

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attempts to clear off debris while the motor is running. Although snow throwers can handle dry, powdered snow with little difficulty, their performance in wet, sticky snow is not as effective. Wet snow tends to clog the blades and vanes, and often jams and sticks in the chute. Snow throwers are also capable of picking up and even throwing ice, stones and other hard objects.

The following safety suggestions for snow thrower operations are recommended by the Outdoor Power Equipment Institute. Protect yourself and others by following these safety tips:

- Read the Operator's Manual.
- Do not allow children to operate this machine, nor allow adults to operate it without proper instructions.
- Keep all persons a safe distance away.
- Disengage all clutches, and shift into neutral before starting the motor.
- Keep hands, feet, and clothing away from powerdriven parts
- Never place a hand inside the discharge chute or even near its outside edge with the engine running.
- Know the controls and how to stop the engine or how to take the unit out of gear quickly.
- Disengage power and stop the motor before cleaning the discharge, removing obstacles, making adjustments, or when leaving the operating position.
- Exercise caution to avoid slipping or falling,

- especially when operating the machine in reverse.
- Never direct discharge at bystanders, nor allow anyone in front of the machine—debris may be hidden in the snow.

Written Snow and Ice Removal Plan

A written Snow and Ice Removal Plan is an excellent tool to use and reference for ensuring that snow and ice exposures are taken care of promptly and effectively. When developing a Snow and Ice Removal Plan, be sure to include information on the following items:

- Individuals responsible for snow/ice removal
- Utilization of a snow and ice removal log
- Contractor selection guidelines
- Frequency of snow/ice removal procedures
- Use of sand or salt
- Proper claim-handling practices

Snow/Ice Removal Log

It is important to maintain a Snow/Ice Removal Log. This log includes pertinent data demonstrating that snow/ice has been cleared from walkways and other surfaces on the property. The log should include the name of the individual or contractor who removed the snow/ice, estimated snowfall amounts, the presence of any ice buildup, temperature, action taken, dates and times, inspection notes and any unusual conditions.