

# ***Catholic Mutual. . . "CARES"***

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## ***Electrical Preventative Maintenance (EPM)***

How do you prevent electrical system failures, fires and extend the life of your electrical equipment? By implementing Electrical Preventative Maintenance. Also known as EPM.

Your facility's electrical system is not unlike other mechanical equipment. It can overheat, breakdown, fail and even cause a catastrophic fire. Like other equipment, it needs periodic inspection and maintenance to better assure it not only continues to function, but continues to function in a safe reliable manner.

The following information reviews the 4 most important concerns to address with your electrical system. Together, these issues are responsible for the great majority of all electrical failures which too often can lead to a fire. Carefully addressing each is an excellent means to maintain your facility's system.

**CLEAN:** Electrical equipment, components and equipment rooms need to be kept clean. Excessive dirt and dust can greatly diminish electrical contact points, air flow through cooling vents and functionality. Regular inspections should be made with equipment and utility rooms cleaned as needed. Electrical equipment rooms should not be used as general storage areas.

**COOL:** Excessive heat buildup is detrimental to electrical components. Whether caused by dirt and dust buildup, poor ventilation, too much storage blocking cooling air flow, elevated temperatures shorten your equipment's service life. Reduce storage and clean or vacuum electrical equipment vents. If installed, cooling fans and blowers need to be maintained. All air ventilation filters need to be checked regularly and cleaned or replaced as appropriate to maintain good air flow throughout your facility, including equipment rooms.

**DRY:** Damp equipment areas, moisture buildup and any direct water contact with electrical components can cause failures and reduce service life. If any rust or moisture contamination is observed on equipment, a thorough examination needs to be completed. Repairs need to be made for any damaged and deteriorated equipment. The source of water or high moisture needs to be determined and eliminated.

**TIGHT:** The most common cause of electrical breakdowns and fires is loose connections. Check connections to ensure they are tight. Always follow manufacturer's instructions and guidelines. The use of an infrared thermometer, also known as a laser thermometer, is a very inexpensive tool which can be used to check for loose connections and other potential problems that show up as an elevated temperature on electrical panels and equipment. A superior method is the use of an infrared camera to scan electrical panels and equipment to uncover loose connections before failures occur.