

# Loss Control Insights

## **"BANG TO FLASH" LIGHTNING CALCULATION**

Lightning - summer's biggest light show - causes worker fatalities and injuries every year. Electrocution death, burns and brain damage are some of the effects. Lightning risks vary from one region to the next, from job to job and seasonally, but lightning safety knowledge is a good survival skill for everyone.

Many thunder and lightning storms occur during summer afternoons. Although individual fatalities are most common, almost 10 per cent of incidents involve multiple victims. To estimate how far away lightning is, count the seconds between the flash and the sound of thunder. Each second is about a fifth of a mile, or 300 meters. If you count fewer than five seconds (a mile) take shelter immediately. This is known as the "flash to bang" method of calculation.

Outdoor workers are at a particular risk for lightning strikes. Danger zones include open fields, below solitary tall objects such as trees, near power lines and fences. Avoid metallic objects, high ground and proximity to other workers. At the first sign of thunder or lightning, move to a substantial building. Wait a half hour after the last lightning or thunder before resuming work.

If you are caught outdoors during a lightning storm, avoid any objects which are likely to attract an electrical charge. This would include tractors, power tools, motors, tools such as shovels, tall objects such as power lines or canopies. Look for a low area such as a ditch. You don't want to be the tallest object in the area. If you are caught in the open, crouch down with your feet together. Do not lay down flat, you always need to minimize your contact with the ground.

If you are indoors during a lightning storm stay away from doors, windows, water, plumbing, electrical appliances, computers and televisions. Lightning can strike electric, telephone and cable lines, transmitting a jolt through telephones, TVs and electrical equipment.

What if you are driving a vehicle? Pull off the road in a location away from trees which might fall on you. Turn on the emergency flashers and turn off the engine. If you are in an enclosed metal frame vehicle, stay there. Do not touch metal objects connected to the outside of the vehicle - door and window handles, steering wheel and radio controls.

If you are operating enclosed heavy equipment such as a backhoe or grader, turn off the engine and wait out storm. Do not attempt to step off the equipment during a close lightning storm.

*Lightning kills about 100 in the United States alone each year. When lightning threatens, get out of the way. As always ~ be safe!*