Executive Order #511
Description of Hazards

1. HAZARDS THAT APPLY TO ALL COMMITTEES

DRIVING

What is the hazard?
Employees may be required to drive from their primary work location to meetings, trainings, project sites, other agency offices, etc. as part of their work duties. Employees may also spend work time in a vehicle travelling roadways as part of their work duties, such as police officers and highway personnel. Any employee who is travelling in a motor vehicle is at risk of a motor vehicle accident. Motor vehicle accidents are the number one cause of death for government employees in the United States.

Note 1: Driving for employees commuting to and from their primary work location is not the employer's responsibility, and does not fall under the jurisdiction of worker protection laws.

Note 2: The risk of being struck by a vehicle while working in a traffic area but outside of a vehicle is covered in the Workzone Safety Assessment tool. This would include work such as flaggers, roadway construction and maintenance activities, and police officers on a traffic stop.

Do you have employees exposed to this hazard?
Any employee who is driving a motorized vehicle during work hours as part of their work duties is at risk of a motor vehicle accident.
Examples: Driving to an alternate location (not the primary work location) to: attend a meeting, attend a training class, give a training class, conduct an inspection, conduct an investigation, conduct a field visit, respond to an emergency. Driving in a work vehicle to patrol an area, respond to a roadway accident, inspect an area, pick up items in a roadway, to get to a site as part of a roadway work crew, to supervise a contractor conducting roadway-related work (tree trimming, line painting, etc.).

EMERGENCY ACTION PLANNING

What is the hazard?
Medical emergencies, severe weather, terrorist attacks, fire, chemical spills, release of biological agents, and other emergencies can occur while employees are at work. If

employers do not have an advance plan to respond to these events and protect employees when they occur, the outcome of such events will be much worse, with potentially greater injuries and loss of life.
Note: Flu pandemic does not fall specifically under worker protection regulations relative to emergency action planning, but it will be addressed under this assessment tool as it is a similar type of hazard and could pose an urgent threat in the near future. There is a fully separate assessment section for flu pandemic following the general emergency action planning questions.

Note: This assessment tool should be completed in conjunction with the Life Safety assessment tool. Exit routes and fire extinguishers are covered under the Life Safety tool.

Do you have employees exposed to this hazard?
YES. Every employee at every workplace is at risk from the types of events listed above.

ELECTRICAL HAZARDS – GENERAL

What is the hazard?
Numerous workplace burns, falls, electric shocks, and electrocutions have been caused by old, ungrounded electric equipment, overloading of circuits, exposed wires, use of electricity in wet areas, and other improperly installed, and improperly used electrical devices and equipment.

Do you have employees exposed to this hazard?
Yes, ALL employees in a work environment with electricity and use of electrically-powered equipment or tools are subject to this hazard.

LIFE SAFETY

What is the hazard?
If a fire occurs in a building, building occupants may not be able to escape in time and survive if they cannot readily find exits in darkness and smoke, if exits or exit routes are blocked, or if there are no sprinkler systems in place (when required) to hold off the fire long enough for occupants to get out.

Do you have employees exposed to this hazard?
YES. ALL employees who work indoors for any part of their shift are at risk from being caught in a building fire.

WORKPLACE VIOLENCE

What is the hazard?
Homicide is a significant cause of fatalities for workers on the job. Workers are killed and injured on the job by co-workers, clients/customers/students/patients, and domestic partners during immediate violent outbursts as well as planned attacks.

Do you have employees exposed to this hazard?
YES. ALL employees are potentially at risk from workplace violence by a co-worker. ALL employees who work with patients, clients, customers, or students are potentially at risk from workplace violence by a client/customer/patient/student. ALL employees who are potential victims of domestic violence are at risk in their workplace if no measures are taken to keep the perpetrator out.

2. ADDITIONAL HAZARDS

CHEMICAL

What is the hazard?
Employees may work with products containing hazardous chemicals in the course of their job duties. Chemicals can expose employees to physical hazards such as fire, explosion, and strong chemical reactions, and also short-term health hazards such as asphyxiation, burns from corrosives, irritation of the respiratory system, and long-term health hazards such as cancer, central nervous system damage, brain damage, reproductive effects, and diseases such as asbestosis. If an employee is not aware that a chemical poses a risk to them, they cannot adequately protect themselves. This is especially true when an employee does not feel any effect from the chemical. For example, exposure to a chemical may be initiating a cancer in the employee, but the employee does not feel ill or have any noticeable effect when using the chemical.

Do you have employees exposed to this hazard?
Examples: Employees who work in laboratories and shops, science teachers, art teachers, custodians, facilities maintenance staff, painters, groundskeepers, mechanics, emergency responders (chemical), can be exposed to hazardous chemicals. These chemicals can include (but are not limited to): solvents such as toluene and methylene chloride, pesticides and herbicides, metals such as lead and mercury, and corrosives such as hydrochloric acid and sodium hydroxide.

CONFINED SPACE

What is the hazard?
Employees must sometimes enter awkward or “confined” spaces to conduct inspection or repair of equipment or to work on utilities. These spaces could be underground, have

small entry openings, contain pipes or equipment that get in the way, etc. A confined space is more difficult to enter and exit and is not designed for continuous human occupancy. The real problem occurs when there is an additional hazard in one of these spaces, in particular a problem with the air such as not enough oxygen or a chemical contaminant. In the case of not enough oxygen, the employee could quickly become unconscious. Because of the awkward nature of the space, it is extremely difficult to get the employee out to safety.

Do you have employees exposed to this hazard?
Examples: Entering a boiler to inspect it, entering a manhole for utility work, entering a storage tank for cleaning (including underground storage tanks), entering vaults, etc, at water and wastewater treatment facilities.

ELECTRICAL HAZARDS – for ELECTRICIANS

What is the hazard? Employees working with electrical infrastructure (panels, wiring, etc.) can be exposed to high levels of electrical current and also high-temperature explosions known as an "arc flash," during which employees can be killed or seriously injured. Employees working on any electrified equipment are also at risk of exposure to electrical current, which could result in electrical shock, electrical burns, or electrocution. In addition, employees conducting electrical work while on ladders, at height, or in precarious positions are at risk of a fall triggered by receiving an electrical shock.

Note: This tool should be prepared in conjunction with the lockout/tagout hazardous assessment tool relative to repair of electrified equipment.

Do you have employees exposed to this hazard?
Examples: Employees installing, updating, or repairing electrical infrastructure such as wiring, panel boxes, circuits, power lines, etc.
Employees installing or repairing any electrified equipment.

FALL FROM HEIGHT

What is the hazard?
Employees who are conducting work at heights, on ladders, rooftops, scaffolding, loading docks, mezzanines, etc., are at risk of falling. Workers at ground level or on flat, stable floors or rooftops are also at risk if there are holes or openings into or through which they can fall, including soil excavations, skylights, and trap doors. There is a high risk of fatality and serious injury, even with falls from relatively low heights. Fifty percent of workers who fall from 11 feet or less are killed by the fall. Fall from height consistently ranks among the top causes of worker fatalities.

Do you have employees exposed to this hazard?
Any employee working at height, or passing through an area where there is a potential fall from height.
Examples: Construction and maintenance personnel, painters, window washers, loading dock, stock, and warehouse staff, corrections officers, and elevator and amusements inspectors.

Employees who are not directly involved in construction activities, but who work in or are passing through areas of construction or renovation can be at risk from falls if openings and edges are not adequately guarded, blocked, or marked.

LOCKOUT/TAGOUT

What is the hazard?
During repair and maintenance operations, machinery or equipment that has been shut down in order to safely conduct the repair may accidentally be reenergized by someone who is not aware that work is occurring (e.g., they flip the switch or circuit breaker back on). If this occurs, the employee doing the repair could be electrocuted, caught up in the machinery, crushed, have an amputation, etc.

Do you have employees exposed to this hazard?
Any employee conducting maintenance / repair, installation, set-up, or inspection of equipment with "stored energy" (electrical, hydraulic, gravity, kinetic) is at risk. This includes equipment and machinery that can move (rise, fall, rotate, press, etc.), with suspended weight, that can discharge air, water, or other material with force, or expose an employee to electricity.
Examples: Employees who are: conducting work on electrified equipment,, elevator repair and inspection, amusement ride inspections, repair of industrial machinery, working underneath a suspended vehicle….

TRENCH

What is the hazard?
When a sub-surface excavation is created, there is a high likelihood that the soil walls will collapse. There are many tasks that workers conduct while inside relatively narrow sub-surface excavations, trenches. If a worker is inside a trench when the soil walls collapse, he will most likely be killed (by suffocation or compression injuries). Those who survive will likely have serious musculoskeletal injuries. Other hazards to workers inside trenches include: electrocution, explosion, and water engulfment from underground utilities, falling loads, rocks, and soil, collapse of undermined surface structures, and the potential for a hazardous atmosphere.

Do you have employees exposed to this hazard?

Any employee who enters a subsurface excavation with a soil wall on at least one side and less than 15' across the narrow part of the excavation (as measured at the bottom) is exposed to this hazard.
Examples: Employees who are: installing or repairing underground utility pipes, working on foundation exteriors, installing frost walls, installing drainage, conducting / observing perc tests in soil, inspecting septic systems, conducting chemical spill emergency response activities, evaluating contaminated soil and digging graves.

WORK ZONE SAFETY

What is the hazard?
Some work tasks (e.g., road repair, utility work) take place in an active roadway. When this occurs, employees are at risk of being struck by passing vehicles. Also, workers at sites with construction vehicles are at risk of being struck by, caught in between, or crushed under construction vehicles. Workers of course, being struck by a vehicle will most likely lead to a fatality or serious injury.

Do you have employees exposed to this hazard?
Any employee working in an active roadway or other area with moving vehicles or on a site with construction vehicles is at risk. Flaggers / detail officers and also employees supervising or overseeing this type of work who are at the work site are also at risk.
Examples: Road repair, utility work, tree trimming, line painting, responders to roadway chemical spills and traffic accidents, and crossing guards.