

OCCUPATIONAL SAFETY AND HEALTH RISKS  
FACED BY  
LAW ENFORCEMENT OFFICERS

## Dedication

Over the past forty years, the awareness and importance of safe operating practices have become part of our day-to-day ‘standard’ procedures’. Safe work practices can no longer be thought of as ‘another program’ added to our normal work practices; it is now and must be part of our daily working existence. ***The law enforcement profession is no different. We readily associate the law enforcement profession with protecting the public, without realizing that at the same time they face many of the same occupational hazards that many other workers face, such as exposure to hazardous substances, slip and fall hazard hazards, selection and use of proper personal protection equipment, safe lifting techniques, working alone and blood borne pathogens.***

I am a safety professional with forty plus years of experience observing human behavior in many different work place environments. Over that time frame, I’ve conducted a considerable number of safety training sessions and work site safety inspections, as well as written numerous safety policies and procedures. Interestingly enough, I find that I’m hungry for more. Maintaining workplace safety, protecting employees is my passion. Now even more for our law enforcement officers.

While performing my duties with the City of Kalamazoo, Michigan I was ‘**volunteered**’ to assist Captain Jon Uribe, Kalamazoo Department of Public Safety to develop and conduct occupational safety and health. DOT and EPA training programs for law enforcement officers for their work in dismantling clandestine drug labs. Along the way, he soon became my mentor in what I was about to accomplish in this training program as well as a role model for what law enforcement officers stood for. Developing this training program became the greatest challenge I would ever undertake in my working career and would become the source to drive my passion that set my goals for the future work. I soon discovered that law enforcement officers have one of the most dangerous jobs in today’s work force. As I stood in the class room in front of these laws enforcement officers I soon began to realize they are some of the bravest and the best men and women I had ever had the opportunity to train. Of course you couldn’t pay me enough to be a saw enforcement officer, their job is too tough. They have to solve people’s problems and ‘baby-sit’ many of the people they come in contact with. My respect for them is immense.

While reflecting on the direction this guide should take, I opted to contrast past and present experiences to illustrate the unforeseen dangers regularly encountered as the standard operating procedure rarely in all-encompassing. ***Common sense should be employed whenever the need for a safe operating practice is demanded.*** How one should react to a hazardous situation along with the steps one should take to protect themselves and their colleagues from harm is derived from that experience. As I have encountered many of these scenarios in the ‘ordinary’ work place, my challenge was to now apply that experience and knowledge to the hazard fraught profession of law enforcement.

Experience can be very real and tangible. We learn by collaborating with others, by doing and/or watching others. It can be acquired then applied to guide one through mitigation if the foundation for the knowledge is properly employed. By sharing my experiences with you, I hope that I can stimulate your quest for knowledge and possibly motivate you to study further so you can learn how to operate effectively and safely.

I treasure my friendship with the law enforcement officers I have had the opportunity to share what I’ve learned over the years is what I hope will keep them safe while they are protecting all of us. I will always look upon law enforcement officers as my friends. They are dedicated public servants who are sworn to maintain and protect public safety at any time and place – each and every one of them are the bravest and the best the entire world can offer.

## About This Guide

I have done a lot research and done a lot of visual ‘inspections’ on the occupational safety and health when dealing with law enforcement personnel and I truly believe that law enforcement receives the best of job site training, and that training is used daily to protect officers doing their jobs. I do however believe that because of their dedication to the job and the community, ***they constantly forget how to protect themselves when it comes to occupational safety and health.*** I see the short cuts taken by officers and these short cuts put them at a risk for ***protecting themselves*** when it comes to occupational safety and health issues.

Police officers face a range of risks at work: homicide, assaults, communicable diseases, injuries during car crashes and regular abuse. The risks vary according to the task being undertaken for example, whether performing traffic duties, attending street disturbances, arresting offenders, guarding prisoners in jails or transporting offenders to court.

Police have a ***high-risk job*** compares to many others workers. Several officers are killed each year, while many more are assaulted and other contract a range of illnesses from work. The dangers are not just physical. The daily “civilian combat” of police officers can be compared with warfare.

The police officer is expected to be combat-ready at all times. . .a continual sense of danger from an unknown enemy. While the Vietnam veteran was at war for a minimum of nine months, police officers alternate between the violence of the street to the normalcy of civilian life on a daily basic.

Following accidents and deaths of police officers, it would appear homicide is more common for officers doing undercover work, making arrests, conducting drug raids, attending domestic disputes or pursuing speeding motorists.

I believe offices are most at risk of being assaulted when attending domestic disputes, as these are particularly unpredictable.

***I also think physical force is the most common cause of injury followed by contact with body fluids.*** It is also important to note that occupational safety and health do not clearly address the safety and health issues that these officers incur on a daily basic.

This guide explains the value of occupational safety and health (OSH) programs for law enforcement agencies and provides consideration for creating or strengthening current OSH programs and policies for all agency personnel. The guide begins with an overview of occupational safety and health for law enforcement and explains the benefits of these programs, stressing that providing OSH programs is the right thing to do for personnel, and the department will significantly benefit from providing such programs. Next, a comprehensive, approach to OSH programs is presented along with consideration for developing or improving related programs within the department. The guide will then discuss how departments can use these programs to respond to personnel safety and health needs during a public emergency.

The Occupational Safety and Health Act of 1970 (OSH Act) created the Occupational Safety and Health Administration (OSHA) to provide occupational health regulations for all private-sector and federal government employees. OSHA has established requirements with which most general industry employers must comply with. These include informing employees of *hazardous chemicals* on the job, having an *Emergency Action Plan*, a *Fire Prevention Plan*, complying with *exit route* requirements at the workplace, meeting *walking/work surface requirements*, and providing appropriate medical supplies/first aid to employees. Other important OSHA laws and regulations require employers to properly ***train*** employees for certain dangerous job duties, to have appropriate personal protective equipment (PPE) for employees performing specific job tasks, and for select workplaces to keep records of accidents or illnesses on the job. According to the OSHA Act it specifically addresses that each federal agency, including federal law enforcement agencies, must:

- Provide safe and healthful places and conditions of employment

- Acquire, maintain, and require the use of safety equipment, personnel protective equipment, and devices reasonably necessary to protect employees
- Keep adequate records of all occupational accidents and illnesses for proper evaluation and necessary corrective action

**While the act covers federal law enforcement agencies, it does not apply to state and local law enforcement agencies.**

***There are no national occupational safety and health requirements specific to state and local law enforcement. These law enforcement agencies are only subject to any local and state laws, accreditation standards, and bargaining contracts that may exist.***

In summary, less than half of U.S. States mandate that law enforcement agencies meet even basic occupational safety and health program components, which generally include safe and healthful work environment, using and maintaining Personal Protection Equipment (PPE), tracking workplace accidents or injuries and reporting annually on these incidents. *The need to provide basic protections may seem like a no-brainer, but these requirements are not in place for all law enforcement agencies.* **In general, law enforcement has lagged behind other fields in this area.** Despite a lack of specific regulatory controls, many departments offer **components** of occupational safety and health programs. More progressive departments in this area have initiated preventative effort.

In the absence of an effective occupational safety and health program, the employer may face liability lawsuits. Occupational safety and health program may help reduce liability and the number of lawsuits against a department. For example, physically fit officers may be more likely to use less forceful tactics when faced with a situation that has potential for excessive force. Having a good Occupational Safety and Health program in place:

- It can improve police-community relations.
  - Even if a department is not legally liable, police agencies are ultimately responsible for the actions of its personnel. Personnel behavior can also impact the overall relationship and trust between the police and community, and the chief executive will have to answer for any violations of this trust. Healthy officers may also be less likely to be the subject of complaints. For example, negative media attention and resident complaints can be brought on by officers' stress-related behavior. Stress reduction program may help officers to work with the community in a more positive manner.
- It is the right thing to do for the personnel and for the public safety of your community.
  - Proponents of developing a comprehensive approach to occupational health for law enforcement agree that while there are economic and other reasons for a department to provide occupational safety and health programs to its staff, departments should ultimately provide these programs because it is the 'right thing to do.' While the primary focus of the law enforcement field is to protect the safety and well being of others, departments must also protect the safety and well being of its employees to accomplish this mission. The entire department benefits from showing a commitment to providing resources to prevent illness or injury and to care for ill or injured employees, and employees will recognize that the department is doing everything it can to provide for their safety and health. When officers are healthy and their moral is high, the department as a whole is more productive, as more officers are on the street and responding to call for service.

Law enforcement personnel face a variety of **safety** and **health** issues every day. Some of the exposures are relatively minor. ***Other can have long term consequences that affect an officer's quality of life or result in death.*** *Unless a municipality eliminates or mitigates these risk exposures, officer safety is at risk, and the municipality could incur the costs associated with an injured employee's lost time and fines from OSHA. These costs can be significant.*

Safety and health hazards exist in all areas of law enforcement activities. For example, several safety and health issues are present during normal training activities. Firearms qualification is just one example. Inhalation of lead fumes and gasses from expelled primers and power can result in lead poisoning and respiratory illnesses. Impact noise can contribute to hearing loss. Ejected cartridges and splash back particulate create eye, head and face hazards.

The use of personal protective equipment (PPE) ***must be used*** when it is not feasible to use engineering controls for eliminating or reducing hazards. For example, safety glasses, a billed cap, and hearing protection should be minimum requirements during firearm qualification. The PPE standard requires employers to develop a ***written hazard assessment for PPE. This means that employers must identify exposure to hazards in their workplace, determine if their workers need protective equipment, and identify the most appropriate type to provide.*** An example of an identified hazard is the potential for blunt trauma by a variety of weapons or objects. The PPE that employers have identified to protect against the result of this exposure is body armor. Responding to traffic accidents and performing traffic control functions are regular activities for law enforcement. Many officers are exposed to injury or death because passing motorists do not see them. High visibility clothing with retro-reflective markings is the recommended PPE that officers should use during traffic accident investigations and traffic control activities. These vests can reduce the probability of being struck by a passing motorist. If the assessment determines that PPE should be used to reduce exposure of employees to hazards, the employer must implement and maintain a ***written program***. The program documents the employer's identification and evaluation of hazards in the workplace. If use of PPE is an appropriate control measure, the program should include an explanation of how the employer selects it as well as how employees use and maintain it.

OSHA also requires that employees must receive training in using PPE properly. The employer should conduct ongoing evaluations of its PPE program to determine its effectiveness in preventing employee injury and illness.

Only properly trained and equipped officers should knowingly enter a clandestine drug laboratory. The Clandestine Laboratory Training Unit of the Drug Enforcement Administration (DEA) offers training programs that meet Occupational Safety and Health Administration (OSHA) standards for working with respiratory protection. Current regulations do mandate that law enforcement officers receive at least ***24 hours of hazardous chemical handling training*** before entering a clandestine drug laboratory. Officers should also receive annually refresher training.

When entering a clandestine laboratory, officers should wear appropriate PPE. Depending on the risk assessment, air sampling, and previous intelligence, officers can choose level B or level C PPE, as defined by OSHA, a coetaneous and respiratory protection are necessary. The atmosphere should be monitored remotely, before entering the suspect location for oxygen level, toxicity, and lower explosive limit.

Officers should wear fire-resistant uniforms, and eye protection. ***Heat exhaustion*** may become an issue because of the ballistic vests and heavy tactical equipment. To prevent heat injury, officers should be rotated frequently and allowed to rest. Officers should train with PPE on a regular basis, because PPE tends to impair vision and dexterity.

With today's heightened awareness of the potential need for responding to terrorism incidents employers should not overlook the requirements of a ***respiratory protection program*** and chemical resistant clothing protection. Whenever respirators are necessary to protect the health of the employee, OSHA requires ***employers to develop and implement a written respiratory protection program***. This requirement also holds should an employer require and employee to wear a respirator in a situation where the standards does not otherwise require such use. The program must include workplace-specific procedures. The standard also requires employers to select respirators that protect employees against the physical state and chemical form of the particular contaminant or contaminants present in the work place.

***Every police officer should be trained to recognize a clandestine drug laboratory.*** Some signs include ammonia or other unusual odors, a large number of glass containers and specific chemicals. In most cases, an unprepared officer should leave the environment of the laboratory and call for the appropriate response.

If officers recognize a laboratory, they should get out if possible, avoid eating or drinking anything, and be aware of booby traps and hostile suspects. Only trained officers should make entry and should wear personal protective equipment (PPE). Always remember the most dangers can be found in an *active* drug laboratory, but there are safety and health dangers found in an *inactive* drug as well.

Officers who are exposed to chemicals in the clandestine drug laboratory can experience *illness* symptoms of headache and respiratory, mucous membrane, and skin irritation. Inhalation of exposure is the greatest. Chemicals found in clandestine drug laboratory can be classified as carcinogen, respiratory irritants and skin irritants.

OSHA mandates a *medical surveillance program* for employees working with a respirator and for employees dealing with hazardous waste operations. An initial medical evaluation is necessary to determine whether the officer is physically able to work with a respirator. Physical examinations are required before beginning the use of a respirator and then once a year.

Officers spend an enormous amount of time in motor vehicles and, not surprisingly, motor vehicle accidents are leading cause of serious injury and death for law enforcement personnel. Law enforcement departments *must require* employee to use seatbelts when occupying a motor vehicle because seatbelt usage will help departments to reduce the primary injury potential.

Arrest and apprehension activities pose unlimited safety and health exposure. *Communicable diseases* have become a significant concern. *Blood borne infectious disease* pose a serious risk to law enforcement often overlooks until and exposure occurs. By then, it may be too late. It is essential for all officers to use barrier protection when their hands might come in contact with infectious materials or hazardous chemicals. OSHA requires that employees wear protective gloves when it is reasonably anticipated that hand contact may occur with blood, other potentially infectious materials, mucous membranes, non-intact skin, or contaminated items or surfaces. *It is important for all law enforcement departments to have an up to date blood borne pathogen and infectious disease policy.* OSHA requires yearly training for all employees who are in jobs that may have an exposure.

Police officers often come into contact with body fluids in the course of their duties, such as when handling accident victims or those who have been rescued from violent attacks. In such situations, the officers stand the risk of being infected with bacteria and viruses which may cause diseases such as HIV. To guard against this risk, OSHA requires officers to wear protective clothing and gloves. However, if contact with bodily fluids such as blood does occur, they should wash the infected areas with water and soap. Gloves and other protective gear should not be reused.

While investigating crimes, conducting searches, taking samples, or arresting suspects, police can be exposed to infectious organisms. During the body search of a suspected drug user or his/her premises, there is always the risk of a puncture wound from secreted needles which may be contaminated with HIV, hepatitis B or other debilitating virus or bacteria. *Police can also contract hepatitis B from the saliva of infected offenders, from their vomit or feces in padded cells, or while restraining a suspect who bites. Tuberculosis can be contracted through airborne cough droplets.*

**With the HIV/AIDS virus, the perception of risk far exceeds the probability.**

Offenders infected with hepatitis B and C poses a significant risk to exposed police officers. Hepatitis B is highly infectious, with perhaps one in three exposures resulting in transmission. It can live for some time outside the human body, for example, for over a week in dried blood or saliva on clothing, and is a widespread disease for which there are no absolute cures. Police can be infected if a hepatitis B infected person spits or bites an officer, if a contaminated sharp cuts skin.

Police suffer *stress* through constant exposure to danger, and traumatic events. Stress risks may be increased for female officers because of the need to adapt to a male-dominated profession. Post-traumatic stress disorder (PTSD) may also occur. Affected officers may be constantly on alert, depressed, and

preoccupied with traumatic events, have flashback and nightmares, or indicate that they feel their work role – or life- is pointless.

Police officers suffer a range of other *work-related injuries* (for example, from jumping over fences during chases) and illnesses (such as hypertension). Officers involved in arson, bomb and fraud investigations may be exposed to poisonous chemicals and vapors (with acute and long-term health effects), insecure building, explosions as well as unbalanced or coldly calculating offenders.

An escalating risk stems from clandestine laboratories established to manufacture illicit drugs such as methylamphetamine. Police officers can be exposed to *toxic chemicals*, by-products that are flammable or explosive, large concentrations of *corrosives*, and life-threatening concentrations of *toxic vapors*.

Exposures to these chemicals may result in shortness of breath, dizziness, nausea, vomiting, chest pain and loss of consciousness. Residual chemicals can permeate walls or carpets and be absorbed through the skin or eyes, but officers may not recognize symptoms in time for escape.

While officers are working in the facility they must be aware of *safety hazards* they may encounter. Automatic overhead garage doors blocked by an obstruction during closing or have wiring that requires constant pressure on the down switch to fully close the door. All electrical outlets in areas of potential water exposure must be protected to protect the officers. If using ladders the officer must use a ladder that meets OSHA specification if it is to be used in the course of his/her work.

***All officers should be trained in Occupational Safety and Health subjects which are applicable to their job.*** Occupational Safety and Health training for law enforcement personnel is standard from department to department. The training should cover the concepts of knowledge of basic hazard and risk assessment techniques, understanding hazardous material terms and learning the selection of protective equipment. Departments can start a training program in conducting initial OSHA training for each officer and a brief training session annually or when the work environment changes. Recommendations specific to hazards associated with Public Safety Officers should be trained in where applicable would be as follows:

- Risk Assessment
  - All officers should be required to receive training in risk assessment. This training may include the assessment and protocol for weapons of mass destruction, hazard materials and disaster preparedness. The training sessions would vary from one to 40 hours.
- Hazard Materials Training
  - Law enforcement personnel may be the first responders to a chemical spill or accident involving hazard materials. The hazard material training concentration on hazard material identification, containment of the material and storage of the material.
- Protective Equipment Training
  - When a first responder arrives at a chemical spill or a terrorist attack that utilizes biological, chemical or nuclear technology, the protective equipment the responder wears could save his/her life. The training for protective involves the use of tactical equipment for self and citizen defense, but also equipment that helps the responder survive in an adverse environment.

Police officers carry out some of the most important jobs for communities across this country. They are often required to attend to kidnap victims, murder victims and even assist in accident and disaster scenes. While carrying out their day-to-day activities, police officers encounter some of the riskiest occupational hazards.

- Contact With Body Fluids
  - Police officers often come into contact with body fluids in the course of their duties, such as when handling accident victims or those who have been rescued from violent attacks. In such situations, the officers stand the risk of being infected with bacteria and viruses which may cause diseases such as HIV. To guard against this risk, Occupational Safety and Health requires officers to wear protective clothing and gloves. However, if contact with bodily fluids such as blood does occur, they should wash the infected area with water and soap. Gloves and other protective gear should not be reused. All officers who encounter an exposure must complete an exposure report and testing for communicable disease is completed. Exposure report must be filed with officer's supervisor.
- Handling Contaminated Water
  - When dealing with contaminated water, police officers should reduce the number of people working in the contaminated area. The officers should wear protective clothing and gloves and other protective gear such as goggles to avoid water splashing to their eyes. They should also cover any cuts or abrasions on their skin to avoid contamination. After their shift, they should wash their hands and other body parts that come into contact with the contaminated water thoroughly with water and soap.
- Exposure To Dust
  - A police officer working in a situation where there is dust that causes a nuisance should stay away from heavy wind. The situations where dust may be prevalent include excavation sites and road repair sites. Officers should also spray water on the scene to suppress the generation of dust. Respirators should be used to avoid direct inhalation of dust.
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Below are specific to hazards associated with law enforcement and recommendation for corrections:

- Vehicular Traffic/Lack of Traffic Controls
  - Key Engineering Controls and Work Practices – Set up controls (temporary lights, 4-way stops, officer-directed traffic) at busy intersections. Use flashlights, flares, construction barriers, and cones to highlight road hazards and direct traffic flow.
  - Additional Personal Protective Equipment – ANSI/ISEA 107-2004 compliant high visibility safety apparel and headwear. Signaling wands/flashlights.
- Structural Instability
  - Key Engineering Controls and Work Practices – Conduct public safety activities from outside damaged structures to the extent feasible. Limit access/set up controlled access zones until stability and structural integrity is known. Ensure that a competent person inspects building and floors before entry to perform work. A competent person is able to recognize existing and predictable hazardous conditions and has the authority to take prompt corrective measures to eliminate the hazardous conditions. Install temporary structural support adequate to protect response and recovery workers.
- Unsecured Hazards In The Work Area
  - Key Engineering Controls and Work Practices – Remove or secure objects that may fall while workers work under them. Use debris netting, sidewalk sheds, canopies, or catch platforms to reduce hazards from falling objects.
- Contact With Blood or Body Fluids
  - Key Engineering Controls and Work Practices -Follow universal precautions, including washing any part of the body or clothing that becomes contaminated with blood or bodily fluids. Wash hands with soap and water every time gloves are removed. In the absence of soap and water, use an alcohol-based hand cleaner after glove removal. However, wash hands with soap and water as soon as feasible. Do not wear PEE or clothing that been



damaged or has been penetrated by body fluids. Report injuries and exposures to body fluid to a supervisor. Decontaminate equipment before reuse; do not reuse gloves or other disposable PPE. Additional PPE would be fluid-proof gloves (latex, nitrile, rubber). Cover with heavy-duty work gloves if potential for cuts and abrasions.

- Contact with Downed Lines and Live Electrical Equipment and Other Utilities (gas and water).
  - Key Engineering Controls and Work Practices -Assume that electrical lines are energized until proven other wise. Lines and other conductors may become re-energized without warning as utilities are evaluated and restored after a disaster. Inspect the work area for downed conductors and do not go near, drive over, or otherwise come in contact with them. Downed electrical conductors can de-energize other objects, including fences, water pipes, bushes, trees and telephone-fiber optic cables. Unless de-energized and visibly grounded maintain proper distance from over head electrical power lines – at least 10 feet- and/or provide insulating barriers. Do not approach any gas leaks; if a gas leak is detected, secure spark-producing devices (such as engines, tools, electronic and communications equipment) and evacuate the area until the leak is secure. Contact the utility company to assist in locating, marking and shutting off utility lines that may pose a hazard or may be impacted; ensure that lines have been purged as needed before beginning work.
- Work Zone Safety
  - Key Engineering Controls and Work Practices – Personal Protective Equipment. The General PPE is recommended for all response/recovery tasks/operations; only the additional PPE that may be needed for a specific hazard. General PPE should include – Hard hat for overhead impact or electrical hazards. Eye protection with side shields. Gloves chosen for job hazard expected. ANSI approved protective footwear. Respiratory protection as necessary. Additional personal protective equipment ANSI/ISEA 107 compliant garments with long pants or sleeves that retro-reflective or retro-reflective material that encircle the legs or sleeves.
- Hazardous Waste Operations and Emergency Response
  - For response and recovery workers who will conduct emergency and post-emergency response operations involving or potentially involving release of hazardous substance. It also involves workers involved with hazardous substances at recognized, uncontrolled hazardous waste sites. This is specially intended for designated hazardous materials response teams and trained hazardous waste site workers and their supervisors, when these individuals are involved in the operations defined in the scope of OSHA’s Hazardous Waste Operations and Emergency Response (HAZWOPER). Where the HAZWOPER standard applies, the response, cleanup, and recovery activity should only be performed by designated workers who are trained and equipped according to the requirements of the standard.
- Exposure To Hazardous Substances and Work Practices
  - Key Engineering controls and Work Practices – For emergency response operations- follow the company existing Emergency Response Plan. This plan must address the following:
    - Personnel roles, lines of authority, training, and communication
    - Site Security and control
    - Safe distances and place of refuge
    - Evacuation routes and procedures
    - Decontamination
    - Emergency medical treatment and first aid; medical surveillance/consultation for workers that show any signs or symptoms of exposure as a result of the emergency.
    - Emergency alerting and response procedures
    - PPE and emergency equipment

- Conduct air monitoring to determine the extent of contamination and concentration levels of airborne contaminants.
- Minimize time in areas where exposure could be strongest
- Decontaminate workers, train workers on decontamination procedures before they enter contaminated area.
- Decontaminate contaminated clothing and equipment; discard clothing and equipment that cannot be reused.
- Ensure all HAZWOPER operations at the site are performed by trained workers who are properly equipped for the roles they are assigned. Training is determined based on the worker's job, expected hazards, and stage of clean-up.
  
- Additional Personal Protective Equipment (PPE)
  - Dermal protection including hooded chemical protective suit, inner/outer gloves, and boot covers suitable for the chemical and exposure concentration anticipated. Total-encapsulating, chemical protective suits may be required for response to measured or anticipated high concentrations of a hazardous substance that requires the highest level of skin, eye, and respiratory protection based on work operations that involve a high potential for splash, immersion, or exposure to vapors, gases, or particulates that are harmful to the skin or are capable of being absorbed through the skin. Other dermal protection may include, coveralls for particulate protection, and chemical protective aprons, goggles with indirect venting, and face shields for splash protection.
  - Respiratory protection that is suitable for the chemical and exposure concentration anticipated. A positive pressure self-contained breathing apparatus must be used for an inhalation or potential inhalation hazard until air monitoring allows the individual in charge to reduce the level of respiratory protection and an air-purifying respirator is available that can remove the contaminants.
  - Inspect tanks, drums and other containers for integrity before moving them; if they can not be inspected in place, (because they are buried or stacked) move them to an accessible location and inspect them prior to further handling.
  - Remove soil covering containers with caution to avoid damaging the container.
  - Assume that containers hold hazardous substance until the contents can be positively identified and labeled.
  - Minimize container movement.
  - Limit access to the areas and warn all potentially exposed workers of potential hazards associated with the contents.
  - Keep absorbent and over-pack equipment available where leaks or spills might occur; transfer contents from damaged or unsafe containers into sound containers to avoid ruptures and spills.
  - Ensure fire extinguishers are available in the immediate area.
  
- Opening Drums and containers
  - Key Engineering Controls and Work Practices – Restrict the area to individuals actually involved in opening the containers
  - Consider the risk of explosion, provide shielding, open drums remotely, or provide other protection in the area where this may be a hazard.
  - Use material handling equipment and tools that prevent ignition. If a flammable atmosphere may be present in or around the drums and containers being moved or opened.
  - Open containers in a way that will allow internal pressure to be relieved safely; if this cannot be done remotely, then place a shield between the workers and the drum to prevent injury. Protect workers from standing on drums.
  - Drums and containers containing packaged laboratory wastes must be considered shock-sensitive or explosive until characterized.
  
- Shock Sensitive or Crystalline Materials

- Key Engineering Controls and Work Practices – If crystalline material is observed on any container, handle the container as if it is a sock-sensitive until the contents are identified.
- Handle shock sensitive wastes using the following minimum additional special precautions
  - Evacuate all non-essential workers from the transfer area
  - Use material handling equipment with explosive containment devices or protective shields to protect equipment operators from exploding containers.
  - Signal the beginning and end of explosive waste handling activities using a work alarm system that can be perceived above surrounding light and noise conditions.
  - Maintain continuous communication (using equipment that will not cause shock sensitive materials to explode) between the worker-in-charge of the immediate handling area, the site safety and health supervisor, and the command post throughout explosive waste handling activities.
  - Do not move drums and containers under pressure (bulging or swelling drums) until the cause of the excess pressure is determined and appropriate containment procedures have been implemented to protect workers.
  
- Segregation of Wastes
  - Key Engineering Controls and Work Practices –
    - Segregate containers of hazardous materials by expected hazard class
    - Store incompatible hazard classes separately (oxidizers away from flammables)
    - Store/stack containers securely so that they will not break or fall and so that they are clear of vehicular traffic and heavy equipment.
    - Provide spill containment, where necessary. Line hazardous material holding area with plastic sheeting and build a berm around the perimeter to contain leaking of spilled material
    - At the end of each shift, cover hazardous materials that were not processed with plastic and close the lids on any drums
    - Store and handle hazardous materials in areas with natural or forced ventilation, do not store or handle in low-lying areas.
    - If intact hazardous chemical containers are found-with debris, segregate them from the waste stream before continuing work in the area.
    - If broken or leaking hazardous chemical containers are found with debris, contact a supervisor/hazardous material personnel for evaluation/removal before continuing work in the area.
    - If material that contain asbestos is found with debris, contact a supervisor/hazardous material personnel
  
- Work on, Over, or Near Water
  - Key Engineering Controls and Work Practices-
    - Use grappling poles to retrieve objects; take caution around floating barrels and drums which could release hazardous substances if punctured.
    - Use buoys to mark underwater diving locations or locations of submerged materials
    - Use additional protection, such as a lifesaving skiff and a ring buoy, as appropriate
  
- **Improper Ladder Use**
  - Key Engineering Controls and Work Practices-
    - Inspect ladders for cracked, broken, or defective parts before use.
    - Do not exceed the load rating of ladders-remember that load rating include people, tools, and equipment.
    - Set up ladders on stable surfaces

- Set extension or straight ladders at a 75 degree angle from the ground (1/4 foot back for every foot of rise) and provide 3 feet above the upper landing surface to ease climbing onto/descending from height.
- Use non-conductive ladders and exercise extreme caution when working near power lines.
- Secure ladders that can be displaced by work activities; consider barricades as the base to keep traffic away.

➤ **Confined Spaces**

- Key Engineering Controls and Work Practices- Confined spaces have limited means of entry or exit, are large enough to bodily enter, and may contain physical (mechanical, electrical, hydraulic, pneumatic energy; engulfment hazards; inwardly converging surfaces) or atmospheric hazards (atmospheres that are oxygen-deficient or oxygen-enriched, contain or may contain flammable gas, vapor or mist, airborne combustible dust, toxic substances, or any other atmosphere that is immediately dangerous to life or health. Examples include storage tanks, process vessels, bins boilers, vaults, ventilation or exhaust ducts, sewers, tunnels, pipelines, and pits more than 4 feet in depth. Evaluate the need for entry, placing any body part into the space you will require a permit. Prevent unauthorized entries.

➤ **Noise**

- Key Engineering Controls and Work Practices – Place generators, compressors, and other noisy equipment at a distance or behind a barrier when possible. Hearing protection when working around potential noise sources and when noise levels exceed 90 dBA. A useful “rule of thumb” – if you cannot hold a conversation in a normal speaking voice with a person who is standing at arms length approximately 3 feet, the noise may exceed 90 dBA.

➤ **Silica, Mold, Nuisance, Dust, Dried Mud and Silt**

- Stay upwind of or away from dust-generating activities, and in particular those involving crystalline silica-containing materials like concrete, brick, tile, drywall, mortar, and or stone. When inhaled, the fine crystalline silica particles contained in the dust can become lodge deep in the lung, which can lead to silicosis and other respiratory illness.
- Use water spray or mist to suppress dust generation, especially during operations that may create a lot of dust, such as cutting or sawing silica-containing materials, jack hammering, impact drilling, using heavy equipment, and demolishing structures.
- Avoid using compressed air for cleaning surfaces
- Sample worker exposure t silica during dust generating activities Limit contact or disturbance of surfaces containing substantial visible mold growth.
- Additional Personal Protective Equipment
  - At a minimum, use respirators with N, R, or P95 filters for work with crystalline silica-containing materials. The use of N, R, P100 filters may provide additional protection. Higher levels of respiratory protection may be needed for some operations. N, R, P95 respirators may be used for nuisance dusts. Filters with a charcoal layer may be used for odors.

➤ **Other Potential Hazards –**

○ **Accident Hazards**

- Accidents are most likely during emergency response of the law enforcement officer and may occur especially while doing first aid work, patrol car driving and riot control
- Slips, trips, and falls while ascending and descending from roofs or while chasing suspects in a crime
- Wounds caused by knife or other object metal rod, baseball bat as a result of being attacked by persons contacted in the course of duty. Wounds caused by random or careless shooting by others. Self-inflicted wounds caused during

firearms cleaning, and loading. Car or motorcycle accidents while chasing fleeing vehicles, or while fast driving in response to emergency calls.

- **Preventive Measures**
  - When on duty, wear the personal protective equipment provided for the job at hand, such as bulletproof clothing.
- **Physical Hazards**
  - Exposure to ambient environmental factors low or high air temperatures, rain, wind, snow, sun resulting in acute common cold, heat stroke, dehydration or chronic diseases.
  - Exposure to high noise levels from the emergency horn or on the firing range.
- **Preventive Measures**
  - Wear appropriate hearing protection on the firing range
- **Chemical Hazards**
  - Exposure to lead while directing traffic, working on the firing range or doing printing work. Firing-range instructors must submit periodical urine/blood tests for lead.
  - Exposure to excessive levels of carbon monoxide while directing traffic.
  - **Preventive Measures**
    - Wear appropriate hearing protection on the firing range
- **Biological Hazards**
  - Risk of contracting a contagious disease, such as HIV, infectious hepatitis, or rabies as a result of needle stick injury, human or animal bite, or close contact with infected/ill people.
  - Infection caused by insects or rodents while entering polluted or abandoned places for the purpose of inspection, search and observation.
  - **Preventive Measures**
    - In rescue operations or when dealing with drug addicts, take precautions to avoid contact with body fluids; in particular do not expose cuts or other open skin wounds to body fluids, to avoid contamination with agents causing disease such as AIDS and hepatitis.
- **Ergonomic, Psychosocial and Organizational Factors**
  - Long periods of time spent inside vehicles may in the course of time result in musculoskeletal disorders in low back.
  - Cumulative trauma disorders of lower extremities as result of long-time, extensive foot patrolling assignments
  - Post-traumatic stress disorder (PTSD), most likely if the incident witnessed by the law enforcement personnel has resulted in serious injury or death to any of those involved.
  - Exposure to various psychological stressors such as stress-related disorders may be manifested as behavioral problems, marital or family problems, or sometimes as alcohol or substance abuse
  - Personal and/or family problems caused by shift work, irregular work hours, constant state of alertness, relations with peers and superiors within an hierarchical system typical of police and law-enforcement forces and similar psychosocial factors.
  - Fear of being prosecuted afterward for actions which seemed to be clearly indicated as necessary during an event, but later not considered as such, when the moments of peak stress were past.
  - The paperwork duties, as opposed to active law enforcement, are often experienced as a major stressor.
  - **Preventive Measures**
    - Learn relaxation exercises and perform them during long waiting periods

- Seek psychological or vocational advise if experiencing work-relate stresses or burnout
- Select a shift work schedule that would have the least harmful effect on the employee's health, family and personal life.

**Law enforcement personnel may also suffer such accidents as:**

- Slips, trips, and falls on working surfaces\
- Manual handling of materials/weight
- Cuts and lacerations
- Heat and cold stress
- Sunburn
- Poisonous plants

**Some of the most frequent safety and health issues encountered by all law enforcement officers include:**

- Violent attacks
- Exposure to contagious and infectious disease from people, animals, needles and other sources
- Exposure to various chemical or biological hazards
- Pain from physical overexertion, and prolonged or awkward body postures
- Exposure to extreme temperatures
- Noise
- Slips, trips and falls
- Fatigue from shift work
- Psychological stress or trauma

**Some of the preventive measures for law enforcement officers should include:**

- Have extensive safety and skills training
- Exercise regularly to keep fit and reduce the risk of injury
- Wash our hands frequently, to reduce the chance of infection
- Use personal protective equipment or other barriers for the task
- Learn safe lifting techniques
- Always be aware of your surroundings, and on the alert for dangerous people and situations
- Take breaks, as appropriate, from awkward positions or repetitive physical tasks
- Follow a recommended shift work pattern and protect yourself from the hazards associated with shift work
- Follow or establish safety procedures for working alone, or for avoiding working alone wherever possible
- Lear about stress and post-traumatic stress, and consider a debriefing session or counseling after a critical or traumatic event

Ensure that you are trained and informed on how to avoid the various safety and health hazards of your job.

## **Safety and Health Tips to Make the Work Place Safer - Key Safety and Health Tip for Police Officers:**

These safety and health tips provide general information on ways to manage the most common hazards and risks the in the industry and will help to effectively manage safety and health in the workplace. However, every workplace is different so you must not take this information as being all that you will need to do.

### **GENERAL**

Activities/ Instructions:

Make your work and workplace safe by:

- Finding what is safe or unhealthy in your workplace
- Deciding what is the highest risk, what needs to be fixed first and how to go about fixing it
- Taking action to fix the unsafe or unhealthy workplace problems
- Checking the problems are fixed and won't happen again
- Having a site-specific training to do work safely
- Making sure personal protective equipment (PPE) is used where provided
- Remember, everyone is responsible for workplace health and safety

### **BIOLOGICAL HAZARDS**

Activities/Instructions:

- Implement an occupational immunization program for hepatitis B and influenza
  - Additional vaccines may be necessary for work in specific communities
- Instruct workers to wash their hands regularly, including after contact with blood, body substances and sharps and after removing PPE
- Provide alternative hand hygiene amenities for field officers (such as alcohol hand rub)
- Provide and instruct workers to wear PPE for contact with blood, body substances and sharps; this may include disposable gloves, face-shields and eye protection
- Make sure spills of blood and body substances are cleaned up promptly

### **EMERGENCY PREPAREDNESS AND RESPONSE**

Activities/Instructions:

- Make sure fire extinguishers are available and testing is current
- Make sure an emergency plan is available covering a range of emergencies such as fire and chemical spills
- Brief workers on emergency evacuation plan

### **FATIGUE**

Activities/Instructions:

- Where rostering is used-

- Make sure the roster provides for a continuous 7 to 8 hours sleep in each 24 hours, and at least 50 hours sleep for every seven days
  - Limit number of consecutive night shifts to four
  - Use forward shift rotation
  - Make sure there are sufficient numbers of workers to cover for sick and annual leave
  - Plan for overtime so that workers can schedule their activities around it
  - Employ job rotation for repetitive tasks, or work that involves heavy physical demands
  - Have contingency plans in place to allow for removing fatigued workers from work activities where there is a considerable risk to health or safety
  - Limit shift work to core duties that must be completed at night
  - Redesign work practices so that routine administrative tasks are minimized for night shift workers
  - Schedule low risk work during period of high fatigue
  - Schedule complex tasks to be performed only during the day
  - Instruct workers about the effects of fatigue and ways to minimize it
  - Advise workers they should plan their social activities and make sure they have sufficient sleep in order to do their job safely
- For work involving hard physical effort-
    - Organize work to reduce the physical force needed to lift, carry, move, hold or restrain items, such as positioning items as close as possible to where work is done
    - Provide, use and maintain adequate mechanical and assistive devices to minimize effort
    - Train workers in safe use of equipment/devices, where provided
    - Where possible, make sure flooring does not impede the use of wheeled equipment
  - For work involving awkward working positions, workers should:
    - Work in the straightest forward facing position
    - Work with their arms close to their body, not reaching away or over head
    - Vary their position frequently, don't stand, sit, kneel or squat for long periods
    - Minimize bending and over reaching, by for example, adjusting equipment such as car seats, office chairs, and workstation and storing frequently used items between hip and shoulder height
  - For work that is highly repetitive or involves tasks of long duration, workers should
    - Work at a slower pace for tasks repeated frequently or done for long periods
    - Vary work duties or working positions for example, alternate between standing and sitting activities
    - Change work practices or obtain equipment to avoid repetitive actions or prolongs tasks

Make sure all workers have received clear instructions and have been trained to perform them safely.

## **OCCUPATIONAL STRESS**

### Activities/Instructions

- Assign appropriate amounts of work to workers
- Make sure workers have the appropriate skills to meet the demands of their job
- Identify stress hotspots and implement controls to manage
- Monitor work demands and control over work
- Provide support systems for critical incidents
- Track critical incident history of individual officers
- Make sure work roles are clear – including reporting requirements – and provide clear work structures
- Provide human resource management support services such as Employee Assistance Program, injury management, discipline review and appeal processes



- Make sure work procedures are applied consistently and in an unbiased manner.

Promote positive workplace support for supervisors and police officers.

## **OCCUPATIONAL VIOLENCE**

Activities/Instructions

- Identify best practice design guides for the design and construction of police facilities
- Use design or engineering measures to change the physical characteristics of the workplace to reduce the risk
- Change the system of work or work practices to help reduce risks, such as:
  - Train workers in aggressive behavior management, including the recognition and diffusion of potentially volatile situations
  - Ensure sufficient number of appropriately trained workers
  - Provide for emergency communication
  - Implement a system of communication and support for home visits
- Provide and instruct workers to use PPE appropriate to the level of risk
- Put control measures in place to manage any specific risks associated with individuals with challenging behaviors

## **PERSONAL PROTECTIVE EQUIPMENT**

Activities/Instructions

***Provide and instruct workers to use PPE, where identified through risk assessment, standard operating procedures or manufactures' instructions.***

## **SHARPS**

Activities/Instructions

- Instruct workers to not place hands into areas where sharps may be concealed
- Provide and instruct workers to use equipment, such as tongs, to search areas and objects where sharps may be concealed
- Use design measures such as 'hard' car seat covers in police vehicles to prevent the hiding of sharps within the car seat
- Develop safe systems of work for the handling and disposal of sharps
- Provide and instruct workers to dispose of sharps in a rigid-walled, puncture-resistant sharps container in accordance with local government requirements
- Locate sharps containers as close as possible to the area where sharps are used, such as provided in police vehicles
- Ensure appropriate first aid and medical attention for accidental skin penetrating injuries and blood and body fluid exposures

## **TRAINING**

Activities/Instructions

- ***Make sure workers have appropriate training and are competent to do a work task.***
- ***Provide general, site-specific and task-specific training where appropriate***

**Recommend Police Officer OSHA Training Program**

<b><u>Training Classes</u></b>	<b><u>Required Frequency</u></b>	<b><u>Additional Guidance/Information</u></b>
Back Safety	One Time Only	Employees whose job tasks involve excessive or heavy lifting of materials.
Bloodborne Pathogens	Annually	Employees with reasonably anticipated skin, eye, mucous membrane, or parenteral contact with human blood, human blood components, products made from human blood, human body fluids, unfixed tissues or organs (other than intact skin) from a human (living or dead), HIV-containing cell or tissue cultures, organ cultures and HIV- or HBV-containing culture mediums or other solutions, blood organs, or other tissues from experimental animals infected with HIV or HBV.
Confined Spaces	One Time Only	Employees who have the potential to work in or supervise entry into a confined space or permit-required confined space. A confined space is a space that is large enough and so configured that an employee can bodily enter and perform assigned work, has limited or restricted means for entry or exit (e.g., tanks, vessels, silos, storage bins, hoppers, vaults, and pits), and is not designed for continuous employee occupancy. A permit-required confined space is a confined space that has one or more of these characteristics: contains or has the potential to contain a hazardous atmosphere; contains a material that has the potential for engulfing an entrant; has an internal configuration that might cause an entrant to be trapped or asphyxiated by inwardly converging walls or by a floor that slopes downward and tapers to a smaller cross section; and/or contains any other recognized serious safety or health hazard(s).
DOT In-Depth Security	Every Three Years	Essential personnel having a role with hazardous materials (e.g., signing potentially infectious waste manifests, assisting waste contractors, receiving or delivering chemicals, laboratory facility managers, police officers and public safety) as identified by Environmental Health and Safety.
Ergonomics		Employees who want more information on preventing cumulative trauma disorders.
Fall Protection	One Time Only	Employees utilizing fall protection equipment or systems.
Fire Safety and Evacuation	Annually	All employees.
Hazard Communication	Every Three Years	By successfully attending Hazard Communication training, employees will also receive credit for initial Fire Safety and Evacuation training.

Hearing Conservation	Annually	Employees whose job classifications may involve duties in areas which result in noise exposures equal to or in excess of an 8-hour time-weighted average (TWA) of 85 decibels and therefore are included in the Hearing Conservation Program.
Ladder Safety	Every Three Years	Employees whose job classifications may involve duties requiring them to perform operations with industrial and temporary stairways, ladders and portable ladders.
Personal Protective Equipment	One Time Only	Employees wearing protective equipment for eyes, face, head and extremities, protective clothing, respiratory devices and protective shields and barriers for protection from hazards (e.g., chemical, radiological, mechanical irritants), processes or environment capable of causing injury or impairment in the function of any part of the body through absorption, inhalation or physical contact.
Respiratory Protection	Annually	Employees required to wear respirators for health protection.
Shipping Hazardous Materials - General Awareness	Every Three Years	Employees engaged in preparing, shipping, receiving, materials handling or transporting of hazardous materials.
Shipping Infectious Substances	Every Two Years	Employees engaged in any aspect of shipping an infectious substance, including filling out waste manifests for medical waste.

## **Conclusion**

I am aware that police officers are dedicated to their job duties that they sometime forget to look at Occupational Safety and Health for themselves. Through research and a lot of visual observation it is obvious that police officers are putting themselves in harms way daily when it comes to Occupational Safety and Health. Police officers carry out some of the most important jobs for communities across America. While carrying out their day-to-day activities, police officers encounter some of the riskiest occupational hazards. At least one officer is killed every 52 hours in the line of duty, many are assaulted, a number contract communicable disease and there are other risks to their safety and health. These risks are probably increasing over time because of increased demands on officers. Reduction of vulnerability can be lessening by simply training or training to remind officers that they must also protect themselves when performing their job.

***Every Officer In Charge (OIC) at the start of his or her shift should take the time to introduce into the briefing a short five minute occupational safety and health training session. This can easily be done by selecting one safety topic each day as a reminder for all officers to add a little extra protection in their schedule for occupational safety and health to protect them.***