

Things To Know About Crime & Trauma Scene Cleanup

Posted: November 19, 2007



Years ago, few cleaning or restoration personnel thought much about getting blood on themselves. Aside from the repulsive nature of blood, the very thought of it being the carrier of deadly and debilitating diseases was far from our minds. This all changed on Dec. 6, 1991, when the Occupational Safety and Health Administration issued its final ruling on “Occupational Exposures to Bloodborne Pathogens.”

The regulation covers all employees who could come in contact with human blood or potentially infectious materials in the course of their routine work (insurance adjusters take note, this may include you if you inspect bloody vehicles or property as part of your job). Part of this regulation mandates the implementation of “Universal Precautions,” procedures designed to reduce infectious exposures. This includes the adoption of procedures mandating that employees treat all blood or other body fluids as potentially containing bloodborne pathogens – harmful microorganisms or other potentially infectious materials present in blood that could cause disease or even death in humans. Included among these microorganisms are hepatitis B virus (HBV), human immunodeficiency virus (HIV), syphilis, tuberculosis and hepatitis C, to name a few.

Federal regulation 29CFR1910.1030 now states that no employee can be placed in a position to be exposed to blood spills without first:

- Receiving Bloodborne Pathogen Training from an approved trainer.
- Having a written Bloodborne Pathogen Exposure Control Plan in place.
- Having work practice controls in place to protect the employee.
- Having been provided personal protective equipment specific to the job.
- Having been offered in writing and free of charge, Hepatitis B vaccination.
- Have a way to properly package and dispose of the contaminants.

Why do we emphasize this regulation? Without being able to determine which blood or body fluid spill is infected with disease, extraordinary precautions must be taken every time. A tiny pinprick or splash of fluid in the eyes can be a death sentence. Even a dried, airborne blood flake coming into contact with a technician’s mucous membranes could transmit a fatal disease. Without special training, precautions, equipment and protective suits an employee could pick up a contaminant and spread the disease unknowingly to his or her family. Death from these pathogens can be slow and agonizing, causing great emotional and financial burden for the victim as well as his or her family.

In addition to the bloodborne pathogens regulations, biorecovery companies may also have to comply with the Respiratory Protection, Confined Space, Lock-Out Tag-Out, Hazard Communication, and Hazardous Materials regulations (as well as others). Any

disinfectants used must meet EPA regulations for specific antimicrobial kill claims related to bloodborne pathogens.



Bio-recovery As a Specialty

Over the past decade, the field of crime and trauma scene bio-recovery has become a recognized specialty, just like smoke or water damage restoration before it. Today, bio-recovery technicians (in California, referred to as trauma waste practitioners) provide regulatory-compliant on-site cleaning, decontamination and restoration of properties damaged by blood, body fluids, decomposition, projectiles, and other physical destruction associated with dead or injured victims.

Each situation encountered requires different cleaning techniques, chemicals and equipment. Technicians may find themselves responsible for the cleanup of a suicide in the bedroom of a million-dollar home; a multiple homicide in a fast-food restaurant; cleaning vomit off the back seat of a police car, or picking up used syringes after a raid at a crack house. It is physically, mentally, and emotionally challenging. Turnover is high due to the psychological strain associated with the daily carnage of human beings. In fact, the atmosphere is often emotionally charged by distraught family members and friends whom the technician must interact with, much the way a funeral director would. Those performing this work take on tasks many others say they could never do. Technicians in this profession do, however, often receive praise and respect for having the fortitude and compassion to help their fellow human beings in this unique manner.

It's All About the Details

This goes far beyond wiping up a spot. In fact, most bio-recovery jobs take longer and are more involved than they first appeared. It is painstakingly tedious to find and clean every near-microscopic blood droplet from a scene. Remnants of the trauma may be found imbedded in the ceiling, propelled into heating vents, into machinery, and puddled behind cabinets, refrigerators, and the like. Fluids can soak into and under walls, baseboards, sub-floors and studs. Many scenes require dismantling appliances and machinery, pulling up flooring, removing heating and air conditioning ducts, or completely dismantling a car's interior. To do the job right can take a great deal of time and effort. Overlooking just a drop of blood or other trace of carnage can be emotionally devastating if found by the spouse of a trauma victim or the next rental car driver.

Decomposition odors and fluids are also a part of the job. As an undiscovered body decomposes, it returns to the basic compounds of life. Liquid comprises the majority of the body, with protein compounds and minerals making up most of the remaining elements. When decomposition begins, the body's tissues begin to break down, forming putrid liquids that leak initially out of every opening in the body. Decomposition also

produces gases that cause the body to bloat. If the gases do not find routes out of the body through natural openings, the body will swell to the point that the tissue gives way and the gas expels. Sometimes the pressure is so great that there is literally an explosion, forcing liquids and tissue some distance from the body. Some decompositions have been known to leak from an upstairs bedroom to the basement. If the liquids weren't enough, the resulting organic odors penetrate the structure and contents, requiring intensive deodorization.

Finally, the technician's tools and equipment cannot be put away without extensive decontamination. Each time a hammer, carpet knife, bucket, or steam vapor machine is used, it must be thoroughly cleaned and disinfected. Cross-contamination or direct exposure to a previously contaminated device could infect the next person moving, using, or putting away the device.



Trauma Waste

When the job is finished, the accumulated contaminated textiles, wood, protective suits, gloves, etc., must be properly packaged, marked as biohazardous and transported to a designated receiving site. In most states, this would be a medical waste (also known as regulated waste or infectious waste) processing facility. This is where the trauma waste is incinerated or otherwise rendered sterile. The transport of this waste is regulated, as is its destruction, and federal and/or state documentation of this process must be compiled and maintained by the biorecovery company.

Training

Bio-recovery work is a specialty that requires a very broad knowledge base. A good bio-recovery technician education includes, but is not limited to: basic microbiology, chemicals, disinfectants, enzymes, carpentry, auto mechanics, flooring, deodorization, disease processes, PPE, OSHA regulations, dealing with the bereaved, specialty equipment, evidence preservation, post-traumatic stress, and photo documentation. Until recently there were no formal training programs for this type of work but now there are several training programs being offered around the country. As in every industry, the depth and quality of these courses vary, so those persons seeking a quality course need to be diligent in their research. Remember that just because a training program offers a certificate, that doesn't mean the certificate carries any recognition or weight. As in many industries, training programs that are associated with non-profit trade associations tend to carry more weight and governmental recognition.

What Does the Future Hold?

Crime and trauma scene bio-recovery technicians are finding that they are being called to do more and more unusual decontaminations. Because they are considered biohazard specialists, they often get calls to clean everything from bird droppings (*histoplasma capsulatum*) to cruise ships (norovirus). The future is unlimited for those who have the compassion, the ambition and, of course, the stomach.