Pesticide Exposures

Training employees to handle an emergency

Despite extensive training and application experience, accidents do, and will, happen. When an accident occurs -- such as an eye exposure -- people panic. The quality of training plays a big part of how they will react in an emergency situation.

By law, employers are required to cover decontamination procedures during employee training. Talking about decontamination procedures in the classroom will certainly meet the training requirements, but how much information will an employee retain from this kind of training?

When it comes to training employees, hands-on demonstrations are more effective than just talking about procedures. When a pesticide exposure occurs in the real world, the person will have to execute what they have been taught under stressful conditions. If employees have physically practiced decontamination procedures during training; it will help the employee remember what to do in an actual emergency.

Dermal Decontamination:

When pesticides come into contact with the body, the decontamination procedures will usually be the same regardless of the type of pesticide. (Read your pesticide labels for any specific instructions!) The first thing applicators need to know is to immediately remove any contaminated clothing and wash the contaminated body area with soap and water.

A suggestion for hands-on training would be to set up a scenario for your employees. Have one of your experienced employees outside with one of your service rigs and wet their Tyvek suit or sleeve with water. Then, have the other employees instruct the "exposed" employee what to do. Does the employee have an extra pair of coveralls or a spare shirt on the rig? Where's the soap and water? Is there a pesticide label at the site? Who does the employee call after decontaminating themselves? If the employee feels some tingling or a burning sensation on their arm, can they drive themselves to the doctor? You can have your employees instruct the "injured" employee on the proper procedures.

Ocular Decontamination:

Splashing pesticides into the eyes can be a frightening experience. It can be painful, and can cause temporary or permanent damage. Applicators need to act quickly to minimize the effects.

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The first action every employee should do is make a mental note where water is located. Whether mixing and loading at the office, or working at a client's property, it's a good idea to locate the water source, just in case something happens. When pesticides are splashed in the eyes, it's very difficult to see where to go, let alone hunt for a water source.

When pesticides get into an eye, the first step is hold the eyelids open of the affected eye and rinse for 15 minutes with water. The water must be clean, be of an appropriate temperature, and have a gentle flow. The person's head should be tilted with the affected eye toward the ground so the water will not run down into the other eye.

If you have eyewash kits for your employees, it would be a good idea to demonstrate how they work. (It is also important to point out that if the eyewash is kept inside a vehicle and the exposure happens during a hot day, the eyewash may be too hot to use.) If your company chooses to use a client's garden hose for decontamination, you can show your employees an appropriate water flow and go through the motions of rinsing your eyes. It wouldn't be necessary to actually rinse your eyes, but physically demonstrating how to do it would be more effective than just talking about it.

Medical Care

Employers must arrange for and inform employees where they can obtain medical care, and of the fact they cannot drive themselves to the doctor if they suspect they have a pesticide illness. The medical care posting regulation requires employers to post the name, address, and phone number of the medical facility at the worksite. If an employee is placed in the position of needing to drive their injured co-worker to a medical facility, you want to make sure they know how to get there without any unnecessary delays.

Medical Facilities

Hospitals and clinics expect you to decontaminate before arriving at their facility. If you show up with drenched clothing, many of them will have you turn around and go right back outside to decontaminate. They don't want you contaminating their facility.

It is also important to bring the doctor a label of the pesticide the person has been exposed to. This is where having an up-to-date label book would come in handy. Especially if the only other label you have on hand is the one attached to the pesticide container. The law requires that a label be available at the pesticide use site. For our inspection requirements, the label on the pesticide container is acceptable. However, during a medical emergency, having just the label on the container can be a problem. The hospital will not allow you to bring a label attached to an opened pesticide container into their emergency room.

It is also important to realize that you will be much more familiar with pesticide labels than hospital staff. You will likely be asked to help them locate the emergency medical care section on the label. Many labels will place the emergency health care information on the front page, but that isn't always the case. This would make another good exercise for your employees. Have them locate and identify the specific emergency procedures for the different pesticides you use.

Structural Exclusion Work

When do you need a license to perform exclusion work?

Section 8555 (g) of the Business and Professions Code exempts certain exclusion and live capture work from licensing. It's legal for a non-licensed company with a $25,000 insurance bond to perform live capture and removal or exclusion of certain vertebrate pests, bees, or wasps from a structure without the use of pesticides. Examples of vertebrate pests included in this license exemption are animals such as bats, raccoons, skunks, and squirrels.

It is important to note the code specifically lists three vertebrate pests that do not qualify for this license exemption. This exemption does not extend to mice, rats, and pigeons. Which means if a company wants to exclude, live capture, or remove mice, rats, or pigeons from a structure, they will have to be licensed by the Structural Pest Control Board.
Birds Decimated by Virus

Scientists worry West Nile could heavily impact food chain
By NIKKI COBB, Staff Writer San Bernardino County Sun
Sunday, August 29, 2004

Scientists are worried that mosquito and rodent populations are growing because the birds that eat them are dying off at an alarming rate from West Nile virus. The ecological consequences are dire.

The very predators that keep the mosquito population, as well as the numbers of rodents and other animals, in check, are vulnerable to the virus raging in the pests they eat.

"We've had an increase in snake and rodent complaints. Not overwhelming, but noticeable," said Joan Mulcare, program manager for San Bernardino County Vector Control Program.

The virus is a proven killer of more than 200 species of birds, and 29 species of mammals. Birds and animals at every link in the food chain can catch West Nile virus and die from it. And though most contract the disease through the usual route, the bite of a mosquito that previously fed on an infected bird, scientists are learning the deadly virus can spread by other means, too.

"It's an emerging disease, something that will become part of the landscape from now on. With birds moving around, it will spread," said William Boyce, a veterinarian and director of UC Davis' Wildlife Health Center. "I think what's going to happen is we'll keep adding to the list.'

Birds can also catch West Nile by eating animals, birds or even insects that harbor the virus. One study showed infected birds can also transmit it directly to other birds they're in close contact with, either in a flock or among nestlings.

"It's frightening, really. Crows and ravens are being affected, but so are other birds," said Dori Myers, president of the Audubon Society's San Bernardino chapter. "Raptors are being hit very hard, too.'

Raptors birds of prey are the proverbial "canaries in the coal mine." Their position as predators at the top of the food chain makes them bellwethers of ecological distress.

Conversely, a drop in the numbers of raptors creates an environmental free-for-all, allowing the animals they formerly preyed upon to multiply in haphazard and yet-unpredictable ways, like a cancer that spreads unchecked and randomly overtakes the interdependent organs of a victim.

Worse, some birds, raptors, and carrion-feeders like crows and ravens, as well as insect-eating swifts, swallows and flycatchers, can catch West Nile virus by eating infected animals or insects.

 Entire species of California's endangered birds could conceivably be wiped out by West Nile virus.

"The species we're mostly concerned about are those that are already threatened, species that could be pushed over the edge," by the disease, Boyce said.

All of California's endangered condors that could feasibly be protected with the West Nile vaccine, the same vaccine given to horses, have long since been inoculated by prescient wildlife officials.

But there are other species at risk. Many of these fragile populations are found in the Central Valley, where a rich diversity of birds flourish.

Nestled in the foothills of the Sierras, the Central Valley is home to many endangered birds, and in a month or so the area will also be teeming with fall migrants pausing on their annual flight south for the winter.

The coming migration concerns scientists, but because most passers-through in the fall are on their way from relatively West Nile free Northern climes, they're not as likely to bring the disease to the Central Valley stopover.

However, experts are bracing for spring, when the birds head north again from virus-ravaged Southern wintering havens. They'll bring West Nile with them, experts worry.

"The Central Valley has all the right conditions for the disease," Boyce said. "It's all set up to be hit (by a West Nile epidemic). It's a key part of the Pacific flyway.'

It's unknown if birds that survive West Nile can pass the antibodies to their offspring, making them immune to the virus. Boyce said the epidemic will get worse before leveling off, as those birds that are strong enough to weather the illness survive and breed.

Scientists say the public can help them to understand West Nile's impact on wildlife, and track its spread.

They urge people to report any dead bird or wild animal to the West Nile hotline, (877) 968-2473, or Website: www.westnile.ca.gov, no matter what the species.
Registration Season
Registering for the 2005 year

It's that time of year again! The annual registration of agricultural pest control companies and the submission of structural notice of intents are upon us again.

Our office will begin accepting registrations on December 6, 2004. You can register with our San Jose office between the hours of 1:00 p.m. - 5:00 p.m. or at our Morgan Hill office between the hours 8:00 a.m. - noon.

What are the registration fees for agricultural pest control companies in the Bay Area this year?

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What is the notice of intent fee for structural companies?

The notice of intent fee is $10.00.

Office Hours
Change in our San Jose office hours

In August 2004, our San Jose office eliminated the morning office hour from 8 a.m. - 9 a.m. San Jose on-duty biologist office hours are now 1:00 p.m. - 5:00 p.m.

Our office in Morgan Hill has office duty hours from 8:00 a.m. - 12:00 p.m., should you need any assistance during the morning hours.

The Pesticide Review 2005
Updating our mailing lists...

We are in the process of updating our distribution list for The Pesticide Review. If you already on our e-mail alert list or mailing list, we will roll your contact information into our 2005 database.

If you are not currently receiving our bi-monthly newsletter and would like to be placed on our mailing list, forward your request and contact information to your district biologist.

Pesticide Seminar

Our office will present a continuing education seminar this December. If you need a few extra C.E. units, give us a call and reserve a seat today!

Topics will include a presentation on West Nile Virus, virus diseases in peppers, biosecurity on the farm, and agricultural water waivers. To view the seminar agenda, log on to our website: http://www.sccagriculture.org

When: December 7, 2004
Where: San Martin Lions Club
       12415 Murphy Ave
       San Martin
Time: 8:30 a.m. - 12:00 p.m. (Registration starts at 8:00)
Credits: 2.5 hours of "other" for QAL, QAC, PCA, and private applicators
Fee: FREE!
RSVP: Call (408) 465-2900

Contact Corner
If you have questions, comments, or would like to suggest a subject for an article, please write to:
Santa Clara County Division of Agriculture
The Pesticide Review
1553 Berger Drive
San Jose, CA 95112
Or e-mail us: sccagriculture@era.co.scl.ca.us

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