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BED BUG LOCKDOWN

**How to protect
correctional facility staff
and inmates from these
cryptic bloodsuckers**

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_APPLICATION AREAS:

MATTRESS SEAMS
MATTRESS EDGES
MATTRESS TUFTS
BED FRAME
BOX SPRINGS
INSIDE EMPTY DRAWERS
CLOTHES CLOSETS
CRACKS AND CREVICES

NIGHT STANDS
CARPET EDGES
HIGH AND LOW MOLDINGS
WALL VOIDS
BEHIND WALL HANGINGS
WALLPAPER

_APPLICATOR:



_LOCATION:
BEDROOM

_OBJECTIVE:
ELIMINATION



_TARGET SITED:
BED BUGS



_SOLUTION:
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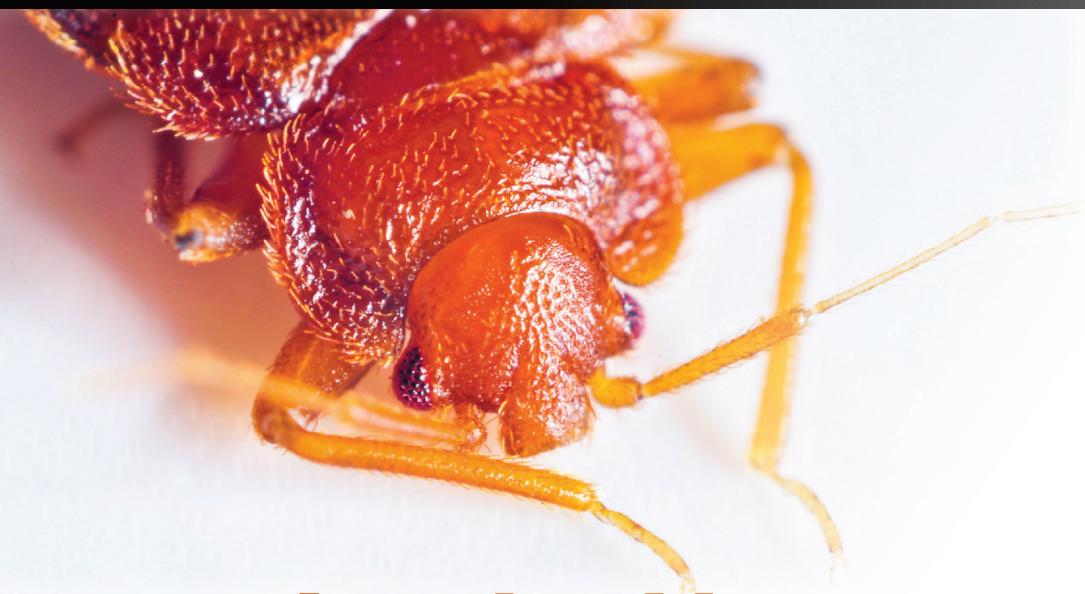
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GUGLIUZZA is the national sales manager of pest control operations for Control Solutions Inc. (CSI), a member of the ADAMA Group. He can be reached at tony@controlsolutionsinc.com.

Battling bed bugs ... on both sides of 'the wall'

BY **TONY GUGLIUZZA** | PCO National Sales Manager, Control Solutions Inc. (CSI)

Bed bugs are resilient critters. They can live six months or longer without a bloodmeal. They're also extremely opportunistic. When bloodmeals are available around the clock — as they are in many correctional facilities — these parasitic pests can quickly take over.

Bed bugs pay no mind to the big walls mankind builds. These crafty little vampires freely find their way in and out of prisons, jails and detention centers through courtrooms, patrol cars, visitors and correctional facility staff and suppliers.

To win the escalating global war against bed bugs, we must fight the good fight together — on both sides of "the wall."

Spawned from a pest management company four decades ago, Control Solutions Inc. (CSI) is uniquely positioned to understand professionals' need for bed bug management solutions that are quick-acting *and* long-lasting. Here's a short list of the solutions comprising CSI's bed bug arsenal formulated especially for pest management professionals (PMPs):

• **CYONARA 9.7** — Packaged in 8-oz. and 1-qt. plastic bottles designed for easy measuring and pouring, Cyonara 9.7 combines an advanced-generation pyrethroid (9.7% lambda-cyhalothrin) with CSI's Sigma Technology, which provides a residual for up to several months. In addition to bed bugs, Cyonara 9.7 controls darkling beetles, flies, mosquitoes, ticks and scorpions. Cyonara 9.7's broad label allows applications to be made indoors and outdoors — including at food handling and food prep establishments, as well as institutional, public, commercial, agricultural and industrial sites.

• **CYZMIC CS** — This controlled release insecticide also incorporates 9.7% lambda-cyhalothrin as its active ingredient (AI). Cyzmic CS features CSI's CapVantage slow-release microencapsulated technology. Available in 8-oz. and 1-qt. bottles, the low-odor, water-based formulation delivers quick knockdown and a long lasting residual. Cyzmic CS is labeled for control of ants, bed bugs,

cockroaches, darkling beetles, fleas and ticks, flies, mosquitoes, scorpions, silverfish, spiders and stink bugs.

• **D-FENSE DUST** — Leveraging 0.05% deltamethrin as its AI, this waterproof formulation does not clump or absorb moisture. D-Fense Dust is labeled for use against ants, bed bugs, bees, cockroaches, fleas and ticks, silverfish and termites — indoors and outdoors. It can last eight months if undisturbed.

• **D-FENSE SC** — This suspended concentrate features 4.75% deltamethrin as its AI. The non-staining formulation is safe for use on paints, plastics, fabrics and other surfaces. Labeled for use in and around residential and commercial structures — including food-handling accounts — D-Fense SC controls ants, bed bugs, cockroaches, fleas, flies, silverfish, spiders and other pests.

Put simply: CSI's solutions provide maximum security (from pests) for correctional facilities as well as commercial, industrial and residential structures.

BED BUG LOCK

How to protect correctional facility staff and inmates from these cryptic bloodsuckers

BY **MARTY WHITFORD** | Publisher & Editorial Director

“I usually don’t talk about my years at San Quentin State Prison, but not for the same reason most typically don’t discuss their time served there,” says Dr. Vernard Lewis.

As an entomologist and certified pest control operator, Dr. Lewis performed pest management at the legendary California correctional facility from 1984 to 1988. Dr. Lewis did two years at San Quentin as an outside service provider, followed by two years as the facility’s on-staff pest control coordinator. Since then, Dr. Lewis has worked

for a different type of institution: the University of California – Berkeley, from which he received his doctorate while working in the big house.

“I’ll never forget my time served at San Quentin,” says Dr. Lewis, a UC Berkeley cooperative extension specialist and renowned researcher. [Dr. Lewis will be inducted into the *Pest Management Professional (PMP)* Hall of Fame on Oct. 17, the night before PestWorld 2016 kicks off.]

“It’s an entirely different world inside those cold, cement walls,” Dr. Lewis says.



SNAPSHOT: U.S. Correctional Populations

- **Adult correctional systems in the United States supervised 6.85 million persons in 2014**
- **More than 1.5 million were incarcerated in prisons**
- **More than 700,000 were in jails**

SOURCE: LATEST DATA AVAILABLE FROM THE U.S. DEPARTMENT OF JUSTICE

DOWN

“We were battling nasty bed bug infestations in the mid-1980s, two decades before the parasitic pests escaped and really began victimizing the outside world.”

Why were bed bugs Enemy No. 2 (behind cockroaches) at San Quentin? Home to more than 4,200 prisoners, the facility — established in 1852 — has more than a few cracks and crevices where the cryptic bloodsuckers can hide.

“Bed bug problems at correctional facilities have only intensified since I was at

San Quentin,” Dr. Lewis says. “Why wouldn’t they? Bed bug infestations have spread everywhere else.”

The bed bug work is out there — or, in this case, “in there” — but pest management professionals (PMPs) need to understand the rules “on the inside.” What follow are tips shared by those on the firing line: How to nab bed bug and general pest control (GPC) contracts with correctional facilities, and how to work within the system to inspect and protect.

2016 BED BUG MANAGEMENT SUPPLEMENT



Overpopulated San Quentin converted its gym into a bullpen holding more than 360 inmates.

TROUBLING TIMELINE

2010

- *The Jersey Journal* reports the Hudson County Correctional Facility in Kearny, N.J., is battling a chronic bed bug problem.

2011

- *The Staten Island Advance* reports NYPD's 120th Precinct on Staten Island, N.Y., has temporarily shut down its holding cell area while officials deal with a bed bug infestation.

2012

- *Business Insider* reports approximately 90 work-release inmates at the York County Prison in Pennsylvania are sent home for three days while the facility fights bed bugs.
- United Press International (UPI) reports the Norwalk (Conn.) Police Department has hired a pest management professional with bed bug-sniffing dogs

to inspect areas. Five officers, holding cells and some patrol cars are "decontaminated" after bed bugs are found on three prisoners.

2013

- NBC Connecticut reports spider mites and bed bugs are found at Connecticut's Department of Social Services and Department of Rehabilitation Services offices in Hartford, Conn.
- *The Daily Herald* in Everett, Wash., reports bed bugs have infested the Snohomish County Jail in Everett.

2015

- *Huffington Post* reports Western Pennsylvania's largest

911 dispatch center — Allegheny County Emergency Services — has an emergency of its own: an alarming bed bug infestation.

- Bed bugs infest the Estill County Detention Center in Kentucky.
- FOX6 News reports the Vel R. Phillips Juvenile Center in Milwaukee is battling bed bugs.
- *Civil Beat News* reports bed bugs have infested the Oahu Community Correctional Center in Hawaii.
- HRANA News Agency reports bed bugs are plaguing inmates in Ward 8 of Evin Prison in Iran.
- *Daily Mail* reports female inmates at HMP Styal, a correctional

facility in the United Kingdom, have threatened to sue authorities over a bed bug infestation that has left them covered in bites.

- *The Tribune-Review* in Pittsburgh reports a lawsuit filed by inmates at the Allegheny County Jail includes a complaint of a bed bug infestation.
- *The Plain Dealer* reports a PMP fumigated the 20th floor of the Cuyahoga County Justice Center after an alleged bed bug sighting. The Cleveland facility fought a bed bug infestation in January 2014, just three months before PMP's editorial director served jury duty there. —MW





LOCKING UP BUSINESS

Brand recognition and referrals have helped New Berlin, Wis.-based Batzner Pest Control garner bed bug work at three correctional facilities in the state. Of course, having a dedicated bed bug unit with 11 technicians and four K9s doesn't hurt.



Randy Rupert

"Initially, we were fielding bed bug calls every week or two from each of the three correctional facilities," says Randy Rupert, team leader for Batzner Bed Bug Services. "Now that we're in there — regularly inspecting, treating, monitoring and educating — we can go several months without a bed bug call from any of the facilities."

Sweetening the deal, bed bug work can lead to a GPC contract, says Nate Nunnally, owner of Custom West Pest Control in Missoula, Mont. A local pre-release center hired Custom West to control bed bugs. Two years later, the company is also managing mice, ants and other pests there.

For World Pest Control, it worked the other way. First, the Plainville, Kan.-based company secured GPC contracts. Months later, the correctional facilities signed bed bug contracts. World Pest Control's clients include Rooks County Jail in Stockton, Kan., and the Aurora Detention Center in Colorado. Roger Meitler, owner of World Pest Control, says Rooks County Jail battled bed bugs in its female inmate bullpen last fall. In January, bed bugs were hanging out in the officers' locker room at the Aurora Detention Center.

"Inevitably, we get 'the bed bug call' from correctional facility clients," Meitler says. "It's more than a call. It's a calling ... to protect public health on both sides of the wall. These bloodsuckers pay no mind to the big walls we build. To avoid a bed bug epidemic, we need to serve *all*."

Glenn Holschwander answered the call. A county jail asked his Easton, Pa.-based company, Pesty Animal & Insect Control, to sniff



out a suspected bed bug infestation. Holschwander spent four hours a day, for five days straight, inspecting the facility with his four-legged friends:

Nate Nunnally says bed bug jobs at correctional facilities often lead to GPC contracts.

Holly, a yellow lab, and Faith, a beagle. Fortunately for staff, detainees and visitors, the one bed bug found in the kitchen was crawling solo.

Holschwander and the other PMPs shared a few tips to locking up contracts with correctional facilities:

- **BID TO WIN:** Correctional facilities have limited budgets.
- **READILY SHARE REFERENCES:** Rave reviews from bed bug or correctional facility clients are key.
- **EXPECT RED TAPE:** Most facilities require background checks and fingerprints. Convicted felons need not apply.
- **EXPECT THE UNEXPECTED:** Some require vendors to sign waivers acknowledging their facilities' "no negotiation" policies in the event a supplier is taken hostage.

THE USUAL SUSPECTS

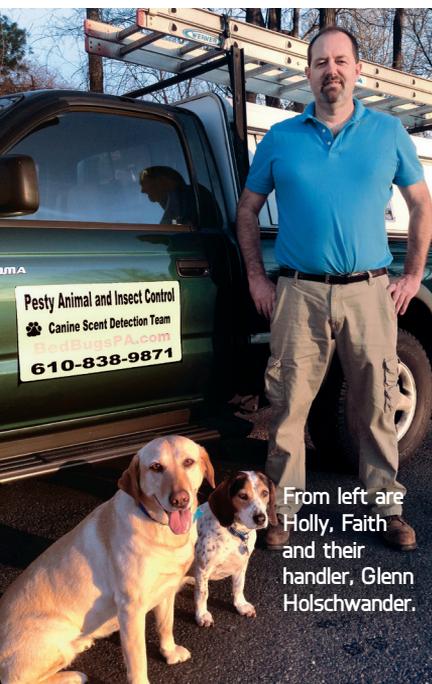
Inmates, officers, staff, visitors and vendors.

Food, uniforms, books, medical supplies and maintenance equipment.

These are just a few of the many Trojan horses bed bugs freely ride, undetected, in and out of even the most "secure" correctional facilities.

Equally alarming is bed bugs' uncanny ability to make any correctional facility space their home: Inmate intake areas. Personal effects storage. Laundry. Jail cells. Common areas. Administrative offices. Break rooms. Locker rooms. You name it, they'll infest it.

"There are so many suspects — so many groups of people, types of products and sorts of spaces — it's hard not to play 'the blame game,'" admits Michael Sands, owner of Natural Pest Control Co. Based in Camden, N.J., the firm serves five state-run correctional facilities. "While some corrections officers and staffers are quick to point their fingers at the inmates, we've found that bed bug infestations are



From left are Holly, Faith and their handler, Glenn Holschwander.

MISSION BRIEF:

_APPLICATION AREAS:

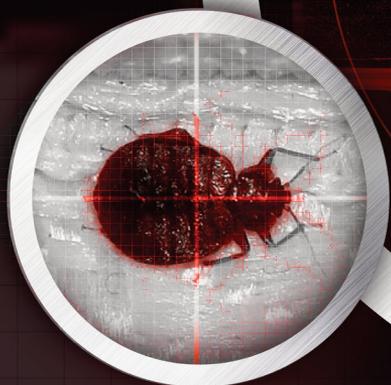
MATTRESS (ALL SURFACES - LIGHTLY SPRAY)
BED FRAME
BASEBOARDS
MOLDINGS
FLOORS

_APPLICATOR:



_LOCATION:
BEDROOM

_OBJECTIVE:
ELIMINATION



_TARGET SITED:

BED BUGS

_SOLUTION:

VECTOR-BAN PLUS

Control Solutions Inc. has many weapons in its arsenal to control bed bugs; **Vector-Ban Plus Multi-Purpose Insecticide** is a very powerful weapon. Vector-Ban Plus can be applied directly to mattress surfaces as well as all other parts of the bed to give total control of bed bugs. Vector-Ban Plus is formulated with permethrin plus a piperonyl butoxide synergist to make the active ingredient more effective. Available in eight ounce and half gallon containers. Always read and follow label directions.

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MISSION BRIEF:

_APPLICATION AREAS:

MATTRESS TUFTS
MATTRESS FOLDS
MATTRESS EDGES
BED FRAME

_APPLICATOR:



_LOCATION:
BEDROOM

_OBJECTIVE:
ELIMINATION



_TARGET SITED:
BED BUGS

_SOLUTION:
D-FENSE® SC



Control Solutions Inc. has many weapons in it's arsenal to control bed bugs; **D-Fense® SC Insecticide Concentrate** is an excellent weapon with effective bed bug control. D-Fense SC can be applied directly to mattresses to aid in the war against bed bugs. D-Fense SC is formulated with deltamethrin in a suspension concentrate for effective knockdown and long lasting residual control. Available in one pint and one gallon containers. Always read and follow label directions.

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Michael Sands services five state-run correctional facilities.



Termitech's Steve Parke applies an aerosol in cracks and crevices in an inmate cell.

just as likely to start in *their* homes, squad cars, offices and locker rooms.”

Steve Parke, owner of Irvine, Ky.-based Termitech, agrees.

“Bed bugs are equal opportunity offenders,” Parke adds. “They don’t really care whether their next meal comes from an inmate or an officer.”

“Imagine a free, all-you-can-eat buffet open 20 hours a day right where you live,” says Jerry Schappert, owner of The Bug Doctor in Ocala, Fla. “That’s the lottery bed bugs win when they infest correctional facilities, where their victims are literally caged for most of the day.”

INSPECT & PROTECT

Natural Pest’s Sands says bed bug work requires hard work and teamwork. Thorough inspection and early detection are critical.

“The reemergence of bed bugs has forced PMPs to embrace integrated pest management (IPM),” Sands adds. “With bed bugs, there is no silver bullet. Even if we do eventually formulate a one-shot solution, history tells us these little bloodsuckers will adapt and overcome.”

Nunnally summarizes bed bug control in one word: *thoroughness*. Typically, these jobs call for a quick knockdown chemical treatment and two follow-up

chemical applications, each 10 days apart. Custom West uses a few proven pesticides, and an aerosol formulation for cracks and crevices.

“For each infested bedroom we find in the two-story pre-release center we service, we also inspect and treat the two adjacent rooms and the three rooms above or below them,” Nunnally reports.

World Pest’s Meitler points out that heat treatment often doesn’t work as well as it does in other structures due to jail cells’ thick concrete walls, floors and ceilings.

“We perform three chemical applications, each two weeks apart,” Meitler adds. “We rotate a few pesticides to combat any resistance issues the bed bug population may have built up.”

Parke suggests PMPs need to think both inside and outside the box. For instance, sometimes bed bugs grant themselves furlough, riding the prisoner parade into courtrooms. Parke’s Termitech, which services the Estill County Jail & Detention Center, recently treated bed bug-infested chairs at the neighboring courthouse.

Holschwander warns that not all corrections staffers are open and honest about potential problems PMPs may encounter while inspecting and treating cells. For instance, he says one corrections staffer failed to be upfront about a series of recent methicillin-resistant *Staphylococcus aureus* (MRSA) infections at the facility.

“That non-disclosure was far more alarming than being forewarned I needed to be extra careful when inspecting cells because some inmates may be hiding shanks,” Holschwander adds.

Rupert says much of the work takes place during off-hours. If inspections and treatments are during work hours, usually the work is in cells and requires the transfer of prisoners to holding areas or the prison yard.

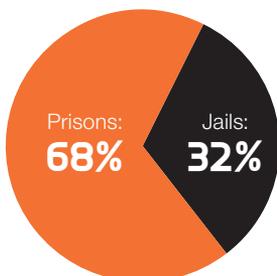
Sources warn that many inmates play tough and fail to report bed bug problems. Other inmates cry wolf, claiming they’ve been bitten so they can get more yard time. Some suffer from delusional parasitosis (DP). Others don’t want PMPs in their “homes” — in many

U.S. Incarcerations

2000: 1.94 million

2014: 2.22 million

U.S. Incarcerations: Prisons vs. Jails (2014)



SOURCE: LATEST DATA AVAILABLE FROM THE U.S. DEPARTMENT OF JUSTICE



cases because they're hiding contraband. Some inmates get cagey at the sight of K9s, not realizing the dogs are trained to sniff out bed bugs, not drugs.

"One facility made me drive my truck back outside the gate because officers feared prisoners would use my hose reel as an escape tool," Meitler notes.

"To some degree, PMPs are handcuffed regarding what we're allowed to bring in and use," Parke says. "Many correctional facilities prohibit cell phones, cameras, screwdrivers and other inspection and control tools commonly used by PMPs."

Control tool limitations aside, Parke reminds PMPs that money from "the inside" spends just as well on "the outside."

"I don't see the bed bug work — be it in correctional facilities or the outside, free world — slowing down anytime soon," he says. "Ten years ago, bed bugs accounted for less than 5 percent of our business. Last year, bed bug work generated more than 60 percent of our jobs."

TIPS FROM 'THE INSIDE'

Education and cooperation are the keys to nabbing bed bugs *before* they become big-time offenders, says Major Brian Arnold of the Stark County (Ohio) Sheriff's Office. Maj. Arnold should know: He's overseen 500-plus inmates at the Stark County Jail and presented "Bed Bug Information for Law Enforcement & Correctional Facilities" to

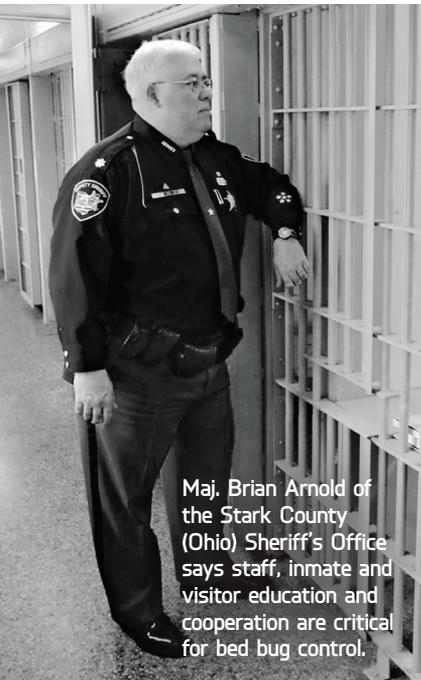
the Central Ohio Bed Bug Task Force.

"In correctional facilities — where staff, inmates and visitors are coming and going, day and night — bed bugs are bound to bite you," Maj. Arnold says. "We had one case where bed bugs were literally falling off an incoming detainee."

Thankfully, Stark County Jail has strict bed bug prevention protocols. The facility also prescreens inmates, asking: *During the past three months, have you been*

Maj. Brian Arnold of the Stark County (Ohio) Sheriff's Office says staff, inmate and visitor education and cooperation are critical for bed bug control.

PHOTOS: STARK COUNTY SHERIFF'S OFFICE; UC-BERKELEY; ©CORBIS/COMBETT/MANN



Dr. Vernard Lewis

Run-in with an infamous inmate

While serving as pest control coordinator for San Quentin State Prison in California during the mid-1980s, Dr. Vernard Lewis *tried* to mind his own business. But sometimes a run-in with an inmate was unavoidable.

Dr. Lewis' work often required prisoners to leave their cells so he could conduct pest inspections and treatments. Not all inmates were OK with these temporary transfers.

"One day, I was inspecting the AC — the Adjustment Center, aka 'The Hole' — when I heard 'Man on!' That was my cue to stand against the wall and stay alert because a high-security prisoner was on the move," Dr. Lewis recalls.

"Three guards to escort this slight man just over 5 ft. tall?" thought Dr. Lewis, as the inmate shuffled past in heavy hand and foot shackles.

The prisoner froze when he saw Dr. Lewis' pesticide sprayer.

"Are you trying to poison me?"

"No, I'm here to inspect and protect," Dr. Lewis answered.

Unhinged, the inmate began insulting Dr. Lewis.

"Who are you?" a slightly irked Dr. Lewis replied.

"I'm Charlie!"

"Charlie who?"

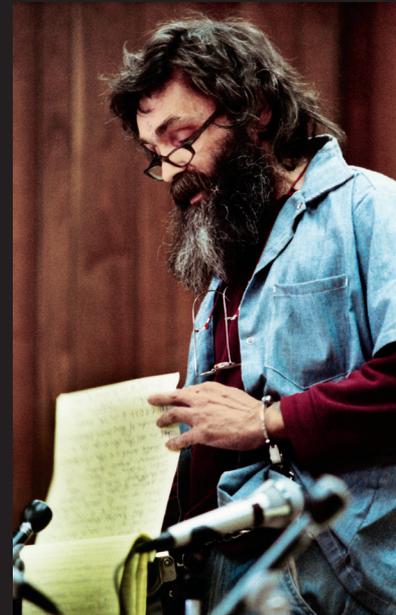
The question drove the inmate mad.

"He was appalled I didn't know who he was,"

Dr. Lewis recalls.

The inmate was Charles Manson, the notorious cult leader who led several of his followers to commit nine horrific murders in the summer of 1969. Now an inmate at California State Prison - Corcoran, Manson is serving nine concurrent life sentences.

"Manson made some odd hand gestures and put a voodoo hex on me. I'm not sure what the hex was, but I think it worked," Dr. Lewis adds, tongue in cheek. "Not long after Charlie's hex, I landed the job I really wanted: cooperative extension specialist with UC Berkeley, where I'm at today." — *MW*



Charles Manson reads a statement at his 1986 parole hearing in San Quentin.

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exposed to bed bugs? Do you have any unexplained bites or blisters?

If an infestation is detected, the jail staff bags incoming detainees' personal belongings, and launders their clothes on the hottest washer and dryer settings before re-bagging them.

According to Maj. Arnold, if an inmate has bed bugs on his or her person, staff should isolate the prisoner in a barren cell or shower. The detainee should remove clothing and footwear, and place everything in a water-soluble bag to be washed and dried on the hottest

settings. The inmate should shower thoroughly, and be segregated until he or she can be examined by medical staff and confirmed to be bed bug-free.

Maj. Arnold's tips for correctional facilities battling bed bugs include:

- Wash infested bedding in hot water, and dry on high for 30 minutes.
- Compromised — cracked or heavily infested — mattresses should be bagged, marked and discarded.

- Infested areas should be inspected, treated and actively monitored by a PMP.
- After a PMP has completed a series of chemical treatments and re-inspected to confirm complete bed bug control, the facility's maintenance staff should power-wash previously infested cells; seal all cracks and crevices; and paint the walls, floors and ceilings.
- When permitted, PMPs should place glueboards and other monitors in suspected hot spots for early detection of bed bug infestations.

Maj. Arnold suggests PMPs advise law enforcement personnel if they suspect a potential bed bug infestation at a location to:

- Wear shoe covers and tuck pant legs into socks or boots.
- Inspect footwear before returning to stations and vehicles.
- Keep spare uniforms and backup footwear in vehicles.
- Place staff's suspected infested clothes in sealed bags to be washed and dried.
- Organize cluttered spaces, lockers and vehicles.
- Vacuum spaces and vehicles weekly.
- Avoid leaning against doors, walls, beds, tables, chairs or desks.
- Limit the placement of belongings on bedding, furniture and carpet.

“Communicating to staff, inmates and visitors our ‘Bed Bug Prevention Dos & Don’ts’ is half the battle,” Maj. Arnold concludes. “The other half is staff and PMPs establishing and enforcing the protocols, and remembering that our line of work is part occupation, part vocation.” PMP

You can reach WHITFORD at mwhitford@northcostmedia.net or 215-706-3765.

TOP 10 Incarcerations By State: 2014



1. **Texas (219,100)**
2. **California (207,100)**
3. **Florida (153,600)**
4. **Georgia (91,000)**
5. **Pennsylvania (85,200)**
6. **New York (77,500)**
7. **Ohio (71,200)**
8. **Illinois (67,200)**
9. **Michigan (59,400)**
10. **Virginia (58,600)**

SOURCE: LATEST DATA AVAILABLE FROM THE U.S. DEPARTMENT OF JUSTICE



Jerry Schappert serviced correctional facilities for two decades.

Prison Poetry

Following are edited excerpts of a blog (PestCemetery.com) by Jerry Schappert, owner of Ocala, Fla.-based The Bug Doctor, about his two decades of experience servicing correctional facilities:

Looking up over the 16-ft. wall, with razor wire glimmering in the sun, I see the clouds floating by and the birds freely flying back and forth. Taunting me, they flit with ease over the rampart that holds me in, and they chirp with a gleeful refrain.

I can go nowhere without eyes upon me and a pat-down. Locking doors make an unmistakable sound but I have no control of any, whether they open or shut.

Inside these walls, time has a different meaning.

In the cells of certain individuals, I learn quickly NOT to spray. The pests are a source of “interest.”

Even my hollow B&G sprayer is opened and checked. I feel guilty: Don't they trust me?

Pest control inside a prison is so different than anything in the free, open air. I really have to be diplomatic, using as few words as possible, and learn how to be effective with limited tools.

I'm actually saddened to receive the news I've treated my last cell. I've heard that big metal door lock behind me for the last time. I've been released.

— MW

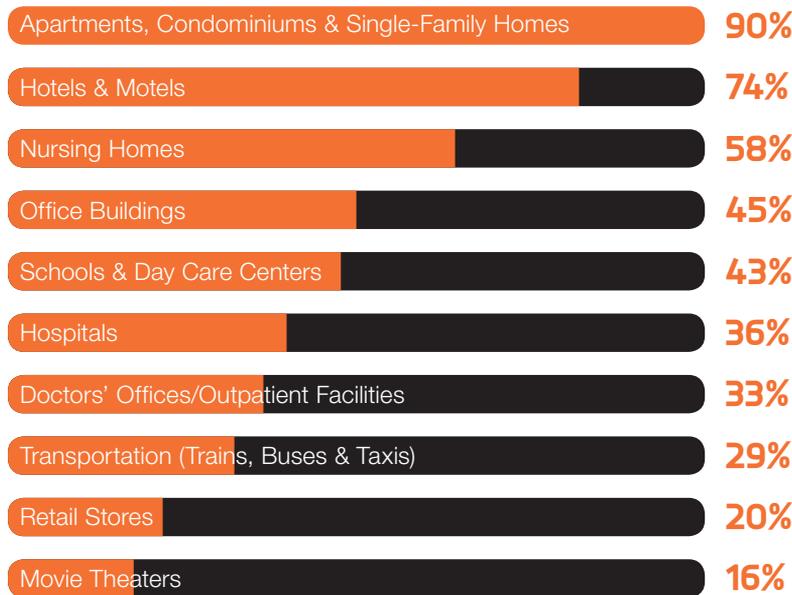


NPMA & UK BED BUG RESEARCH

2015 BUGS WITHOUT BORDERS SURVEY

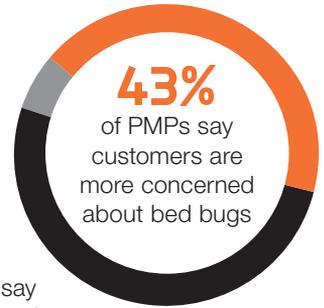
Jointly conducted by the National Pest Management Association and the University of Kentucky, and fully funded by the Professional Pest Management Alliance

Where PMPs Battle Bed Bugs



Rising Concern

6% say customers are less concerned about bed bugs



51% say customers' bed bug concern remains the same

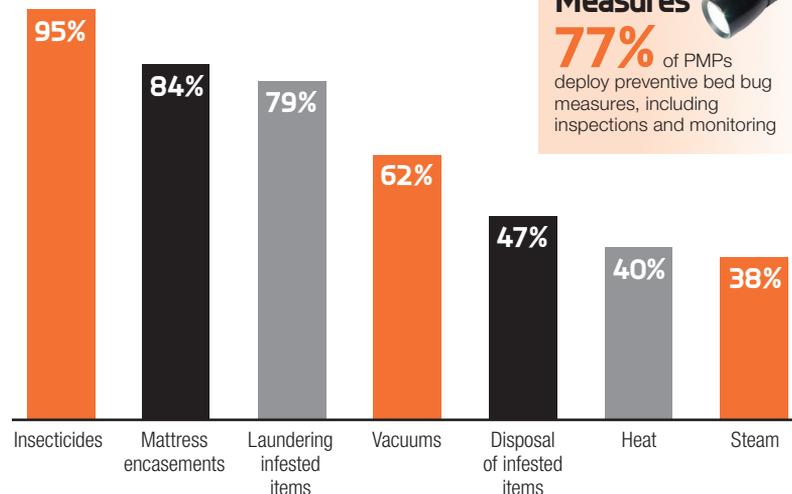
Top 10 Most-Searched Pests

1. Bed Bugs
2. Spiders
3. Stinging insects
4. Cockroaches
5. Ants
6. Stink bugs
7. Mosquitoes
8. Ticks
9. Termites
10. Rodents



SOURCE: THE NATIONAL PEST MANAGEMENT ASSOCIATION'S ANALYSIS OF THE MOST-SEARCHED PESTS ON ITS PESTWORLD.ORG CONSUMER WEBSITE IN 2015

Bed Bug Management Tools



Proactive Measures

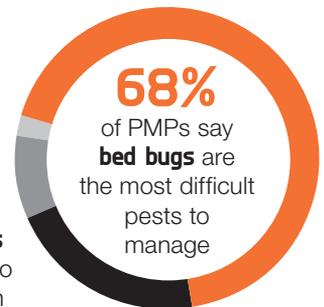
77% of PMPs deploy preventive bed bug measures, including inspections and monitoring



Most-Challenging Pests

2% say termites are the toughest to manage

9% say cockroaches are hardest to knock down



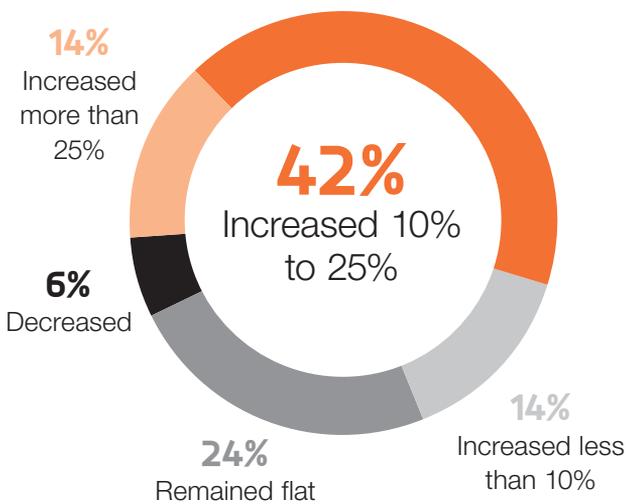
21% say ants are the most challenging to control

PMP BED BUG RESEARCH

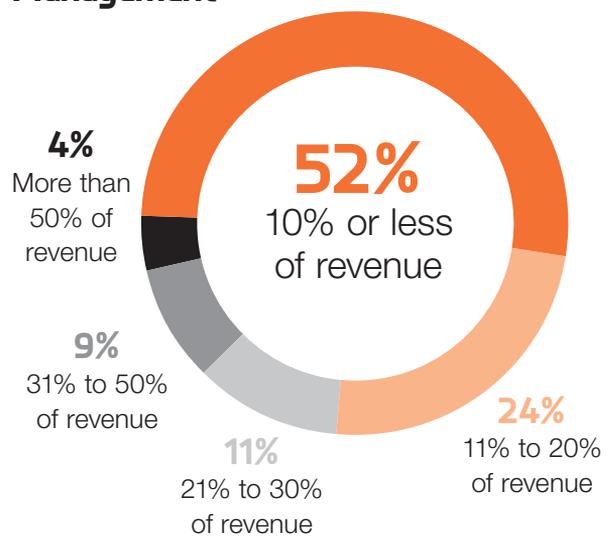
Source: PMP Bed Bug Management Survey • 211 respondents online

Bed Bug Management Revenue

2015 vs. 2014



Percentage of 2015 Revenue Generated By Bed Bug Management



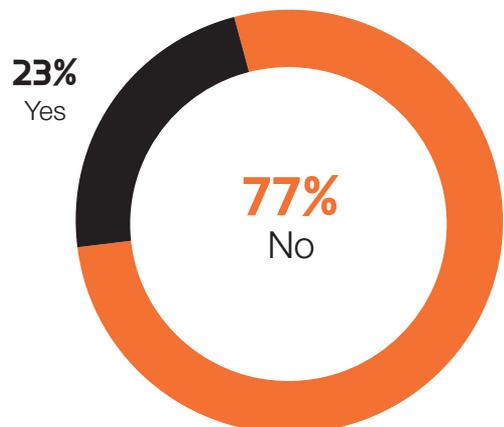
Bed Bug Inspections

Do you offer current clients free bed bug inspections?



Bed Bug Contracts

Did an attorney with pest management industry knowledge help your company create a bed bug-specific service contract?



Number of Bed Bug Jobs

2015 vs. 2014

69%

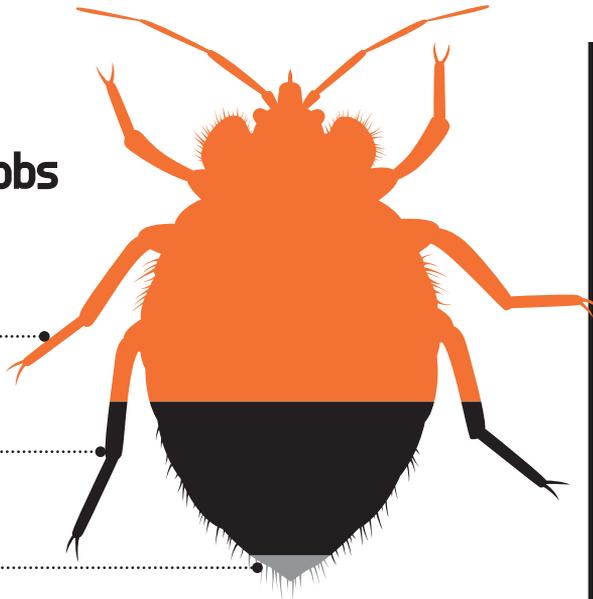
Increased

27%

Remained flat

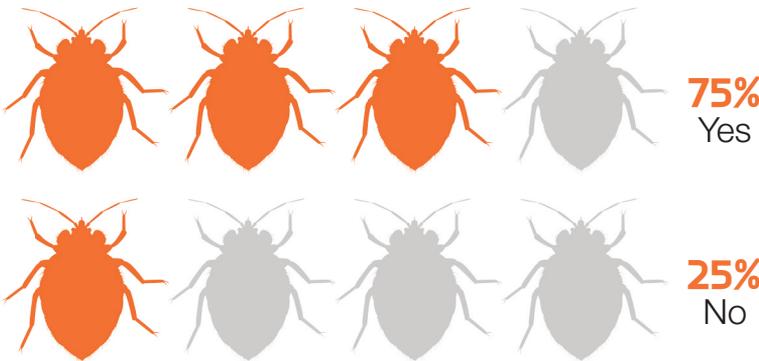
4%

Decreased



Proactive Services

Do you offer ongoing bed bug monitoring services?



Single-Room Treatments

What do you charge to treat a single room infested by bed bugs?



Legal Worries

81% of PMPs are concerned about bed bug litigation

Resident Liabilities

27% of PMPs believe most lawsuits and claims are the fault of uncooperative residents of infested dwellings



Failure to Follow Instructions

49% say less than half of their bed bug management clients follow pre- and post-inspection and treatment instructions



MISSION BRIEF:

_APPLICATION AREAS:

CRACKS AND CREVICES
BASEBOARDS
LOOSE PLASTER
BED FRAME
BOX SPRINGS
FURNITURE

_APPLICATOR:



_LOCATION:
BEDROOM

_OBJECTIVE:
ELIMINATION



_TARGET SITED:
BED BUGS



_SOLUTION:
CYZMIC® CS

Control Solutions Inc. has many weapons in it's arsenal to control bed bugs; **Cyzmic® CS Controlled Release Insecticide** is a very effective weapon with long-lasting residual effects. Cyzmic CS is a sentry that guards the war zone perimeter against the enemy: bed bugs. Cyzmic CS is formulated with lambda-cyhalothrin which has been encapsulated with **CapVantage® Technology** to provide long-term protection. Available in eight ounce and one quart containers. Always read and follow label directions.

Contact your local distributor or CSI representative for more information. Cyzmic and CapVantage are registered trademarks of Control Solutions Inc., Pasadena, Texas 77507. This product may not be registered in all states, please check the CSI website or the state's department of agriculture for registration information.



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