This year’s report on bed bug control turned up some surprising finds, from hints of slowing growth to signs that customers are starting to refer (Yes, refer!) bed bug service. Is it time to adjust your bed bug business for a new future? Read on and find out.

INSIDE:

>> Market: Has bed bug growth peaked?
>> Service: A proactive versus reactive shift
>> Callbacks: Managing the human factor
>> Prep: Less is more for a growing number of PMPs
>> Season: A year-round service offering
>> The Future: An ever-evolving marketplace
Bed bug control revenue saw double-digit growth in 2017 and the average nationwide price for a typical residential job increased. Still, PCT survey data and pest management professionals in follow-up interviews hint that market growth may be stabilizing. The industry is getting better at controlling the pest with proactive treatment strategies and a growing number of PMPs are requiring less site preparation. Bed bug resistance and lack of client cooperation (a cause of callbacks) remain top concerns. PMPs reported that customers seem less freaked out by the pests and even have begun referring bed bug services.

B ed bug control revenue saw double-digit growth in 2017 and the average nationwide price for a typical residential job increased. Still, PCT survey data and pest management professionals in follow-up interviews hint that market growth may be stabilizing. The industry is getting better at controlling the pest with proactive treatment strategies and a growing number of PMPs are requiring less site preparation. Bed bug resistance and lack of client cooperation (a cause of callbacks) remain top concerns. PMPs reported that customers seem less freaked out by the pests and even have begun referring bed bug services.

THE MARKET: STILL GROWING... BUT NOT AS FAST

The bed bug control market is “growing,” “good” and “steady,” reported pest management professionals in the PCT 2018 State of the Bed Bug Control Market survey.

On average, bed bug services accounted for 15.1 percent of overall revenue at companies last year, nearly double the 8 percent reported in 2016. More than half of PMPs (58 percent) believe that bed bugs play an important role in their company’s profitability.

“Bed bugs mean a lot” to the bottom line, said Bryan Nichols, owner of Advanced Maintenance and Pest Solutions in Chicago. Controlling the pests generates 20 percent of his revenue and that number is increasing, he said.

In follow-up interviews, some PMPs said they were so busy with bed bug work they had two-week wait times for treatment and were hiring new technicians just for this service. For Brad Carrier, who launched Bugsy’s Pest Solutions in Waterloo, Iowa, in January 2017, bed bugs “kept us afloat” in winter, helping “put money in the bank and gas in the vehicles” while he developed other recurring revenue streams.

For 66 percent of PMPs, bed bug con-
## Bed Bug Market Overview: What PMPs Are Reporting

### Does Your Company Location Offer Bed Bug Control Services?
- **2018:** 75% Yes, 25% No
- **2017:** 71% Yes, 29% No

Number of respondents: 318 (Source: Readex Research)

PMPs who agree or strongly agree that bed bugs play an important role in their company’s profitability.

57%

---

### Percentage of Revenue Generated by Bed Bug Control Services Performed by PMPs in:

**2017**
- 50% or more: 7%
- 30% – 49%: 8%
- 20% – 29%: 11%
- 10% – 19%: 23%
- 5% – 9%: 18%
- 3% – 4%: 14%
- 1% – 2%: 8%
- less than 1%: 11%
- None: 0%

**2016**
- 50% or more: 2%
- 30% – 49%: 7%
- 20% – 29%: 13%
- 10% – 19%: 21%
- 5% – 9%: 20%
- 3% – 4%: 14%
- 1% – 2%: 13%
- None: 9%

Number of respondents who offer bed bug control services: 238

Source: Readex Research

### Market Representing the Largest Proportion of Bed Bug Revenue in 2017

- **49%** - apartments/multi-family housing
- **35%** - single-family homes
- **7%** - hospitality industry
- **2%** - transitional housing
- **2%** - hospitals/health care facilities
- **1%** - schools/colleges/universities
- **1%** - cruise lines
- **0%** - movie theaters
- **1%** - other
- **2%** - none – mix of equal proportions

Number of respondents who offer bed bug control services: 238

Source: Readex Research

### How Did the Number of Bed Bug Jobs Change Last Year in Your Market Area Compared to the Year Prior?

**2017 vs 2016**
- **24%** increased
- **67%** remained the same
- **8%** decreased
- **1%** no answer

**2016 vs 2015**
- **20%** increased
- **74%** remained the same
- **5%** decreased
- **1%** no answer

Number of respondents who offer bed bug control services: 238

Source: Readex Research
control services became a more significant part of the business in the past five years, found the PCT survey. Most bed bug revenue came from servicing apartments/multi-family housing (49 percent), single-family homes (35 percent) and the hospitality industry (7 percent).

But despite “plenty of calls every day” for bed bugs, “I think it’s been leveling out,” said Dan Rao, technical manager of MD Weaver in Natick, Mass., of the market’s growth.

Billy Tesh, president of Pest Management Systems, Greensboro, N.C., agreed. The market “is not the greatest” compared to when it was “growing 25, 30 percent; one year we had 40 percent growth,” he recalled.

“It seems like a few years ago (bed bug control) was a lot more important than it is now,” said Jaya Knox, office manager of Vinton, Va.-based B & C Exterminating, which saw his revenue drop from 10 to 5 percent. The company was getting a bed bug call once a day, now it’s once a month and “those people don’t always buy a treatment from us; they’re just wanting advice” on how to do it themselves, she said.

At Pest End in Methuen, Mass., the service “is still important but definitely not what it was eight years ago,” said Operations Manager Adam Carace, who “had to change treatment options and the thought process behind bed bugs” as a result.

Some PMPs saw the number of bed bug jobs decline. According to the PCT survey, fewer reported an increase in jobs (67 percent versus 74 percent in 2017). In the San Francisco Bay area where the pests were “like an epidemic,” California American Exterminator saw “fewer intense infestations than we had a few years ago,” said Tami Stuparich, owner of the Boulder Creek-California company.

More companies are offering bed bug control services – 75 percent, up from 71 percent last year, found the survey. This “has diluted some of the market advantage we had five or six years ago,” admitted Tesh.

“Everybody wants a piece of the action,” said Garey Clark, president of Clark Pest Remedy. His was the first company in the McDonough, Ga. area to offer heat treatment; “now there’s five or six.”

The PCT 2018 State of the Bed Bug Control Market survey was sponsored by Zoëcon and compiled by Readex Research, a privately held research firm based in Stillwater, Minn.

A sample of 4,190 owners, operators and executives of pest control businesses was systematically selected from the PCT database. Data was collected from 318 respondents — a 7.6 percent response rate — via online survey from February 26 to March 12, 2018. To best represent the audience of interest, 80 respondents who indicated their companies do not offer bed bug control services were eliminated from the survey. The margin of error for percentages based on the remaining 238 respondents is plus or minus 6.2 percentage points at the 95 percent confidence level.

The majority of respondents were based in the South (38 percent), followed by the Midwest (27 percent), Northeast (21 percent) and West (16 percent).

From where you hail

**NORTHEAST: 21%**
New England (CT, MA, ME, NH, RI, VT) 5%
Middle Atlantic (NJ, NY, PA) 16%

**MIDWEST: 27%**
East North Central (IL, IN, MI, OH, WI) 16%
West North Central (IA, KS, MN, MO, NE, ND, SD) 11%

**SOUTH: 38%**
South Atlantic (DC, DE, FL, GA, MD, NC, PR/VI, SC, VA, WV) 18%
East South Central (AL, KY, MS, TN) 7%
West South Central (AR, LA, OK, TX) 13%

**WEST: 16%**
Mountain (AZ, CO, ID, MT, NM, NV, UT, WY) 7%
Pacific (AK, CA, HI, OR, WA) 9%

Number of respondents who offer bed bug control services: 238 | Source: Readex Research
THE SERVICE:
MORE IN CHARGE

Best practices have elevated the industry’s game; so has a focus on prevention and proactive treatments that help reduce the likelihood that bed bug introductions will become full-blown, multi-unit infestations.

“We’re more in charge” now, said Billy Tesh of Pest Management Systems. In fact, 91 percent of PMPs said they have a better understanding of how to provide high-quality bed bug services today compared to five years ago, found the PCT 2018 State of the Bed Bug Control Market survey.

PMPs have learned that a one size fits all approach does not work. “Every treatment that we do is somewhat different” to address the needs of that particular client, said Dan Rao of MD Weaver. Nearly all PMPs (97 percent) offer insecticide treatments; 74 percent said this was their primary method of controlling bed bugs. “I think the chemical companies have done a ridiculously great job of bringing new products out in the market in the last few years,” said Brad Carrier of Bugsy’s Pest Solutions.

Many PMPs use desiccant dust in their treatments; they apply it to wall voids (Rao drills holes at the base of the wall every 16 inches), behind utility plates and underneath carpeting.

Regardless of the insecticide class or formulation used, pest management professionals are keenly aware of the threat of resistance. In fact, more than half of PMPs (54 percent) said bed bug resistance is a concern in their market area, according to the survey.

More than a quarter of PMPs offer heat remediation; 13 percent said this was their primary bed bug treatment. Cost is heat’s biggest drawback, said PMPs in follow-up interviews. Landlords won’t “keep spending a thousand dollars a whack when you know in six months (the tenants) are going to have a problem again,” said Carace, who works with housing authorities.

Canine detection is offered by 16 percent of PMPs. Clark has three dogs that he uses to inspect senior housing complexes each quarter. He also is “a big believer in encasements,” which he installs at every job. Nearly half (49 percent) of PMPs offer bed bug mattress encasements or active mattress liners to both their residential and commercial accounts, found the PCT survey.

PMPs also rely on exclusion, such as caulking concrete-slab ceiling expansion joints and molding.

THE JOB: NOT TECHS’ FAVORITE

Only 39 percent of PMPs believe their technicians enjoy performing bed bug work, found the PCT survey.

Pest Management Systems’ Billy Tesh began hiring dedicated bed bug technicians after he noticed inconsistent results when general pest control technicians performed bed bug jobs. This is “a critical component within our company to get jobs done right and to have satisfied clients,” he said.
Since the resurgence of bed bugs in the late 1990s, people have become more aware of the steps necessary to prevent bed bugs from hitching a ride back home. Travelers know to check mattress seams, bed footing and frames, airplane seats and personal luggage when traveling. Unfortunately, bed bugs are all too common today, and there are many other ways people can encounter bed bugs, inadvertently taking them home.

Light brown to reddish-brown in color and wingless, adult bed bugs can reach 4-5mm in length. While these pests are not known to transmit diseases to humans, they do cause allergic reactions and can lead to secondary infections from their bites. Itchy red bumps and blood blisters are common after bed bug bites, and if scratched, the blisters can become infected.

Bed bugs are most commonly found in residential homes, hotels, hospitals, schools, warehouses, office buildings and on the seats of transportation vehicles, but there are many other places that are susceptible to infestations.

Unfortunately, bed bugs are all too common today, and there are many other ways people can encounter bed bugs, inadvertently taking them home.
**SCHOOLS AND DAYCARES**

Bed bugs in dorms, schools and daycares have many places to hide, so treatment needs to be thorough to prevent an infestation. Clients need to launder bedding and other fabrics to help remove bed bugs. Students and their families should be notified to avoid an infestation in their own homes.

**GYMS**

Commonly found in gym locker rooms and in shoe storage shelves or “cubbies,” bed bugs often find their way into these public places. When personal items are placed in these spaces, the pests will hop on for a ride back to the owner’s home. Treating these shared spaces with a residual product will help prevent these pests from returning.

**HOSPITALS**

The last thing a hospital patient wants to experience is a bed bug infestation. Beds are an obvious location to find bed bugs within a hospital, but waiting rooms, visitor chairs and nurse’s stations may also be homes to the pests, so consider when treating.

**RENTAL CARS**

Bed bugs hidden in or on purses, luggage or jackets can easily make their way into the crevices of rental cars while the driver heads to his or her destination, potentially transferring to the individual renting the car next. Treat trunks, seats and mats, along with seat belts and underneath seats.

**TREATING BED BUGS**

Bed bugs are known to be difficult to treat because of their tendency to hide in hard-to-reach areas. Featuring a 360-degree valve, crack-and-crevice actuator and System III® compatibility, Zenprox® Xtend Aerosol is a convenient choice for reaching these tough areas of infestation. Zenprox® Xtend Aerosol combines an effective battery of adulticides, which includes etofenprox, along with an insect growth regulator (IGR) for efficient broad-spectrum control.

For tank sprayer applications with contact kill and long residual activity, Zenprox® EC is effective in suppressing bed bugs with the non-repellent active ingredient etofenprox. Zenprox® EC works well as a tank-mix partner with Gentrol® IGR and easily mixes with water so that it can be applied with most application equipment, providing long-term relief.

**COAT CHECK**

Coat closets can become dens for bed bugs during a short time. If one jacket is infested, all jackets near it are at risk of bringing the pests home. Once the jackets have been removed from the coat check, any lingering pests will find their way to their next hiding spot, such as where carpets meet the wall or into any bags on the ground or seats.

**LIBRARIES**

Bed bug populations can soar within libraries—living within the pages, binds and jackets of books and on furniture and carpets, waiting for a reader to sit and enjoy the book. Because of the high-traffic nature of libraries, bed bugs can enter the building on someone’s bag, book, coat and more, making prevention difficult.

When bed bugs are found within a library, quarantine the items immediately to thwart infestations. Put quarantined items into plastic bags or totes to stop the spread of an infestation. Use heat, where applicable, on items that chemicals would damage.

**COURTHOUSES**

With people constantly coming and going, courthouses are a common place for bed bug infestations to take hold. Thoroughly inspect and treat waiting or common areas as well as courtroom benches and chairs for these pests.
**THE SEASON: SOME SAY SUMMER**

More than half of PMPs (51 percent) reported no seasonal difference when it comes to providing bed control services; 29 percent said summer was the busiest season for this work, according to the PCT 2018 State of the Bed Bug Control Market survey.

Bed bug work is “very seasonal” and “as it gets hotter, we start noticing the numbers growing,” said Tami Stuparich of California American Exterminator. In summer, more people are traveling and “travel is the number one way that they’re brought in,” she said of the pests.

Online searches for bed bugs peak in July, added Billy Tesh of Pest Management Systems, who tracks this data in Google Analytics. It also can be found on Google Trends [https://trends.google.com/trends/explore?geo=US&q=bed%20bugs].

---

**WHAT SEASON TENDS TO BE THE BUSIEST FOR PROVIDING BED BUG CONTROL SERVICES?**

<table>
<thead>
<tr>
<th>Season</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer</td>
<td>29%</td>
</tr>
<tr>
<td>Fall</td>
<td>7%</td>
</tr>
<tr>
<td>Spring</td>
<td>7%</td>
</tr>
<tr>
<td>Winter</td>
<td>6%</td>
</tr>
<tr>
<td>No seasonal difference</td>
<td>51%</td>
</tr>
</tbody>
</table>

---

**SOME PMPs AGREE OR STRONGLY AGREE...**

91% of PMPs who offer bed bug control services agree or strongly agree they have a better understanding of how to provide high-quality bed bug services today than they did 5 years ago.

---

**KEY SERVICE OFFERINGS & ACCOUNTS**

**WHAT TYPES OF BED BUG TREATMENTS DOES YOUR LOCATION OFFER?**

- Insecticide treatments: 97%
- Mattress encasements/active mattress liners: 80%
- Bed bug monitoring: 61%
- Vacuuming: 50%
- Steam treatments: 28%
- Heat treatments: 26%
- Canine detection: 16%
- Fumigation: 10%
- Cold treatments: 4%
- Other: 9%

**FOR WHICH TYPES OF ACCOUNTS DOES YOUR LOCATION OFFER BED BUG MATTRESS ENCASEMENTS/ACTIVE MATTRESS LINERS?**

- Residential accounts: 49%
- Commercial accounts: 28%
- Both: 19%
- Neither: 3%
- No answer: 1%

---

**DOES YOUR LOCATION USE MONITORS AND TRAPS AS PART OF ITS BED BUG TREATMENT PROTOCOL?**

- Yes: 63%
- No: 37%
- No answer: 1%

---

Number of respondents who offer bed bug control services: 238 | Source: Readex Research
Sometimes tenants cannot or will not prepare units prior to treatment as instructed, which can delay the treatment, render it less effective or even make the problem worse.

But instead of fighting this, a growing number of PMPs are lowering their expectations for the prep activities that clients must complete, and they’re still achieving control success. Carace of Pest End cut his prep task list from 15 items to the five most important. “You hope that they can just get those five done and then we’ll take care of the rest,” he said. In fact, 48 percent of pest management professionals offer a low-prep bed bug service, up from 38 percent last year, according to the PCT 2018 State of the Bed Bug Control Market survey.

“We’ve had pretty good success” with limited prep help from clients, said Brad Carrier of Bugsy’s Pest Solutions. Still, “it’s hard to get people to understand exactly what you’re looking for; clean to me and to them could be two opposite things unless you show them a picture of exactly what you want,” he said.

Hoarding and highly cluttered units remain especially challenging. Some PMPs offer prep services for an additional fee. The handyman division of Advanced Maintenance and Pest Solutions will dispose of clutter, as well as replace infested cabinets and flooring.

THE PREP: LESS MAY BE MORE

DOES YOUR COMPANY LOCATION OFFER A “LOW-PREP” BED BUG SERVICE?

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>48%</td>
<td>38%</td>
</tr>
<tr>
<td>NO</td>
<td>50%</td>
<td>60%</td>
</tr>
<tr>
<td>ANSWER</td>
<td>2%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Number of respondents who offer bed bug control services: 2018 – 238, 2017 – 361
Source: Readex Research
The key to effective bed bug control “is not chemicals; it is people management,” said Bryan Nichols of Advanced Maintenance and Pest Solutions. “If we get a breakdown in communication, then all it does is give the bed bug the advantage,” he said.

And that can lead to callbacks. According to the PCT 2018 State of the Bed Bug Control Market survey, the average callback rate for bed bug control jobs was 4.1 percent.

To minimize callbacks, set expectations and encourage teamwork, PMPs host training classes for managers, staff and tenants on what bed bugs (and their bites) look like, their life cycle and behavior, how to minimize their spread and prevent infestations in the first place.

After treating the same infested sofa in three difference college apartments, Dan Rao of MD Weaver developed a protocol for managers for removing and destroying discarded items and putting them in inaccessible dumpsters.

Garey Clark of Clark Pest Remedy is not opposed to serving up free hot dogs to get as many tenants attending these sessions as possible. Some PMPs hold classes in multiple languages and use pictures to help bridge communication gaps.

PMPs are improving treatment programs, as well. By “asking tons of questions” of peers and experts, Scott Ballard of S&S Termite & Pest Control refined his protocol and made needed personnel changes, reducing a re-heat rate of nearly 85 percent to less than 5 percent.

Questioning tenants can reveal the source of the pest. Rao tracked a building-wide bed bug infestation to one resident who was inviting homeless people into his apartment. “Human behavior is always going to the problem,” he said. ●

**THE CALLBACK: IT’S A PEOPLE THING**

---

**TYPICAL CALLBACK RATE FOR BED BUG CONTROL JOBS**

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Callback Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>No callbacks</td>
</tr>
<tr>
<td>1% - 2%</td>
<td>1% - 2%</td>
</tr>
<tr>
<td>3% - 4%</td>
<td>3% - 4%</td>
</tr>
<tr>
<td>5% - 9%</td>
<td>5% - 9%</td>
</tr>
<tr>
<td>10% - 14%</td>
<td>10% - 14%</td>
</tr>
<tr>
<td>15% - 19%</td>
<td>15% - 19%</td>
</tr>
<tr>
<td>20% or more</td>
<td>20% or more</td>
</tr>
</tbody>
</table>

Number of respondents who offer bed bug control services: 238
Source: Readex Research

---

2018 State of the Bed Bug Control Market
THE FUTURE:
EVER EVOLVING

According to the PCT 2018 State of the Bed Bug Control Market survey, 64 percent of PMPs expect revenue generated by bed bug control services to increase in the next year.

“We expect to be very busy,” said Dan Rao of MD Weaver, who traditionally sees a spike in business when college students return to Boston in the fall. Brad Carrier of Bugsy’s Pest Solutions likewise sees “nothing but growth.”

Still, fewer PMPs — 66 percent versus 72 percent in 2017 — think the market will grow over the next five years, found the PCT survey.

Those interviewed for this report don’t believe big bed bug infestations will disappear, but they do expect them to become less prominent as prevention strategies and proactive treatment become the norm, a testament to the pest control industry’s ability to respond to ever-changing market conditions.

Bed bug control is “always going to be evolving,” said Tami Stuparich of California American Exterminator. “You can’t just put together a program and never look at it again,” she said.

**How do you expect the percentage of revenue generated by bed bug control services to change in the next year?**

- 2018:
  - Increase: 64%
  - Remain the same: 32%
  - Decrease: 0%
  - No answer: 4%

- 2017:
  - Increase: 64%
  - Remain the same: 32%
  - Decrease: 2%
  - No answer: 1%

**Do you think the bed bug market will grow, decline, or stabilize over the next five years?**

- 2018:
  - Grow: 66%
  - Stabilize: 28%
  - No answer: 5%

- 2017:
  - Grow: 72%
  - Stabilize: 25%
  - No answer: 2%

Number of respondents who offer bed bug control services: 238

Source: Readex Research
Zenprox® Xtend Aerosol is the most recent premium performer from Zoëcon. By combining five active ingredients including insecticides, an insect growth regulator, and a synergist, Zenprox® Xtend Aerosol quickly kills and controls more than 25 labeled adult insects. Its flexible delivery options – a crack-and-crevice actuator, indoor/outdoor approvals and System III® compatibility – provide pest management professionals with a powerful all-in-one solution to extend the reach of insect control protocols.

Visit ZoeconFieldGuide.com to contact a Zoëcon sales representative about Zenprox® Xtend Aerosol.

To learn more visit Zoecon.com