notebook

AVMA Pet Ownership Sourcebook

The American Veterinary Medical Association (AVMA) *2017–2018 Pet Ownership and Demographics Sourcebook* provides a snapshot of pet ownership trends across the United States. The *Sourcebook* states that nearly 57% of US households owned a pet at the end of 2016, with 38% owning one or more dogs and 25% owning one or more cats. The dog ownership figure reflects the highest estimated rate of dog ownership since the AVMA began measuring it in 1982.

The report states that more people than ever own exotic pets, including fish, ferrets, rabbits, hamsters, guinea pigs, gerbils, turtles, snakes, lizards, poultry, livestock, and amphibians. More than 13% of US households owned an exotic pet at the end of 2016, a 25% increase from 2011, the AVMA reports.

The sourcebook also examines veterinarian visits, finding that on average, in 2016, dog-owning veterinary clients made 3 visits to the veterinarian. Cat-owning veterinary clients made 2.4 visits.

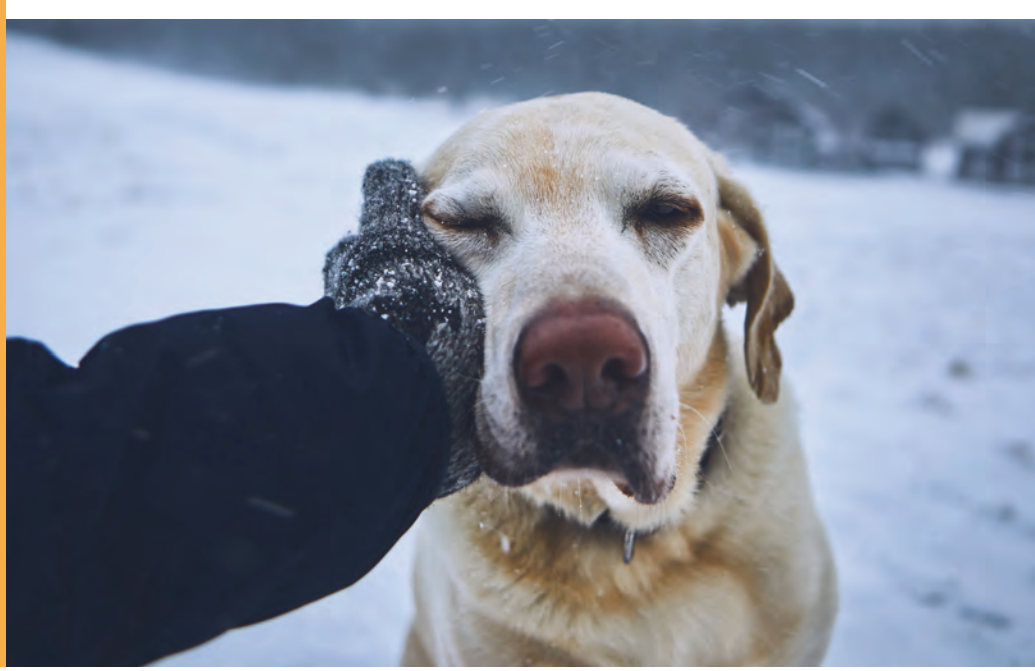
Adopting a Pet May Help Relieve Symptoms of Depression

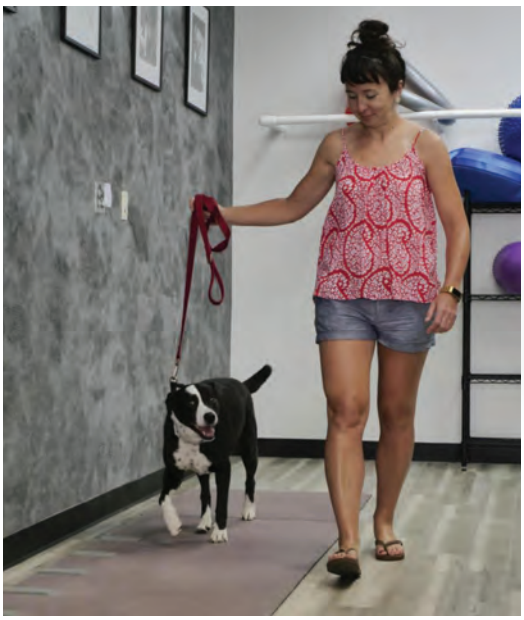
According to a study published in the *Journal of Psychiatric Research*, adopting a pet could help people who suffer from medication- and psychotherapy-resistant severe depression.

Two Portuguese researchers, Jorge Mota-Pereira, MD, PhD, and Daniela Fonte, worked with 80 participants who were diagnosed with treatment-resistant major depressive disorder. They discovered that adopting a pet enhanced the effects of antidepressant medication for a significant minority of their volunteers. Participants were invited to adopt a pet as part of the study; 20 chose dogs, and 7 chose cats. Their depression symptoms were evaluated over a 12-week-long period.

At the end of the study, the researchers found that more than one-third of the group who adopted pets had improved their scores on the Hamilton Depression Rating Scale and Global Assessment of Functioning scale to the point that their symptoms could be considered mild.

The researchers stated that their results indicate pets could be used as an “effective adjuvant” to conventional treatments for depression, adding that those caring for a pet developed “a strong affinity and companionship that strongly contributes to mental health.”





Gene Therapy Reduces Pain, Inflammation in Dogs with Osteoarthritis

A neuroscience professor at the University of Colorado (CU) Boulder reports promising results with an experimental gene therapy based on interleukin-10 (IL-10). Used to treat dogs with severe osteoarthritis, the treatment is intended to reduce pain and inflammation and restore their ability to move and could reduce the need for joint replacements in humans, says professor Linda Watkins, PhD.

CU Boulder reports that the opioid-free, long-lasting immune modulator known as XT-150 has been tested in more than 40 Colorado dogs with impressive results and no adverse effects.

“I’m hoping the impact on pets, their guardians, and people with chronic pain could be significant,” said Watkins, who has worked more than 30 years to bring her idea to fruition. “It’s been a long time coming.”

Watkins is moving toward bringing her idea to clinical practice and has received financial help from the National Institute of Neurological Disorders and Stroke, the Mayday Fund, and CU’s Technology Transfer Office, which has provided intellectual property support, assistance with licensing agreements, and help obtaining a $100,000 research grant in 2018.

She is working with veterinary chronic pain specialist Rob Landry, DVM, DAIPM, CVA, CCRP, CNPM, of the Colorado Center for Animal Pain Management in Westminster, Colorado, to launch the IL-10 research study in dogs.

More dogs are being accepted into clinical trials, and the US Food and Drug Administration recently approved the experimental therapy for human use. With human clinical trials now underway in Australia and California, Watkins is hopeful the treatment could someday play a role in addressing the nation’s chronic pain epidemic.

“If all goes well, this could be a game changer,” Watkins says.

QUOTE OF THE MONTH

“Success usually comes to those who are too busy to be looking for it.”

—Henry David Thoreau

IRS Raises 401(k) Contribution Limits

The Internal Revenue Service (IRS) announced that the employee contribution limit for 401(k) retirement plans increased by $500 in 2019 to $19,000. Just as in 2018, workers who are 50 or older can also make an extra $6,000 in "catch-up" contributions. In total, an employee older than 50 can contribute as much as $25,000 in 2019.

Contribution limits to individual retirement accounts also increased for 2019 for the first time in five years. You can now contribute up to $6,000, an increase of $500. People 50 and older can save an extra $1,000 for a total of $7,000.

If $500 doesn't sound like much, consider that investing $500 annually over 30 years, with a 7% average annual rate of return, would yield nearly $50,000 in retirement savings.

Veterinary Labor Market Going Strong

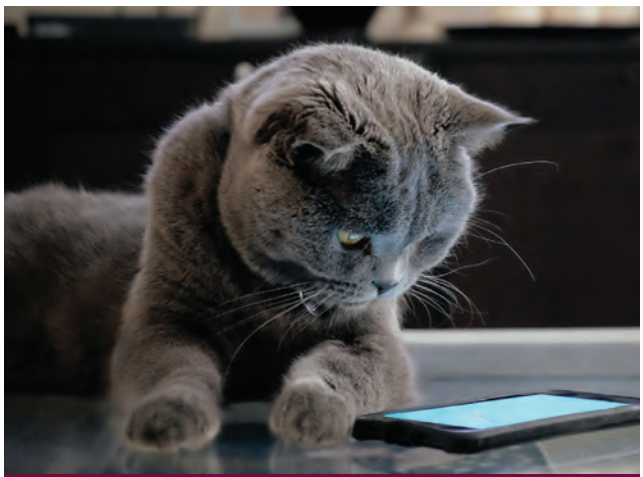
The labor market for veterinarians remains strong for a third straight year, with more employment opportunities than job applicants, according to data from the AVMA's Veterinary Career Center.

Speaking at the recent AVMA Economic Summit, statistical analyst Charlotte Hansen related that all indicators for the veterinary labor market are favorable. "We see increases in [veterinary] salaries, veterinary unemployment is below the national level . . . and we have more jobs than there are applicants applying for those positions," she explained.

Frederic Ouedraogo, PhD, an assistant director at the organization, discussed the growing demand for specialty, emergency, and critical-care veterinary services while relating that demand for production animal and wildlife veterinary services is beginning to decline. He described the market for veterinary services as consolidating and trending toward larger practices.

Excess capacity, a practice that, for a variety of reasons (including failure to fully use examination rooms or veterinary technicians), is producing less than it potentially could, remains a substantial challenge for veterinary practices, he said. The presenters related that in recent years, the supply of jobs has begun to outnumber applicants available for veterinary employment opportunities for the first time since before the Great Recession of the late 2000s.

In terms of salary, the presenters said that new-graduate starting salaries have hit an all-time-high real-income level, and a record number of new graduates are finding full-time employment prior to graduation.



Smart Tech Products for Pets Reach $400 Million in Sales

A new report reveals that one of the hottest trends among pet products is the incorporation of high-tech "smart" features and automation that creates a connected lifestyle between owners and their pets.

In the new second edition of *Durable Dog and Cat Petcare Products*, market-research firm Packaged Facts data show that tech-based, "smart," durable petcare products accounted for 8% of the $5 billion durables market with sales of $400 million for 2017. In the report, durable petcare products include toys; collars, leashes, and harnesses; beds; carriers, crates, and housing; bowls, feeders, and waterers; apparel and fashion accessories; and litter boxes and accessories.

Many of these technology-focused products work in tandem with smartphone or desktop apps that allow pet owners to interact with the products and their makers, and the company anticipates that such smart products will play an even greater role in the future. The company says that convenience is a top motivator for automated products, including litter boxes, feeders, waterers, toys, training devices, and pet doors.

Another important feature for pet owners is enhanced pet health, including products that monitor a pet's activities, vital signs, body functions, location, and so on.

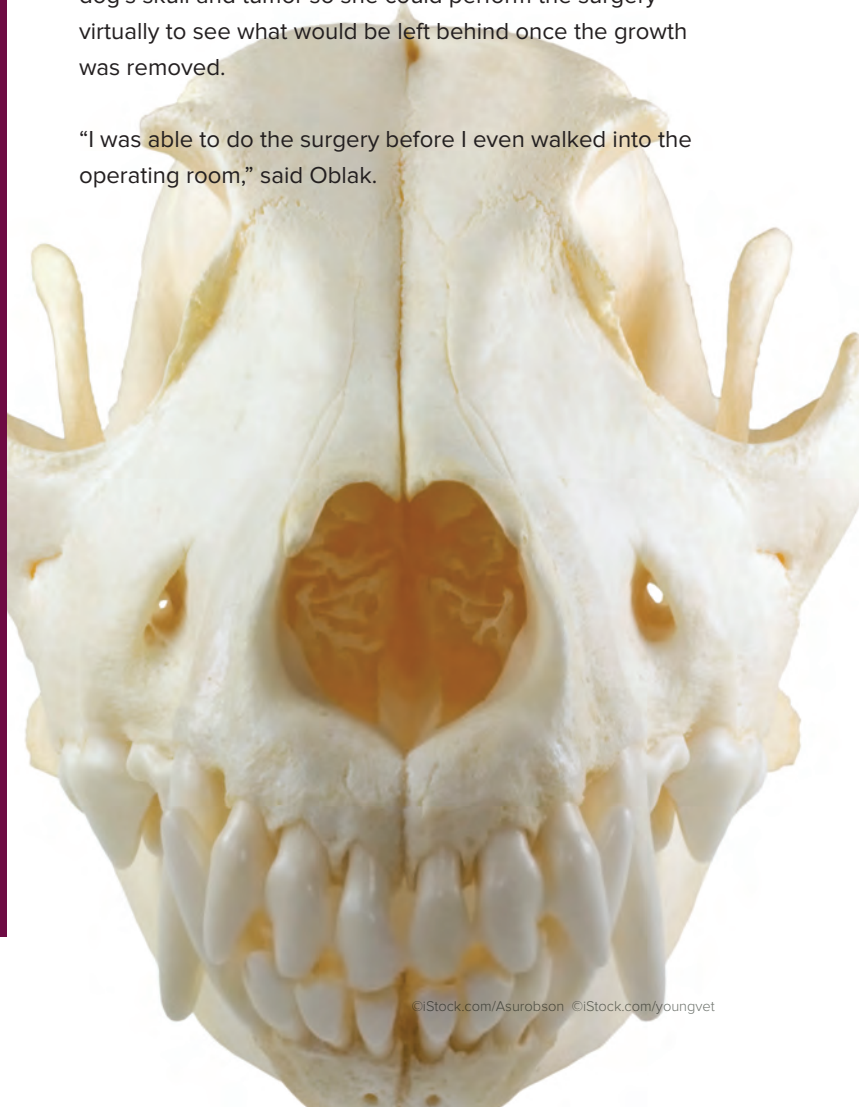
3D Printing Repairs Dog's Skull Postsurgery

Michelle Oblak, DVM, DVSc, DACVS, of the Ontario Veterinary College at the University of Guelph, successfully used a 3D-printed custom titanium plate for surgery on a dog's skull, marking a veterinary first in North America. The veterinarian and university state that the procedure also has implications for cancer research.

In the procedure, Oblak and small-animal surgeon Galina Hayes, BVSc, MRCVS, PhD, of the Cornell University College of Veterinary Medicine, removed a large cancerous tumor growing on a dachshund's skull and replaced it with a 3D-printed custom implant, fitting it in place like a puzzle piece.

Oblak performed the surgery on the dachshund, named Patches, at Cornell's College of Veterinary Medicine. The tumor, a multilobular osteochondrosarcoma, had grown so large that it was weighing down the dog's head and growing into her skull. After mapping the tumor's location and size, Oblak worked with engineers to create a 3D model of the dog's skull and tumor so she could perform the surgery virtually to see what would be left behind once the growth was removed.

"I was able to do the surgery before I even walked into the operating room," said Oblak.



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