

## Pet Microchips: High-Tech Protection Helps Find Lost Pets



### Registered microchips give lost pets the best chance of returning home.

The statistics indicate that missing pets rarely make it home:

- The American Humane Association estimates over 10 million dogs and cats are lost or stolen in the U.S. every year.
- One in three pets will become lost at some point during their life.

A study published in the Journal of the American Veterinary Medical Association, including 53 animal shelters across the U.S., confirmed the high rate of return of microchipped dogs and cats to their owners, and the importance of microchip registration. From the study:

- Only about 22 percent of lost dogs that entered the animal shelters were reunited with their owners. However, the return-to-owner rate for microchipped dogs was over 52 percent (a 238 percent increase).
- Less than 2 percent of lost cats that entered the animal shelters were reunited with their owners. The return-to-owner rate for microchipped cats was dramatically higher at over 38 percent (more than 2000 percent better).
- Only 58 percent of the microchipped animals' microchips had been registered in a database with their owner's contact information.

#### The lost pet reality

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## Microchip Technology Reunites You & Your Missing Pet



### High-tech protection can prevent heartbreak.

Enter the pet microchip—a simple, elegant product of our high-tech age. No bigger than a grain of rice or more costly than a month's supply of pet food, a pet microchip and enrollment in a pet recovery database brings lost pets home and provides peace of mind that your beloved companion will never wander unknown.

### Veterinarians encourage microchipping.

And with good reason—microchipping substantially increases the likelihood of a pet returning home by offering secure, reliable, unique and permanent identification.



A microchip is about the size of a grain of rice.

## Microchip Technology Reunites You & Your Missing Pet

**Microchipping is safe, easy, effectively reunites you with your lost pet, and can offer additional value.**

- Pet microchips can be implanted by any veterinarian.
- No anesthetic is required. The procedure is similar to a routine vaccination.
- A pet microchip does not contain a battery, nor does it need to be charged.
- Unlike traditional collar tags, pet microchips do not wear down, fall off, or scratch into illegibility.
- Microchips are designed to last the life of your pet.
- Globally compatible scanners read the unique identification code on the microchip. This code is used to retrieve the contact information that the pet's owner has provided to the pet recovery database.
- Microchips for pets are surprisingly inexpensive for the value. The microchip and implantation cost about \$45.
- Some pet microchip registries offer a variety of value-added services, like a lost pet emergency medical hotline and travel assistance for found pets at little or no additional cost.

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## Microchips Catch On—A Growing Network Protects Your Pet



### Microchipping pets shows promising growth

Some local governments are beginning to require microchip identification for animals.

### Animal identification has relied on microchipping since the 1980s.

Farmers and scientists regularly implant microchips in laboratory and farm animals. Microchips are also used in various wildlife welfare projects. The pet care industry grasped the technological promise of microchipping in the mid-1990's.

Now, pet recovery networks across the nation foster effective treatment of injured, microchipped animals and increase the likelihood of reuniting you with your lost pet. Pet microchipping continues to show promising growth:

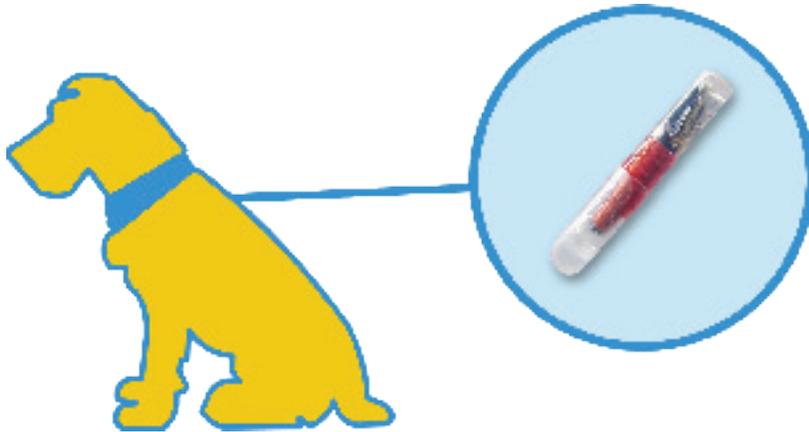
- By 2005, some 8.2 million dogs and cats had received microchip implants. This number comprised 5% of the pet population—a small proportion, but an impressive number.
- Local governments are supporting growth, too—Los Angeles County requires microchip identification for dogs and El Paso, Texas requires that dogs, cats, and ferrets be microchipped.

Los Angeles County requires microchip identification for dogs.



El Paso, Texas requires that dogs, cats, and ferrets be microchipped.

## Simple Brilliance—Pet Microchip Technology



### Technology of a pet microchip

Most animal shelters and veterinary hospitals in the U.S. have global scanners that read pet microchips from most manufacturers.

### The technology of a pet microchip is simple and safe.

The brilliance of a microchip implant is its simplicity.

No bigger than a grain of rice, a pet microchip is an RFID transponder made up of just a few components encased within a slender capsule of bioglass, which is used extensively for implants in both humans and animals. Some microchips have anti-migration features to ensure capsules stay in place by bonding with the tissue under the animal's skin.

- A microchip's sole function is to store a unique ID number that is used to retrieve a pet owner's contact information—it differs from a Global Positioning System, which is used for tracking, and requires a power source such as a battery.
- When a microchip scanner is passed over the skin of a microchipped pet, the implanted microchip emits an RF (radio frequency) signal. The scanner reads the microchip's unique ID code. The microchip registry is called, and the registry company uses the ID number to retrieve the pet owner's contact information from the pet recovery database.
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## What's the Frequency? Microchips & Scanners

### Microchips have different frequencies.

Microchips are passive devices, which means they have no internal energy source. They stay dormant until they are activated by a scanner. In the U.S., several different microchip frequencies have been used for pet microchips:

- The 125kHz chip – until recently, this was the most common frequency in the U.S., and can be read by most scanners in the U.S.
- The 134kHz chip – was introduced to the U.S. in 2004. This microchip is defined by specifications developed by the International Standards Organization or commonly known as ISO. The microchip ID code format for this chip is defined as a 15-digit numeric code that uses 0-9, where the first three digits represent a country code or a manufacturer's code. This frequently is considered the “global standard” for pet microchips, as it is used by the rest of the pet microchipping world.
- The 128 kHz chip – introduced in 2007, can be read by many scanners, but not all.

#### Picking a Frequency

In the U.S., several different microchip frequencies have been used for pet microchips—125kHz, 128kHz, and 134kHz (the ISO standard.) Many leaders in animal health recommend the new ISO standard.

### Does the frequency matter? Yes and no.

- Virtually all shelters and veterinary clinics have scanners. It is estimated that by early 2008, there were already over 70,000 “universal scanners” in the U.S.—scanners that read all frequencies of microchips ever sold here, including the new ISO standard.
- Many leaders in animal health recommend the new ISO standard, including American Veterinary Medical Association and the American Animal Hospital Association.
- If you travel outside of the United States with your pet, it is likely that your pet will need a microchip to enter the foreign country. If so, have your pet implanted with an ISO chip, since most countries outside the United States use the ISO standard and their scanners will not read the other frequencies. If your pet has already been implanted with a different frequency, some countries will allow you to bring your pet as long as you bring a microchip scanner with you that can read the ID number. Do not microchip your pet again, as multiple microchips can interfere with accurate readings.
- You should ask your veterinarian which microchip frequency their clinic recommends.

## Microchipped in a Pinch — Fast Implantation at Your Veterinarian

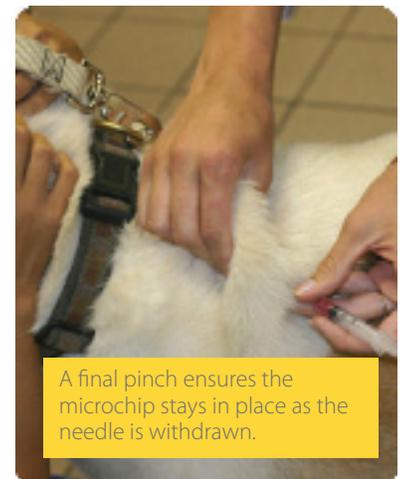
### Microchip implantation is an easy choice.

Microchip implantation is quick, simple, inexpensive, essentially painless, and virtually stress-free for pets and owners.

#### Painless, and stress-free for pets and owners

No anesthetic is required. The pet's reaction will be consistent with that of a vaccination injection. The implant procedure is essentially painless.

- Pet microchips are implanted by a veterinarian through a quick injection, like a routine vaccination.
- The site of implantation varies by animal.
  - In the U.S, dogs and cats receive the injection along the dorsal midline, just between the shoulder blades.
  - Horses are injected along the left side of the neck, about an inch below the mane and midway between the poll and the withers.
  - Birds, which lack the bulk of most animals, receive the implant in their breast muscles.
- The animal-care professional should scan for existing microchips prior to implanting a new one—this step takes 10 to 30 seconds.
- No anesthetic is required. The pet's reaction will be consistent with that of a vaccination injection. The implant procedure is essentially painless.
- Your pet's skin is desensitized by a simple pinch that pulls the skin upwards until taut. The animal-care professional inserts the needle.
- A final pinch ensures the microchip stays in place as the needle is withdrawn.
- Your veterinarian or animal shelter personnel can help you complete the microchip registration forms immediately following implantation.
- You and your pet go home and relax together. Avoid rigorous exercise or activity with your pet for 24 hours, in order to give the anti-migration coating on the microchip a chance to bond to your pet's skin, so the microchip remains where it was implanted.



A final pinch ensures the microchip stays in place as the needle is withdrawn.

**Voila! Your pet is now ID'd for life.**

## Record Recovery—Accurate Records Bring Pets Home

### Keep your records up-to-date.

The key to reuniting you with your lost pet is making sure your pet's microchip is registered immediately after it is implanted, and that your contact information remains up-to-date in the pet recovery database.

- After your pet is implanted with a microchip, you should check with the microchip registry to make sure the microchip is registered and your contact information is correct.
- Outdated phone numbers, email addresses and street addresses are useless to an animal shelter or the finder of your pet.
- You can update your contact details by contacting the pet microchip registry your pet is enrolled with. Visit the company's website for information on updating your pet's record online, or to get the telephone number to call.

### What happens if your microchipped pet goes missing?

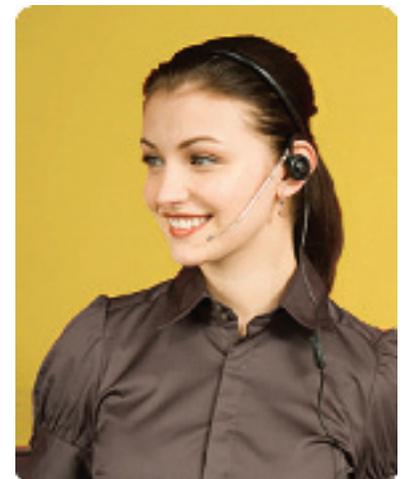
When a pet goes missing, they often end up being brought to an animal shelter or veterinary clinic. Facility personnel will scan your pet for a microchip which will reveal the number on the chip. They will then call the pet recovery database company, and you will be contacted to pick up your pet.

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## A Love That Lasts—Microchipping for The Life of Your Pet

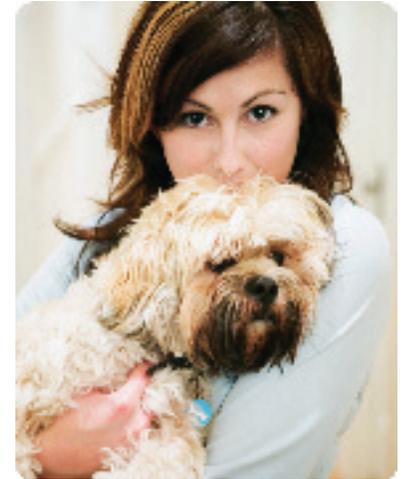
### Microchips last.

Traditional modes of identification, like pet tags or ID collars, need to be replaced regularly — and can slip off, be removed, or become hard to read— but microchips last for the life of the pet.

### Bonus benefits of microchipping your pet

Some microchip registries offer additional services for your pet's care:

- Specialists available 24/7 to assist with advice and support if your pet is lost
- Travel assistance for pets found far from home
- 24/7 Emergency Medical Hotline
- Lost Pet Alerts sent to a network of animal shelters, veterinarians, and concerned citizens around where your pet was lost.



### You and your pet belong together.

Your cat or dog's microchip implant gives your pet the best chance of returning home to you if lost. However, a microchip must be registered along with your current contact information in order to identify you as your pet's owner and contact you. Remember as long as there are pets, even those belonging to the most responsible owners, they will go missing.

### Sources:

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*"Microchip Your Pet," an online video from HomeAgain. For more information, please visit [www.homeagain.com](http://www.homeagain.com)*

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