Microchipping Works: Best Practices

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By

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Outline of Webinar

- Overview
- The role of a standard (ISO)
- Advances in scanning
- Importance of the registration process
- Implementing pet identification in your practice

Overview

Why microchip at all?

Why microchip at all?

- Pets get lost
  - AKC CAR estimates 8 to 10 million stray each year
- Shelters continue to have to euthanize unidentified owned, but lost pets
  - Only 20% dogs and 2% cats reunited with owners
- Identification tags alone don’t always work
Why microchip at all?

- Support of the human-animal bond
- Prove ownership
- Ensure safe passage overseas
- Help in tracking dangerous dogs
- Mandatory for licensing
- Help in reunification during disasters

Why microchip at all?
Why microchip at all?

- Lack of standardization
  - Hodgepodge of systems
  - Multiple frequencies
  - No link between registries

- Lack of buy-in
  - Veterinarians
  - Pet owners
  - Animal shelters

The Role of a Standard / What is ISO?

International Organization for Standardization

ISO

- Over 140 participating countries including U.S. develop standards for industry including credit cards, salmon, wildlife and equine
- In 1996 developed 11784/85 standard for companion animal microchips which has been adopted in Europe, Canada, Australia, Middle East, Asia
- Goal is to have an open standard and to reduce barriers in commerce from technology
ISO Standards

• ISO 11784
  – This regulates the structure of the identification code
  – 15 digit alphanumeric code
  – First 3 digits are 900 to 998 and assigned to manufacturers
    • Ex. 985 is Destron Fearing (HomeAgain)
    • 981 is Datamars (Bayer)

ISO Standards

• ISO works with International Committee for Animal Recording (ICAR) to assign companies the unique code
  – Companies must go through ICAR testing
  – Must agree to comply with ICAR standard

ISO Standards

• ISO 11785
  – This regulates how the microchip is activated and how the information is communicated to the scanner
  – The ISO standard frequency is 134.2 kHz
  – Independent of any company
  – Over 10 companies that make these microchips worldwide
Support for ISO

- AVMA Microchipping Position Statement and July 2008 Resolution 17 Call for:
  - Deployment of true Universal scanners capable of reading all microchip frequencies
  - Conversion of US microchipping standard to ISO 134.2kHz
  - Development of a single national microchip registry

Support for ISO

- Coalition for Reuniting Pets and Families
  - AVMA
  - HSUS
  - ASCPA
  - AAHA
  - AHA
  - ASVMAE
  - SAWA
  - AAFP

Advances in Scanning

How sensitive are the scanners?

Are they reading all the frequencies?
The Scanners

- **Development of Universal Scanners**
  - In response to multiple frequencies being sold in the U.S.
  - Goal to provide backward compatibility in continuing to read 125 kHz microchips while at the same time reading ISO 134.2 kHz microchips

Our Scanner Study

- **Goals**
  - To measure sensitivity of currently available scanners both in-vitro and in implanted animals in shelters
  - Provide information to shelters and veterinarians to provide assurances that universal scanners work

Our Scanner Study

- **Scanners tested**
  - Multi-System Pocket Scanner LID560, (Trovan/AKC-CAR)
  - Reads all 125 kHz, 128 kHz, detects 134 kHz
Our Scanner Study

• Scanners tested
  – MiniTracker I Universal Multi-Scan 125 (AVID)
  – Reads all 125 kHz but not 128 kHz or 134.2 kHz

• Scanners tested
  – iMax Black Label Portable Reader (Datamars / Bayer Animal Health)
  – Reads all 125 kHz, 128 kHz, and 134 kHz

• Scanners tested
  – Universal WorldScan Reader (Digital Angel / Home Again)
  – Reads all 125 kHz, 128 kHz, and 134 kHz
Our Scanner Study

- Microchips included in study
  - AVID Friendchip 125 kHz encrypted
  - 24PetWatch 125 kHz unencrypted
  - HomeAgain 125 kHz unencrypted
  - Trovan (AKC) 128 kHz
  - Bayer ResQ 134.2 kHz
  - Home Again 134.2 kHz

Our Scanner Study

- Study Design
  - Each of 6 shelters implanted animals with 1 of the 6 microchip brands
  - The shelters implanted 440 dogs and cats during the study
  - 220 control animals were used
  - The people scanning were blinded to whether or not an animal had a microchip
  - The scanners were randomly assigned to different people for different animals

Our Scanner Study Findings

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<th>Avid</th>
<th>HomeAgain</th>
<th>Bayer</th>
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<td>97.3</td>
<td>95.6</td>
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<tr>
<td>AKC/Trovan(128)</td>
<td>98.9</td>
<td>*</td>
<td>95.2</td>
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<tr>
<td>Bayer(134.2)</td>
<td>95.9</td>
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<td>94.8</td>
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</tr>
</tbody>
</table>
Our Scanner Study - Findings

- It isn’t realistic to expect perfection
- Proper scanning technique is critical
- Scanning an animal more than once will maximize sensitivity
- Universal scanners are addressing the problem of multiple frequencies but don’t replace a standard!

What is proper scan technique?

- Scan slowly – it may take 20-30 seconds to fully scan an animal
- Slightly rock scanner in order to pick up microchips in different orientations
- Hold scanner close to animal

Other Scanning Issues

- Change Batteries Often
  - Battery Indicators may not be optimum in warning
  - Use high quality alkaline batteries
  - Have a regular battery change schedule
- Avoid Interference
  - Metal collars / tags
  - Metal tables
Importance of the registration process

How effective is microchip registration?

Why the fuss about registration?

- Registration is often separated from the implantation process
- Multiple registries exist for owner information
- Owners often don’t understand their role in keeping registration information up-to-date

Why the fuss about registration?

- Owner contact information that is entered into lifetime registries is rarely, if ever, updated by pet owners
- Customer data ages at a rate of 2% per month / 24% per year due to:
  - Relocation
  - Divorce
  - Job Change
  - Separation
  - Phone service change
  - Email service provider change
Registration Study

- **Goals to find out how successful shelters are at finding owners for animals with a microchip**
- **Collected data for 8 months from 53 shelters across the U.S.**
- **7,704 total microchips**
  - About ½ were strays
  - 80% were dogs

Registration Study

- 73% of owners of strays were found
  - 74% for dogs vs. 63.5% for cats
- 74% of owners wanted animal back
  - 76% for dogs vs. 61% for cats

Registration Study

- **Median Return to Owner rates**
  - 21.9% all stray dogs, 52.2% when microchipped
  - 1.8% for all stray cats, 38.5% when microchipped
Registration Study

Methods Used to Find Owners
- Microchip database: 34%
- Shelter database: 24%
- Info from vet: 17%
- Info from other: 13%
- No registration: 9%

Reasons Owners Not Found
- Wrong number: 36%
- Doesn’t return calls: 24%
- Register other group: 17%
- Different owner: 13%
- No registration: 9%

- Microchip registries
  - 58% of animals had a current registration when microchip registry called
  - No differences between databases for finding owners
How can we improve the process?

- Move towards an interface to all databases
- Stop thinking of registration and implantation as separate events
- Realize that a good registry requires an active surveillance system

AAHA New Microchip Lookup Tool

- http://www.petmicrochiplookup.org

Implementing pet identification in your practice

Why should you?

How to make identification a team effort
### Why pet identification?

- Efforts to preserve the human-animal bond shows we care
- A lost pet is a lost client
- Our efforts to keep pets in the home helps our community

### Pet identification is a team-builder

- In-clinic seminars
  - Proper scanning / implantation technique
  - Client service and registration
- Helping clients find lost pets
  - Tip sheets for search techniques
  - Offer to post fliers
  - Scan stray animals

### Pet identification is a team-builder

- AAHA CE credited online course on Microchipping and Scanning of Companion Animals
  - [http://www.aahanet.org/education/microchip_scanning.aspx](http://www.aahanet.org/education/microchip_scanning.aspx)
Client Education

- **Wellness examination**
  - Time to discuss visual identification
  - Introduce reasons for permanent identification
  - Scan animals as part of routine TPR

- **Puppy/kitten examinations**
  - Chance to introduce identification
  - Offer microchipping at time of spay/neuter

- **Scheduled procedures**
  - Elective procedures
  - Boarding

AVMA Position on Microchipping

- Scanning animals for microchips is necessary for the identification system to be effective. Therefore, every companion animal, bird, and equid presented to a veterinarian should be scanned, whenever possible, for the presence of a microchip. The veterinarian, or designated staff, should scan the animal and note in the patient's medical record if a microchip is present, and if so, record the microchip number in the patient's medical record. This routine scanning for a microchip not only aids in the positive identification of an animal, but also provides the opportunity to assess if the microchip is still functioning properly and located appropriately, as well as reminding owners to keep their microchip database contact information current.


AVMA Position on Microchipping

- If a microchip implant is detected, the veterinarian, or designated staff, should inform the client of this fact, provide the client with contact information for the microchip database company, and encourage the client to contact that company. The veterinarian should document in the patient's medical record that he or she spoke to the client about these matters. The veterinarian is not expected to investigate nor resolve ownership disputes over an animal, nor should a veterinarian be held liable for relying on a client's claim of ownership following scanning.

The Bottom Line

– Visual and permanent identification is a win-win
– The vast majority of the time the system works with pets and owners being reunited!
– Placing a microchip is a community service
– Placing a microchip should be encouraged as a best practice
– The more microchips placed, the greater the public demand

Instructions for CE Certificate

1. To complete the evaluation, please go to the following website:
   http://www.keysurvey.com/survey/271305/e907/
2. After completing the evaluation, you will automatically be linked to the Continuing Education Certificate. The CE certificate can only be accessed after the evaluation is completed.
3. Download the CE Certificate (in pdf format) to your computer and print enough copies for those persons viewing the web conference with you.

Your input is very important! We take feedback seriously in order to provide you with the highest quality experience possible.

Questions to the Speaker

Please email your questions to webconference@oahnnet.org by Thursday, November 26, 2009.

Dr. Lord will provide written responses to all of the questions and they will be posted on AAHA’s website by Tuesday, December 8, 2009.