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The Veterinary Profession's Roles in Recognizing and Preventing Family Violence: The Experiences of the Human Medicine Field and the Development of Diagnostic Indicators of Non-Accidental Injury

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Introduction

Critical to the institutionalization of medical responses to the public health problems of child abuse and domestic violence were the increased awareness among medical professions that these issues were medical conditions worthy of professional response, and the overcoming of practice management and ethical concerns that served as barriers to professional involvement. One such barrier was the recognition and dissemination of diagnostic clinical indicators that differentiate non-accidental injury (NAI) from other types of traumas and that lead physicians to include physical or sexual abuse in differential diagnosis. As a result of the first promulgation of such indicators in the landmark "Battered Child Syndrome" article (Kempe, Silverman, Steele, Droegenmuller, & Silver, 1962), the United States launched one of its most rapid responses to a public health crisis, an institutional model of recognition and reporting that has been imitated widely throughout the world.

An earlier paradigm of what previously had been considered "accident-prone" children has been replaced with a widespread recognition of child abuse and a national system of mandatory reporters and child protective services (CPS) agencies. Training manuals are now readily available to help medical personnel identify telltale spiral fractures; immersion or cigarette burns; characteristic bruises caused by slaps, electric cords, or coat hangars; and other markers of child abuse (e.g., Kessler & Hyden, 1991). The human health care profession codified its responsibility to evaluate suspected child abuse and, later, domestic violence and to act accordingly.

In contrast, more than 69,000 practitioners of veterinary medicine in the United States have been largely excluded from reporting systems for child

abuse, domestic violence, and animal abuse. The veterinary profession has long been recognized for its public health responsibilities and as caregivers who see more human clients than animal patients (McCulloch, 1976). The failure to include veterinary medicine among its human medicine counterparts is a significant barrier to achieving full community recognition of the seriousness of animal abuse and its implication for animal well-being and human health and safety.

In order to integrate veterinary medicine into human medicine recognition and response systems, four issues must be addressed:

1. Veterinary professionals must learn how to approach clients in order to gather additional information to assist in a more accurate diagnosis and a more effective response that protects the interests of the patient, other animals in the household, and persons in the family.
2. Veterinary professionals must be trained and supported by their peers to undertake appropriate steps once they suspect that abusive behaviors may be a cause of the patient's condition.
3. A wide array of practice management concerns must be resolved to make veterinary involvement in the prevention of various forms of family violence an institutional norm.
4. Veterinarians and their staffs must be trained to identify the clinical conditions that indicate a differential diagnosis of NAI.

These issues have been largely resolved by the human medical fields. The experiences of the human health care professions will prove helpful to veterinarians

as they enter these uncharted waters (Munro & Thrusfield, 2001b).

Reasons for Involvement

As early as 1985, the U.S. Surgeon General emphasized that sociological, law enforcement, and criminal justice systems interventions had led to "unmitigated failure" in addressing violence (Koop & Lundberg, 1992). Authorities began calling for an interdisciplinary, epidemiologically based response that focused on violence as a public health matter.

Calling violence "a public health emergency," the U.S. Surgeon General said, "Physicians and other health professionals are firsthand witnesses to the consequences of violence. We see, diagnose, treat, mend, patch, console, and care for the victims of violence and their families thousands of times each day." In encouraging all health care professionals to open and maintain channels with other disciplines, the Surgeon General concluded, "As health professionals, the prevention of violence by using public health methods in our communities is as much our responsibility as is the treatment of its victims" (Novello, Shosky, & Froehlke, 1992). Failure to provide medical intervention has been described as "iatrogenic retraumatization"—abuse caused by the profession itself when unassisted victims feel hopeless with no practical alternative to escape (Skolnick, 1995).

All medical professionals have taken oaths to protect well-being and the public's health. The inclusion of the veterinary profession in this effort is required given their professional mandate as public health practitioners, the profession's oath to prevent suffering, and veterinarians' interactions with families (Arkow, 2004).

Veterinarians are frequently the best qualified to determine if an animal is suffering unnecessary and excessive pain or if an injury or death was unjustifiable. Confidences may be revealed if the veterinarian is required to do so by law or if the health or welfare of others is endangered. Veterinarians are largely given full immunity from civil or criminal liability for reporting suspected abuse to appropriate authorities in good faith. Consequently, veterinary involvement in violence prevention is indicated (Phillips, 1994).

Animal abuse frequently coexists with domestic violence and serves as a barrier to prevent many battered women from leaving abusive partners out of fear for the welfare of the animals in the household. Several studies (Doherty, 2002; Hornosty & Doherty, 2002; Lembke, 1999) have identified this to be a par-

ticular concern in rural areas, where the veterinarian who makes "house calls" may be in an advantageous position to recognize and assist victims of abuse.

Veterinarians are ideally placed as sentinels to identify and deal with animal abuse, and where this is severe or cannot be dealt with effectively by the veterinarian, to report it to appropriate authorities. Given the clear links between abuse perpetrated on animals and that perpetrated on humans (Ascione & Arkow, 1999), pro-activity by veterinarians in respect to animal abuse has the potential to save human life and reduce suffering along with animal life and suffering (Lawrie, 2002).

Sharing information can prevent future maltreatment. The community has delegated the responsibilities of protecting animals, children, elders, and battered women to officials in a variety of professions. Health care officials are unable to meet these duties if they do not know that abuse is occurring (Vulliamy & Sullivan, 2000). Veterinarians are considered part of the community health care system's response to domestic violence prevention (Community Crisis Center, undated).

Other factors prompting veterinary involvement include:

- Failure to intervene perpetuates public health problems and puts patients and others at risk
- Veterinarians are well-trained to identify and correct substandard care
- Veterinarians should be at the forefront of setting the highest standards for animal welfare
- Participation in family violence prevention programs is an opportunity to build bridges between veterinary medicine and other professions
- To elevate the status of the profession and the status and well-being of animals

Prevalence

Veterinarians frequently voice the opinion that as animal professionals they are unlikely to encounter human abuse, are untrained to recognize and respond to it, and that pet owners who care enough about their animals to provide veterinary care are unlikely to be abusive. These assumptions need to be reexamined. Munro and Thrusfield (2001a) have shown unequivocally that perpetrators do indeed present abused animals for veterinary examination.

Three market research studies from the American Veterinary Medical Association (AVMA) describe the primary market niche for small-animal practitioners to be those populations that are most at risk of family violence victimization. In 72.8% of pet-owning households, the primary caregiver is a female. Parents with children are the dominant market for companion animals: 64.1% of households with children under age 6, and 74.8% of households with children over age 6, have pets. Moreover, nearly half—46.9%—of American pet owners consider pets to be “members of the family,” while slightly more than half—50.9%—consider their animals to be companions and pets with whom they presumably have emotional ties. Only 2.2% of pet owners consider these animals to be “property” (American Veterinary Medical Association, 2002).

Households with histories of child abuse are as likely to take their animals to veterinarians as are non-abusive families. Further, an additional public health issue exists in child-abusing households in that the incidence of dog bites in violent homes was reportedly 11 times greater than in the normal population (DeViney, Dickert, & Lockwood, 1983).

In a survey of 15 randomly selected small- and large-animal practitioners in Indiana, Landau (1999) reported that 87% of veterinarians interviewed had treated abused patients, with 50% of veterinarians treating one to three abused patients per year; 60% of respondents had treated an animal who they suspected had been severely or intentionally abused or neglected. In addition, 20% of those surveyed stated they had worked with clients whom they suspected were themselves being abused.

Sharpe (1999) described a national random survey of 368 small-animal practitioners who reported an annual mean number of 5.6 animal abuse cases per 1,000 patients. Only 2.4% of respondents believed that a veterinarian should do nothing if animal abuse is suspected and only 14.9% said veterinarians should do nothing if child abuse or spouse abuse is suspected.

In a survey of 1,000 veterinarians in the United Kingdom, Munro and Thrusfield (2001a, 2001b, 2001c, 2001d) reported that 91.3% of respondents acknowledged NAI, and 48.3% had either suspected or seen NAI in their practices (see Appendix for a copy of the survey). Of 448 reported cases of NAI, 6% were sexual in nature and nine suspected cases of fabricated or induced illness (FII) (synonyms: factitious induced illness and Munchausen syndrome by proxy) were reported.

In replicating the Munro and Thrusfield study, the Colorado Veterinary Medical Association reported that 100% of 214 veterinarians responding to a survey acknowledged the existence of NAI and 61.7% had seen cases of NAI in pets in their practice (American Humane, 2003).

In a survey of 300 Canadian practitioners, Kovacs, Adams, and Carioto (2004) reported 50% of respondents had seen one to five cases of unintentional maltreatment in the past year, and 46% had seen one to five cases of intentional animal maltreatment in the past year. Only 10% of respondents had never seen a case of intentional animal maltreatment. About 90% agreed that part of the veterinarian's job is to respond to animal maltreatment and that learning how to recognize and report it should be part of the curriculum. About 70% felt competent to report suspicions to authorities, but only 50% felt qualified to discuss their suspicions with clients. Fewer than 17% felt that reporting unintentional animal maltreatment should be mandatory, but more than 80% felt that reporting intentional animal maltreatment should be mandatory.

Similarly, an Australian study by Peter Green reported that 185 participating veterinarians divided abuse into two categories: deliberate harm and acts of omission. The average rate of suspected abuse seen in Australian veterinary practices was 0.12%. In 5.8% of cases where animal abuse was suspected, human abuse was known to occur, and in a further 17.8% of cases of suspected animal abuse, human abuse was suspected. In 53.8% of cases of known or suspected human abuse the target was a spouse; in 15.4% of cases it was a child. When asked if veterinarians have a moral responsibility to intervene where they suspect animal abuse, 96.1% answered yes (Sherley, 2004).

Challenges Facing the Veterinary Profession

The Lack of Consistent Systems

The child protection field's 40-year history of protective systems has been enabled in part by statutory language that includes specific definitions of physical, sexual, and emotional child abuse and child neglect.

By contrast, animal anti-cruelty statutes, which trace their ancestry to century-old provisions to protect draft horses, are vague, archaic, and offer minimal protection for animals and little deterrent effect (Lacroix & Wilson, 1998). It was not until 2003, for

example, that New York State enacted legislation requiring animals to have adequate shelter.

Although more than 43 states in recent years have made some forms of serious or intentional animal abuse felonies, anti-cruelty laws vary widely from state to state. Prosecutors are generally willing to prosecute only the most egregious animal cruelty cases due to real or perceived limited resources, inexperienced staff, incomplete investigations, pressure from the community to focus on other crimes, and bias against taking animal abuse seriously as a violent crime (Frasch, Otto, Olsen, & Ernest, 1999; Tannenbaum, 1995).

Animal protection laws are enforced haphazardly by municipal and nonprofit agencies with no national coordinating authority. Municipal animal control and law enforcement agencies have varying levels of interest in cruelty enforcement, and nonprofit humane societies and SPCAs often lack enforcement powers (Frasch et al., 1999; LaCroix, 1999). This is in stark contrast to the system of child protection, which has model legislation, federal funding, federally collected statistics, and 50 state agencies that supervise over 3,100 county child protective services departments.

Attempts to replicate elements of the child protection paradigm in animal protection have been sporadic. The term "battered dogs" apparently first entered print in a 1983 article in *Dog World* magazine by dog writer and trainer Job Michael Evans (1983). The term "battered pets" entered the professional literature in 1996 (Munro, 1996) and Munro and Thrusfield went on to describe non-accidental injury in animals as "Battered Pet Syndrome" in 2002. Diagnostic manuals similar to those in child protection that depict stereotypical NAI consistent with child abuse have not been developed for the animal protection field, although standardized body condition scoring assessments are used by equine welfare investigators in the United States, Canada, United Kingdom, Australia, and elsewhere to objectively evaluate a horse's welfare (Carroll & Huntington, 1988; Henneke, 1995; Kohne, 1992). Patronek (1998) devised the comparable Tufts Animal Care and Condition scales to numerically evaluate dogs' and cats' body conditions and environmental risks to give cruelty investigators objective means of determining threats to animals. Diagnostic and treatment guidelines such as those used by child protection agencies (e.g., American Medical Association,

1992) have not been replicated in animal protection in the United States. Only a handful of guides (e.g., Arkow, 2003a; Humane Society of the U.S., 2003; Maxwell & O'Rourke, 2000; Olson, 1998) have provided competency-based training for professionals to recognize animal abuse and its links with child abuse, domestic violence, and elder abuse. However, diagnostic guidelines for non-accidental injury were described by Munro & Thrusfield (2002) and further refined in a recent publication (Thrusfield & Munro, 2007). In addition, a number of texts, published in the last three years (Merck, 2007; Cooper & Cooper, 2007; Sinclair, Merck, & Lockwood, 2006; Miller & Zawistowski, 2004), may provide guidance for practitioners presented with suspected animal maltreatment of all types.

Reluctance Within the Profession

There is growing awareness that veterinarians' attentiveness to possible animal abuse, domestic violence, and child abuse may improve the well-being of the patient and of others in the household (Arkow, 1992, 1994). However, such involvement presents troubling ethical, legal, economic, and personal challenges to practitioners. The ethical dilemma was articulated by Rollin (1988): Is the veterinarian's primary obligation to the animal (patient) or to the owner (client)?

The experiences of human medical professionals and their efforts to acknowledge and respond to Battered Child Syndrome and domestic violence parallel the challenges faced by veterinarians today. For example, many physicians fail to respond adequately to reports of domestic violence battering for several reasons:

- Physicians' close identification with their patients precludes them from considering the possibility of domestic violence in their differential diagnosis;
- Fear of offending patients by discussing areas culturally defined as private or by violating the physician/patient relationship;
- A sense of powerlessness and inadequacy in identifying appropriate interventions;
- Frustration that the ultimate outcome is outside their hands and that unless the client is motivated to change, medical attempts at intervention are useless; and
- The overwhelming roles asked of a professional complicated by the time constraints of

a busy practice, particularly if incidents are of such a low prevalence in a patient population that pursuit is not seen as a good investment of time. (Sugg & Inui, 1992)

In response to these concerns, Dr. Carol Warshaw said:

Time is a real factor, but when we compare the time it would take to ask about abuse and make appropriate referrals with the time spent on repeated visits, multiple workups, and treating the long-term sequelae of unrecognized abuse, not having time loses its validity as a reason not to intervene.... In an area where competence and mastery are highly valued, it's difficult to risk venturing into subjects that make us feel less confident. We often find it easier to focus on problems we know we can solve. Feelings of discomfort can be overcome the same way we overcome feelings of discomfort when asking a patient about his or her sexual history—by understanding that these questions are legitimate and important. (Skolnick, 1995)

Similarly, physicians may fail to report suspected child abuse due to:

- Inadequate training to diagnose the problem
- Risk of alienating or stigmatizing the family
- Lack of confidence that local officials will respond adequately
- Unwillingness to experience personal, legal, and financial risks
- Discomfort with being a "policeman" or in interviewing hostile clients
- Inconsistent definitions of child abuse (Morris, Johnson, & Clasen, 1985)

The Lack of Adequate Training

Even in the human medicine field, training is notoriously lax in equipping clinicians to deal with the complex dynamics of abuse cases and attendant painful social and personal issues (Chiodo, Tilden, Limandri, & Schmidt, 1994; Skolnick, 1995; Sugg & Inui, 1992). "As dentists, we're very well trained to identify and treat caries or an abscess, but child abuse is more nebulous," said a New Jersey state dental official (Mark, 1994). The dearth of time spent in medical school studying child abuse and neglect encourages the notion that child abuse is of marginal importance (Vulliamy & Sullivan, 2000).

The amount of professional education dedicated to addressing family violence has increased in recent years. Dentists and dental hygienists who graduated since 1980 have had more exposure to elder abuse and child abuse education than those who graduated in earlier years. However, dentists and dental hygienists also widely agreed that their training was inadequate to help them determine whether a patient had been abused. If physical indicators are equivocal, dental health care workers express a lack of confidence in their abilities to engage in this type of sensitive dialogue and to define the suspected situation (Chiodo et al., 1994).

Similarly, veterinary practitioners who graduated more than 15 years ago agree that they were not formally trained to recognize and address the issue of violence. "My four years of veterinary school and four years of residency had not prepared me for the story my client was about to tell," wrote Dr. Sharon Fooshee (1998), describing a cat that had been doused with rubbing alcohol, thrown into a fireplace, set on fire with a cigarette lighter, and then had its leg broken and rectum slit with a knife. Previously, the cat had been dunked in a sink and set outdoors in winter to freeze to the pavement. The cat's sister was also thrown out a window and fell three stories to a parking lot.

Numerous authorities have recommended that veterinary school curricula include additional training on the subject of abuse. Dr. Patty Olson noted that forensic pathology and toxicology screening are not as advanced in the veterinary field as they are in human medicine, making detection of poisons—"a huge cause of animal suffering"—a challenge. "We are a long way from where we need to be," she said (Reisman & Adams, 1996).

Landau (1999) described the extent of veterinary training in a 1997 survey of the deans of all 31 veterinary colleges in North America. The survey achieved a 100% response rate. She reported that 97% of schools strongly agreed or agreed that veterinarians will encounter severe animal abuse during their careers; 75% of schools addressed the topic of recognizing and reporting animal abuse; 31% had a hospital policy for reporting suspected severe abuse; and 17% made their students aware of that policy. Also, 63% of schools strongly agreed or agreed that veterinarians will encounter human abuse, but only 21% addressed the recognition and reporting of severe human abuse. Only two schools at the time had a hospital policy for

reporting suspected severe human abuse, and both schools made their students aware of this policy.

This training, however, was constrained by the exigencies of the curriculum. Each student received, on average, only 76 minutes of training on animal abuse and 8 minutes on client abuse.

The extent of abuse training in veterinary schools currently is not clear, but a number of veterinary colleges include abuse issues in ethics classes. Several veterinary teaching hospitals have instituted policies for reporting suspected abuse in client animals (Ontario Veterinary College, 2003; Veterinary Hospital of the University of Pennsylvania, 1998).

There appears to be support for more training. A survey of veterinarians in Massachusetts (Donley, Patronek, & Luke, 1999) reported that 76.4% of veterinarians expressed concern about being inadequately trained to distinguish between suboptimal care and legal neglect; 70% indicated that published criteria would make them more likely to report suspicions of a "battered pet." Over 84% believed that training about recognizing and reporting animal abuse should be part of veterinary education.

Veterinarians are not alone in noting the absence of formal training regimens: Many professions mandated to report suspected child abuse and neglect have also experienced this constraint. Numerous professionals admitted that during their careers they failed to report suspected maltreatment to appropriate authorities because they lacked training about legal obligations and reporting procedures (National Clearinghouse on Child Abuse and Neglect Information, 1999).

Dental educators have observed that increasing the content of family violence training in curricula alone will not serve the needs of health care workers. Rather, curriculum and continuing education must approach abuse holistically in collaboration with other health care and community workers (Chiodo et al., 1994). The most effective training can come not from books and videos, but rather from professional dental associations on the state and district level (Mark, 1994).

Fear of Litigation

Jack (2000) has described the role of the veterinarian as evolving to that of a "health care professional." This new role will likely lead to greater public accountability and to increased liability exposure when society's expectations are not met.

In a litigious society, veterinarians are concerned about the legal implications of reporting family violence, as physicians were during the early years of implementing child abuse reporting procedures. The American Academy of Pediatrics (1966) reported that although physicians were fearful of legal action and patient criticism, mandated reporting laws would reduce or remove parents' resentment against reporters. Physicians were advised to consult with other professionals so a report would come from a group rather than from an individual; this would result in more accurate diagnoses and help to defuse legal action. King (1998) wrote that veterinarians can similarly defuse retaliatory actions by obtaining consultation support from state diagnostic laboratories, radiologists, and other professionals.

Dental professionals have been hesitant to intervene in abuse cases because they fear subsequent litigation and because they want to ensure that more good than harm will come from the intervention (Chiodo et al., 1994).

Veterinarians have voiced concerns regarding possible civil and criminal exposure should they make a false report, a good-faith report that proves to be unfounded, or fail to make a report as prescribed by law. The experiences of the child protection field may prove helpful.

Similar to laws requiring the reporting of certain infectious diseases, interests of public safety can override physician-patient rights of confidentiality, thereby removing one source of potential litigation. To encourage reporting, all states provide mandated child abuse reporters with immunity from liability. This immunity may be absolute (in effect even when reports are made negligently or fraudulently) or qualified (protects those who report in good faith even when no abuse or neglect is revealed). However, immunity provisions cannot prevent a costly lawsuit from being filed (American Medical Association, 1992). Many states and provinces today offer veterinarians absolute or qualified immunity for reporting suspected animal abuse (Patronek, 1998).

Of greater concern to mandatory reporters are provisions that expose them to civil lawsuits for failure to report suspected child abuse. The financial liability for further injury of a child whose maltreatment should have been detected and prevented by a timely report can be quite extensive. At least six states statutorily prescribe civil liability for failure to report (National Clearinghouse on Child Abuse and Neglect Information, 1999). Prosecutions for failure to report, however, have been

rare. Whether failure-to-report sanctions would be enacted regarding the reporting of abuse of animals—which are considered property without legal standing—remains undetermined.

In the domestic violence field, a woman or her family may seek legal action against a person who reports her to be a victim, or who fails to identify and intervene, especially if she suffers injury or death. Physicians are encouraged to routinely screen all women for domestic violence, to maintain good liability coverage, and to work with their state medical association's legal department to reduce this risk (Salber & Taliaferro, 1995).

Veterinarians can reduce exposure by maintaining liability insurance and signing "hold harmless" agreements with government and nonprofit agencies (King, 1998). Maintaining comprehensive medical records—including health assessment, medical history, statements made, observed behaviors, detailed description of injuries, an opinion as to whether injuries are adequately explained, results of laboratory tests and diagnostic procedures, and photographs and imaging studies—may reduce the exposure to liability.

Fear of Adverse Economic Impact

The possible erosion of the client base is a concern that has been voiced by veterinarians. Again, the experiences of human medicine may resolve this concern. There is no conclusive evidence that physicians have suffered significant economic adversity from being part of the mandated reporter system. In one series of interviews with 58 pediatricians and family physicians in Ohio, four respondents who had reported cases of child abuse were surprised to find that many families whom they reported continued to visit their offices for medical care. Only 3% of respondents believed that "some" physicians were concerned about being sued by families for reporting a suspicion (Morris et al., 1985).

A national survey of 907 psychotherapists reported that the breach of confidentiality consequent to reporting suspected child maltreatment did not inevitably collapse the therapeutic relationship. Although 25% of clients were reported to discontinue treatment as a result of mandated reports, most were retained and many overcame initial negative reactions. Further, most of the therapists who filed reports believed that their actions resulted in a cessation of the abuse (Steinberg, Levine, & Doueck, 1997).

Economic concerns cannot override the mandate to report suspected abuse because this can endanger the child. By citing the necessity to report as specified by statute, physicians may more easily explain their actions to parents (American Medical Association, 1992). This strategy would appear to apply to veterinarians as well.

The Perception That No Action Will Be Taken

A perception among pediatricians and psychotherapists is that mandated reports will not be acted upon by overworked, underfunded child protection officials. Physicians are unlikely to report suspected child abuse if they lack confidence in the CPS agency, cannot predict a favorable outcome, or do not receive feedback after they have made their report (Steinberg et al., 1997; Vulliamy & Sullivan, 2000).

A significant number of child protection reports are not investigated and many are dismissed when reports cannot be substantiated. The CPS agency may elect to pursue referrals to community resources or educational strategies rather than prosecutorial interventions as the most appropriate intervention (Chiodo et al., 1994).

The veterinary field has followed this line of reasoning, although whether the practitioner should pursue a client educational strategy rather than referring an incident for possible prosecution is still undetermined. In the absence of mandates requiring veterinarians to report suspected abuse, professional codes of ethics in several countries have taken several varying positions.

The newest such code is in Canada, where in 2005 the Canadian Veterinary Medical Association (CVMA) adopted a new strategic approach to the issue of animal abuse. An earlier position statement declared that in situations of animal abuse that cannot be resolved through education, it is the veterinarian's responsibility to report such observations to the appropriate authorities (Arkow, 2003b). The CVMA's new position statement declares that "veterinarians have a moral obligation to report suspected cases"; in return, "society has an obligation to support those veterinarians who report in good faith using their professional judgment." CVMA recognizes that moral obligation is not legal obligation, and legal obligation and questions regarding immunity are the jurisdiction of Canadian provinces. The CVMA encourages provincial veterinary associations "to

lobby their provincial governments to develop legislation to make mandatory the reporting of animal abuse by veterinarians and to provide immunity to those who do so using their professional judgment and in good faith. Other health professionals who are required to report suspected abuse cases have such protection. Veterinarians deserve similar immunity," says the CVMA. The CVMA further encourages veterinary schools to discuss animal abuse and reporting so that graduating veterinarians are better able to recognize the signs of abuse and know the appropriate steps in documenting and reporting it (Canadian Veterinary Medical Association, 2005).

New Zealand's Code of Professional Conduct for Veterinarians (Veterinary Council of New Zealand, 2004), enacted in 1998, notes that veterinarians have "a special responsibility for animal welfare." A veterinarian who becomes aware of an animal "suffering unreasonable or unnecessary pain or distress must take action to ensure that the matter is effectively dealt with." This action may include conducting a thorough examination of all mitigating circumstances in the case, and offering professional advice. If the situation still shows no sign of being remedied and the animal is still suffering unreasonable or unnecessary pain or distress, the New Zealand veterinarian must report the case to an inspector under the Animal Welfare Act.

The Royal College of Veterinary Surgeons in the United Kingdom issued guidelines in 2003 (Veterinary Record, 2003), which encourage veterinarians to include NAI in the differential diagnosis. If the examination of the animal leads to a suspicion of abuse, the veterinarian should first attempt to discuss his or her concerns with the client; "in cases where this would not be appropriate or where the client's reaction increases rather than allays concerns," the veterinarian should contact the relevant authorities.

The American Veterinary Medical Association's guidelines, first issued in 1995, were amended in 1999 to read that when "animal abuse or neglect as defined by federal or state laws or local ordinances" cannot be resolved through client education, AVMA considers it the responsibility of the veterinarian to report such cases to appropriate authorities to protect the welfare of animals and people (American Veterinary Medical Association, 1999a).

The Conscientious and Caring Veterinary Personality

It is common for veterinarians to feel that responsibility falls on them to "prove" a case of abuse. Nevertheless, it is important for them to accept that this is not their remit, which is confined to evidence on veterinary matters. All case investigations, it should be remembered, are multidisciplinary (see page 393 for chapter by Boat, Loar, and Phillips), involving a variety of groups: for example, animal welfare organizations, police, and legal personnel. There may also be actual witnesses of the abuse. In those cases that do reach the courts, the final decision remains—correctly—a legal one. Some veterinarians are relieved to realize that their evidence is only part of the case—albeit an important one—because it goes some way to assuage these feelings of professional responsibility, which can be very deep.

In addition, the caring personality of the veterinarian may lead to concerns that there are extenuating circumstances with regard to the *people* who have been accused of animal abuse. Again, it should be remembered that the veterinarian's duty is to the animal, not to the person, and that others should be left to take responsibility in such matters. The case may well have aspects of which the veterinarian is unaware, and is certainly not competent to judge.

Inadequate Definitions

Veterinarians are challenged by conflicting professional, personal, public, and legal standards. Ascione (1993) defined cruelty to animals as "socially unacceptable behavior that intentionally causes unnecessary pain, suffering, or distress to and/or death of an animal," but the child protection field does not require *intent* as a criterion to prove that maltreatment occurred (English, 1998). One veterinary dictionary (Blood & Studdert, 1999) defines cruelty as "the infliction of pain or distress unnecessarily," astutely observing that "the definition of unnecessary varies between countries and from time to time in one country. Determination of the prevailing standard of cruelty can only be decided by the courts."

It can be noted that, in Great Britain, it is irrelevant whether or not there is *intention* to cause suffering, because *lack of intent* is not a defense under animal welfare laws. There is therefore no necessity to subdefine abuse as "intentional" or "non-intentional." It is up to the court to judge whether the actions of the accused have been those of a "reasonable person"

in the particular circumstances of the case (Radford, 2001).

The new Canadian veterinary position statement defines animal abuse as "the active maltreatment or passive neglect of animals and staged animal fighting. Animal hoarding is neglect on a large scale" (Canadian Veterinary Medical Association, 2005).

In 1974, the U.S. Congress passed Public Law 93-247, the Child Abuse Prevention and Treatment Act (CAPTA), to provide a national definition of child abuse and neglect and prescribe actions states should take to protect children. This law established a broad definition of maltreatment as "the physical and mental injury, sexual abuse, neglected treatment or maltreatment of a child under age 18 by a person who is responsible for the child's welfare under circumstances which indicate the child's health and welfare is harmed and threatened thereby, as determined in accordance with regulations prescribed by the Secretary of Health, Education, and Welfare." CAPTA sets minimum standards, but the details of defining physical abuse, sexual abuse, emotional abuse, and neglect falls to the states, and specific definitions vary considerably (English, 1998).

While each state has its own definitions, there appears to be more statutory consistency in child protection than in animal protection, and, as suggested by Munro and Thrusfield (2001a), child protection terminology can serve as a model for the animal protection field. In any event, legal definitions of animal maltreatment may conflict with public perceptions, and enforcement and judicial interpretation in any incident are also dependent upon case law, common sense, sound judgment, local policy, and previous experience (Arkow, 2003a).

Confidentiality Concerns

Like physicians, veterinarians have concerns about client confidentiality. Courts in some states have explicitly refused to recognize a veterinarian-client privilege; other states allow it, either in veterinary practice acts, administrative rules, or statutes affecting a variety of health professionals. There are circumstances where confidentiality requirements are explicitly waived to protect the health and welfare of the individual, the animals, or others who may be endangered (Patronek, 1998).

Some textbooks on veterinary ethics emphasize that clients are not just consumers but animal owners who entrust to the veterinarian property in which they may invest significant emotional importance.

Ethical concerns regarding confidentiality are often described more in terms of the veterinarian's responsibility to inform the client of maltreatment that occurred to animals under care, rather than the practitioner's obligation to discuss clients' maltreatment of animals (Tannenbaum, 1995).

Confidentiality is a challenge for numerous professions. For example, child protection caseworkers who observe animal abuse are restricted by state laws from revealing the names of their clients to animal welfare officials, who, in turn, are reluctant to pursue a report made anonymously. The veterinary profession may be ahead of the curve in this area, as national veterinary associations in the United States, Canada, and the United Kingdom waive doctor-client confidentiality when public health and safety are jeopardized.

The most explicit such protocol is the United Kingdom's Royal College of Veterinary Surgeons Guide to Professional Conduct (RCVS, 2007). This declares that "the public interest in protecting an animal overrides the professional obligation to maintain client confidentiality" (Veterinary Record, 2003). British veterinarians are advised to discuss their concerns with clients, to consider whether child abuse or domestic violence might be present (with or without the presence of animal abuse), and to consider reporting their concerns to appropriate animal protection, child protection, or law enforcement authorities.

While the American Veterinary Medical Association's (1999a) Animal Welfare Position Statement does not specifically mention confidentiality, it does say that "disclosure may be necessary to protect the health and welfare of animals and people." AVMA's Principles of Veterinary Medical Ethics (1999b) further declares that while veterinarians and their associates should protect the personal privacy of patients and clients, they "should report illegal practices and activities to the proper authorities" and "should not reveal confidences unless required to by law or unless it becomes necessary to protect the health and welfare of other individuals or animals."

Mary Beth Leininger, past president of the AVMA, said:

Confidentiality holds for personal privacy of clients unless the veterinarian is required to reveal the confidences of a medical record because of the health or welfare of either the

person or animal. As an organization and as a group of professionals, we feel an obligation to safeguard the health and well-being of not only the animals we care for, but of the need to care for society, as well. (King, 1998)

There May Be Gender Bias Within the Profession

Gender- and age-based biases against reporting suspected family violence have been described in the human medicine literature. Younger physicians are more willing to report suspected child abuse than older physicians, perhaps because of inclusion of child abuse training into medical schools and residency programs in recent years (Morris et al., 1985).

Similarly, there may be more interest in this subject among younger veterinarians, an increasing percentage of whom are female. Currently, 55% of AVMA's members are male and 45% are female; among the student AVMA membership, the ratio is 30% male to 70% female (A. J. Shepherd, personal communication, October 24, 2003).

Chiodo et al. (1994), in a survey of Oregon dental health care workers, reported that the possibility of gender bias must be considered in a profession in which 92% of responding dentists were male and 99.2% of responding dental hygienists were female. While both dentists and hygienists listed reporting as a relatively remote choice for intervention, dental hygienists were earlier identified as having a significant role in being aware of possible family violence, recognizing trauma, documenting injuries, providing follow-up care, and mandatory reporting (ten Bense, King, & Bastein, 1977). This may have implications in the veterinary field, in which the veterinary assistant and technician populations are predominantly female.

Sugg and Inui (1992) reported that many male physicians were reluctant to broach the subject of domestic violence for fear of being viewed as betraying the patient's trust, but no female physicians surveyed believed that discussing domestic violence with female patients would jeopardize the physician-patient relationship.

An informal survey of veterinarians at several conferences by C. A. Lacroix (personal communication, 2000) found that both male and female veterinarians were willing to display information about domestic violence in their clinics and wanted more information about animal abuse and family violence. The ratio of females

to males responding to the survey was 2:1, and it cannot be determined whether this suggests that females were more likely than males to respond to the questionnaire, or were overrepresented as participants in the workshops.

The Need for Consistent Terminology

As noted earlier in this chapter, there is an unfortunate lack of accepted standard terminology with regard to what exactly is meant by "animal abuse," "animal cruelty," or "animal maltreatment." This causes difficulties—not only for veterinarians, but also for other bodies of people, such those working in animal welfare societies or in legal circles. Compounding this lack of clear terminology is the inescapable fact that human society maintains several animal groups for differing purposes. For example, humans rear, kill, and eat farmed animals, and laboratory animals are used to test products for human (and animal) use. However, acceptable animal husbandry standards common in these industrial uses may not be acceptable to a companion animal. It is therefore an unavoidable fact that what is generally accepted as tolerable in the treatment of one group of animals might well be regarded as "cruel" or "abusive" in another group. This muddies the water even further, the result being much debate on definitions (Rowan, 1993; Vermeulen & Odendaal, 1993).

Nevertheless, for companion animals, adopting the tried and tested terminology developed by the medical profession for children can solve the problem very easily. (And it can also be used in appropriate cases in non-companion animals.) This terminology, which is accepted and used worldwide, has two considerable advantages:

- First, in a subject area that crosses both animal and human boundaries, it achieves a common language between veterinarians and other health professionals;
- Second, it promotes consensus on *consistent* terminology—an important factor in avoiding confusion, particularly where research is involved.

Using this terminology, there are four basic types of abuse, any of which may co-exist:

1. Physical abuse

- *Synonyms:* non-accidental injury (NAI), Battered-Child Syndrome, Battered-Pet Syndrome.

- Includes physical actions such as beating, punching, kicking, shaking, burning, throwing (e.g., against walls, downstairs, out of windows, etc.). A weapon, such as a hammer or baseball bat, may be used. Physical abuse also includes the administration of drugs or poisons, and gunshot wounds.

2. Sexual abuse

- Any use of an animal or child for sexual gratification.
- This term is preferable to "bestiality" or "zoophilia" because each of these terms focuses primarily on the perpetrator. Sexual abuse conveys the sense of the physical harm that may occur to the animal.

3. Emotional abuse

- For example, habitual verbal harassment by threats and/or threatening behavior.
- Although some people put forward the view that animals do not possess "emotions," this is at variance with modern thought (Webster, 2005).

4. Neglect

- Failure to provide the basic physical and/or emotional necessities of life, for example, food, water, shelter, medical or veterinary attention, companionship, and affection. Abandonment of an animal is therefore an obvious example of neglect. Leaving a collar to tighten and constrict the neck of a growing puppy is another.

In the more than 45 years since courageous Dr. Kempe and his colleagues published their groundbreaking "Battered-Child Syndrome" paper, a substantial body of knowledge has grown up on all four types of child abuse, and continues to develop. The veterinary profession can make use of this knowledge because it provides a significant head start on how to approach the same subject in animals. The circumstances, the acts involved, the excuses offered, and the resulting injuries are remarkably similar, be the victim animal or child. This is quite simply because there is a common denominator—the human perpetrator.

This common denominator is neatly illustrated by examination of the explanations presented by clients to account for animals' injuries, because the excuses

Case example 1

A young adult springer spaniel was presented with fractured ribs, bruising of the eyes, and bleeding from the mouth. The owner stated that the dog had "fallen downstairs." The veterinarian considered that the injuries were too severe to be explained by this story, and confronted the owner, who then admitted violence. The dog was euthanized because of the injuries.

Case example 2

A dog over 2 years of age died of injuries which the owner said had been caused by "falling downstairs." The dog had suffered massive axillary haemorrhage, rib fractures, and haemothorax.

offered are strikingly similar for pets and children. For example, pediatric texts consistently record that a history of a "fall" is commonly offered to explain the injuries in cases of NAI in babies and small children (Hobbs, Hanks, & Wynne, 1999a). A similar excuse may be offered to explain an injury in a pet.

Physical Abuse: Diagnostic Pointers to a Non-Accidental Injury

The term non-accidental injury may at first seem strange, but it simply means an injury that has been inflicted deliberately. However, a non-accidental injury in a *child* is generally understood to mean an injury inflicted by a parent, a member of the child's family, or a person looking after the child. In a *pet*, the perpetrator may live in the pet's home, but unlike small children, the pet may be allowed to roam freely, so the perpetrator may be outside the family group.

There are no definite rules for diagnosis of non-accidental injury, but there are pointers that raise suspicion. These are sometimes also referred to as "diagnostic features" or "diagnostic guidelines."

It must be emphasized that none of the following pointers is diagnostic per se. It is a combination that raises suspicion and, as case examples will illustrate, this combination is variable. (This is the same as in child physical abuse.)

Aspects in the History

- The history is inconsistent with the injuries (i.e., the injury does not "fit" the history—usually, the injuries are too severe to be explained by the history supplied)
- The history is discrepant (i.e. changes in the telling, or from person to person)
- A previous injury or death has occurred in another animal in the same household, or

belonging to the same owner, particularly when the incident is unexplained

- No explanation is offered for the injury
- Lack of motor vehicle accident (MVA) or any other possible accident
- Family violence is known or suspected

Implication of a Particular Person as the Perpetrator

- Owner may actually admit injuring the animal himself or herself
- Owner may name husband/boyfriend/partner/child as the culprit
- Owner may state the injuries are due to NAI but refuses to give a name
- Lodger/neighbor/stranger may be blamed

Type of Injury

- Repetitive injury is highly suspicious
- Certain injuries may cause suspicion because they are unusual, or because they do not "fit" with the owner's explanation

The Behavior of the Owner Arouses Concern

- May be aggressive on questioning
- May show a lack of concern for the pet
- May behave oddly

The Behavior of the Animal Arouses Concern

- May be frightened of owner
- May be happier when separated from the owner (e.g. when hospitalized)

Case example 3

Inconsistent history

A Yorkshire terrier was taken to the veterinarian with extensive, severe burns to the chest and abdomen. The explanation given was that "the dog sat too close to the radiator." The veterinarian was not the owner's usual veterinarian and the consultation was out of hours.

Case example 4

Repetitive injury

A cat was presented with abdominal muscle rupture. The veterinarian assumed the injury was caused by a motor vehicle accident. Ten days later the cat was brought back with a severe pelvic injury, but this time the veterinarian was surprised to find out that the cat never went outside. No explanation was forthcoming to explain either injury, and the cat was presented to a different veterinarian's office two weeks later, with a fractured femur.

Risk Factors for NAI in a Pet

In addition to the features that raise suspicion of NAI, certain risk factors should also be taken into account.

Domestic Abuse

Until relatively recently, the relevant groups dealing with child abuse and domestic violence (which is generally taken to mean violence against women) were compartmentalized, with little or no sharing of knowledge and information. For example, it would have been most unlikely that a pediatrician, presented with a suspected case of NAI in a child, would have considered whether or not the mother lived in a violent relationship. However, it is now universally acknowledged that domestic violence is a high-risk factor for NAI in children, and it is perfectly clear that such violence is a risk factor for the family pets also (Munro & Thrusfield, 2001a).

Case example 5

An adult domestic shorthaired cat with head and eye injuries was taken to the veterinarian. The female owner stated that her partner had been abusive to the cat and also to herself.

Case example 6

A small mixed breed dog was presented with a fractured tibia. The owner's ex-partner, who had a history of violence toward the owner, had thrown the dog against the wall.

Other Owner-Associated Risk Factors

Factors such as alcoholism, drug abuse, and mental illness are important.

Age, Gender, and Breed of Animal

Male dogs under the age of two years, and all cats of this age, are particularly at risk (Munro & Thrusfield, 2001b).

Crossbred dogs and domestic shorthaired cats have been shown to be at increased risk in the United Kingdom, as have Staffordshire bull terriers. A possible explanation for the latter is that in the United Kingdom Staffordshire owners of a pugnacious disposition may especially favor bull terriers.

Animals with Disabilities

It is recognized that children with disabilities are vulnerable to abuse (Hobbs, Hanks, & Wynne,

1999b), and it is quite possible that animals with a disability may similarly be disadvantaged. One has only to think of undiagnosed deafness in, for example, a Dalmatian puppy, to realize what might result when a controlling owner, frustrated by the puppy's apparent misbehavior, loses his temper.

Socio-Economic Group of the Owner

It would seem plain common sense that the risk of animal abuse (using the term in its widest sense, and therefore including *neglect*) is higher in areas of social deprivation and poverty. However, it can be found in all social groups, including those of affluence. People who are better off are also usually more articulate, enabling them to avoid detection more easily.

Animal Sexual Abuse

The term "animal sexual abuse" derives from the modern term "child sexual abuse," and is preferable to "bestiality" or "zoophilia," both of which focus on the human perpetrator without conveying any sense of the physical harm that may happen to the animal (see page 201 for chapter by Beetz). It is the very fact that the physical actions center on the sexual organs, and/or the anus and rectum, which distinguishes the abuse as sexual in nature. As in children (and adults), both sexes may be abused.

For many people, animal sexual abuse is deeply embarrassing, and indeed some regard the activity almost as a last taboo. Even veterinarians can find the subject difficult, which may go some way to explain the apparent absence of descriptions of sexual abuse injury in textbooks on veterinary gynecology.

However, it needs to be accepted that sexual abuse of animals does occur, that physical injury to both

Case example 7

An adult female border collie with vaginal injuries was presented for examination. The owner had found her husband having sex with the dog.

Case example 8

A young male domestic shorthaired cat was taken by his owner for examination. Four equidistant radial splits, consistent with the insertion of a large object, were present in the cat's anus. Suspicion was aroused because the lesions were considered inexplicable, and it also was noted that the owner was angry when questioned.

sexes may result, and that the injuries—depending on the actual type of sexual act (the spectrum is wide) and the size of the animal—can be very severe (Munro & Thrusfield, 2001c).

Fabricated or Induced Illness (FI)

Currently, this is the latest term that has been adopted for an uncommon form of abuse that by convention has been given a separate chapter in pediatric texts. It has also been called *factitious illness by proxy* and *Munchausen syndrome by proxy*.

In pediatric terms, this type of abuse involves the falsification of illness in a child. The perpetrator is usually the child's mother, and the motive is to gain the sympathy and attention that surround the child's illness. The symptoms may be very varied, and laboratory tests contradictory and confusing. The person presenting the child for treatment may be very plausible and manipulative, making case detection and management extremely difficult.

In the veterinary context, it is the owner who fabricates, or induces, injury in an animal. Feldman (1997) described a case in which an owner eventually admitted that she had starved her dog, and fabricated signs, to gain the concern of others for herself. Repetitive injury is sometimes employed, and the prognosis may be poor if the animal remains with the owner (Munro & Thrusfield, 2001d).

Differential Diagnosis of NAI

Naturally Occurring Conditions

Investigation of a suspected case should include standard checks (e.g., radiography, hematology) for naturally occurring conditions, such as skeletal disorders (e.g., metabolic bone disease) and blood clotting factor deficiencies. (However, it should be remembered that the fact that an animal has a naturally occurring condition does not *exclude* the animal from abuse.)

Motor Vehicle Accidents (MVAs)

MVAs may be a cause for concern for veterinarians when considering the differentiation of injuries caused in such accidents and those associated with NAI. This is an area where more research is urgently needed, but at the present time several factors can be considered.

On clinical examination, the claws of an animal that has been hit by a vehicle are often "tattered,"

Case example 9

A litter of baby ferrets was found abandoned in a wood. The animals were in extreme pain, and each had multiple limb fractures. NAI was considered in the differential diagnosis, but X-ray examination revealed that the fractures were caused by severe nutritional bone disease. The owner was traced, given a formal warning on neglect (lack of veterinary treatment and abandonment), and advice on correct nutrition of other ferrets.

Case example 10

An adult dog was presented with bilateral subconjunctival haemorrhages. There was no history of an MVA and lab tests for bleeding disorders were negative. The couple's other dog had died under unexplained circumstances one month before. The owner admitted her boyfriend had shaken her dog.

there may be dirt in the hair coat, and there may be skin abrasions.

With regard to fractures—common both in MVAs and NAI—Kolata and Johnson (1975) demonstrated that the greatest number of skeletal injuries in dogs involved in an MVA occurred in the body backward from the last rib (i.e., the hind part), with the pelvic bones being the most frequently affected. Munro and Thrusfield (2001b) accordingly suggested that a pelvic fracture in the dog is more likely to indicate MVA, but pointed out that this should be considered "with other supporting evidence" (i.e., other features of NAI, such as an inconsistent history). Unfortunately, currently there are no comparative data (such as Kolata and Johnson's) available for MVAs in cats.

It is wise not to assume MVA—particularly when other features of the case may suggest otherwise—so there is a need to ascertain whether the animal is actually allowed out of the house. Many cats, for example, are housebound, making an MVA impossible. (See case example 4.)

Other Injuries

The demonstration that repetitive injuries are highly suspicious of NAI in the dog and cat (Munro & Thrusfield, 2001b) was a significant advance in veterinary knowledge, but further research on other deliberate injuries is urgently required. Here again, veterinarians can benefit from their medical colleagues, because injuries found in children demonstrate the possibilities. In the years since Kempe, many textbooks have been penned and journals established, all solely

concerned with every type of child abuse. There is even a specialist textbook on diagnostic imaging of child abuse (Kleinman, 1998). As a result, information is available on the many injuries associated with NAI in children, their level of "suspicion" ("suspicious" or "highly suspicious"), and their differentiation from natural disease.

A simple example is that of cigarette burns. Few veterinarians will be aware of the detailed descriptions of these burns available in all textbooks on child abuse—including details of the (differing) patterns that permit differentiation of deliberate and accidental burns. Such descriptions are absent in veterinary texts, although it is known that cigarettes are used to inflict burns on animals.

Fractures are common in both child and animal abuse, but physicians have extensive knowledge of the fracture types that may be particularly associated with child abuse. One such fracture is the spiral fracture of the humerus. In infants, this pattern of fracture is now known to be highly associated with the forces involved when the infant is swung violently by the arm (Hobbs, Hanks, & Wynne, 1999c). A similar fracture, also associated with violent swinging, occurs in the tibia. It is quite possible that spiral limb fractures in young pets may sometimes have the same origin, but as yet this is unproven.

Developmental Factors

Milestones in a child's normal physical development are now well documented and play a part in knowing what is possible, and what is not possible, when a child's injuries are stated to be accidental. For example, a parent may claim that the reason why a 2-month-old baby has fractured limbs is because the infant "rolled away from the middle of the bed and fell onto the floor." In the past, many have believed such a story, being unaware (or unable to face up to the fact) that this was physically impossible, because the average age of attainment of an infant's ability to roll is actually 6.5 months (Behrman, Kliegman, & Jenson, 2000). Thus, the parent's explanation cannot be acceptable.

Knowledge of developmental milestones may also be helpful in the investigation of suspected NAI in animals. Turner and Bateson (2000), citing the work of Martin (1982), point out that development of the kitten's ability to right the body in mid-air while falling (the air-righting reaction) begins at four weeks of age and is complete by six weeks. Consequently, grave doubt must be expressed when, for example, severe head injuries in an eight-week-old

kitten are blamed on "a fall from the top of a door." The air-righting reaction means that kittens land on their feet, making severe head injury extremely unlikely. Clearly, developmental milestones of both the dog and the cat need to be examined further as knowledge of NAI in these animals expands.

Responses to Veterinary Needs

In addition to the national animal welfare position statements and veterinary codes of ethics previously discussed, state legislative activity has begun to codify veterinary response to suspected abuse. California and Colorado require veterinarians to report suspected child abuse. Veterinarians in Alabama, Arizona, Illinois, Minnesota, West Virginia, Alberta, and Quebec are required to report suspected aggravated cruelty, animal torture, animal fighting, or dog fighting. Arizona, California, Florida, Georgia, Idaho, Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, Oregon, Pennsylvania, and Rhode Island provide veterinarians with immunity from civil or criminal liability if they make reports in good faith of suspected animal cruelty.

Federal legislation has been repeatedly introduced into the Canadian Parliament that would redefine animal abuse as a crime of violence rather than a crime against property. Federal funds have been made available for interdisciplinary domestic violence prevention teams that include animal protection agencies in the United States through the Department of Justice's Office of Community Oriented Policing Services (COPS), and in Canada through the National Crime Prevention Strategy.

Research Agenda for the Future

As research and programmatic responses into what is popularly called the "Link" between animal abuse and other forms of family violence mature, and as efforts in this area begin to gain some traction, some apparent patterns for future growth and development are beginning to emerge. General public awareness of the "Link," and more detailed involvement by the various professions involved, are continuing and accelerating. The growing interest in this topic among veterinary associations is mirroring similar developments in schools of social work, the field of animal law, prosecutors, law enforcement, agencies working in mental health interventions, and other professions that work with animals and people.

Veterinarians will continue to be on the leading edge of this issue, particularly in regard to several areas that have been identified (Arkow, 2006) as trends for the near future.

1. Development of diagnostic indicators:

As practitioners require more specific training on identifying the clinical signs of NAI, more diagnostic guidelines will be developed by veterinarians for veterinarians. Similarly, as practitioners discover needs for additional practice management skills to approach clients about suspicious cases, training materials will be made available.

2. **Animal shelters:** Animal care and control facilities that investigate and prosecute animal abuse will need reliable, institutionalized systems of reporting animal abuse data to law enforcement agencies and the courts. Veterinarians can be invaluable in helping to objectify and classify animal abuse and to provide expert witness testimony. Systems are already in place in many areas for the reporting of zoonotic public health concerns, and perhaps these can serve as models for animal abuse reporting.

3. **Animal-assisted interventions:** Much of the field of animal-assisted therapy and animal-assisted activities has shifted in recent years toward targeted interventions directed at violence-prone youth. Many dog training programs have been developed (Duel, 2004) that provide at-risk teens with opportunities to resolve conflicts nonviolently by using positive-reinforcement behavior modification to make shelter dogs more adoptable. What is unknown is the effectiveness of these programs. Veterinarians can provide valuable assistance in organizing these programs, ensuring the welfare of the animals involved, and conducting research to evaluate the long-term successes and failures of these strategic interventions.

4. **Community coalitions:** Many local groups have organized to provide inter-agency cross-training and cross-reporting protocols, linking child protection, domestic violence, animal protection, and elder abuse agencies. But few of these coalitions have achieved the critical mass, infrastructure, or institutionalization necessary for widespread

sustainability. Few coalitions seem to take advantage of the federal funding available. It is critical for the veterinary profession to be represented in these coalitions.

5. **Advocacy:** The increase in the number of states that have made some forms of serious animal abuse felonies is impressive, but there are no indications yet that these states are experiencing either a decrease in animal abuse or an increase in reporting or prosecutions. As veterinary medicine is one of several professions becoming involved in mandates to report suspected family violence, ongoing research will be needed to evaluate the efficacy of these legislative strategies.
6. **Training:** Colleges of veterinary medicine have begun to introduce training in the "Link" into the curricula; it is anticipated that law schools, schools of social work, and law enforcement training academies should be the next venues for this instruction.

Conclusion

Preventing cruelty to animals is the founding mission of the SPCA movement, and protecting animal health is the founding mission of the veterinary profession. But despite over a hundred years of dedicated work, animal abuse persists with disheartening regularity.

Our understanding of the causes of animal abuse has increased somewhat, but there is still much to be done to address these causes. As we examine the triggers involved, it is becoming increasingly clear that we cannot separate violence against companion animals from the broader issues of violence in our families and communities (RSPCA Australia, 2004). Engaging the veterinary profession in this effort is a priority.

Veterinary involvement can be many-faceted. Veterinarians can provide medical care for abused pets; assist SPCAs and humane societies with investigation, documentation, and forensics in cruelty investigations and serve as expert witnesses in prosecutions; participate in multidisciplinary response teams; train animal shelter staffs and cross-train human services officials in the intricacies of cruelty investigations; provide animal-based therapeutic opportunities for at-risk youth and convicted animal abuse offenders; and provide resource and referral information about child abuse, animal abuse, elder abuse, and domestic violence to their clients. When discussions with clients fail to resolve concerns

of suspected abuse, or when such consultations increase rather than allay concerns, the veterinarian should consider referring cases of suspected abuse to appropriate authorities.

Human medicine's crossing of many of these thresholds years ago resulted in increased reporting of cases of child abuse, domestic violence, and elder abuse. The time has come for veterinary medicine to join the human medicine field in assuming public health responsibilities in the prevention of violence.

When animals are abused, people are at risk; when people are abused, animals are at risk (Arkow, 1996). Although the etiology and symptoms of family violence are not completely understood and there are no obvious solutions, family violence may be abated through a multidisciplinary approach that includes the veterinary profession.

The veterinarian is not only a public health authority, but also a type of family practitioner. As the human health care field did earlier, the veterinary profession now has the responsibility to identify and promulgate standardized diagnostic criteria and clinical and environmental indicators of NAI to animals, and to be engaged in community programs that prevent family violence.

Veterinary consideration for the protection of all family members will elevate the status of animals and of the veterinary profession, protect all family members who are at risk, make intervention strategies more effective, and set the highest standards of animal well-being. As professionals with long-standing and committed humane interests, veterinarians are well positioned to find creative approaches that abate violence and help heal animals of many species—including the human one (Lockwood, 2000).

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Appendix

This survey is supported by



and



FACULTY of VETERINARY MEDICINE
Royal (Dick) School of Veterinary Studies
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February, 1998

Non-accidental injury in the dog and cat

Dear Colleague,

Please help us with this survey.

What is this survey about?

The survey is about **non-accidental injury (NAI)** in the dog and cat. Non-accidental injury is also sometimes known as **physical abuse**. In children, you may also know it as the "**Battered Child Syndrome**". In dogs and cats it therefore can be called the "**Battered Pet Syndrome**".

Why study NAI?

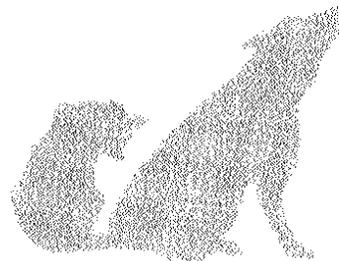
First: although non-accidental injury is known to occur in companion animals, recognition and diagnosis can be very difficult for veterinary surgeons. There is no published comprehensive account of the circumstances, clinical signs, and pathology of the "battered pet". In **child** physical abuse, which has been recognised for over 30 years, guidelines are available for recognising the condition and for helping to **differentiate** between **accidental** and **non-accidental** injury. For example, unexplained subdural haematomata and retinal haemorrhages are highly suggestive of NAI and a torn frenulum is virtually diagnostic.

The experiences of veterinary surgeons who complete this questionnaire will help to ascertain the extent of NAI in the dog and cat, as seen in clinical practice, and to formulate guidelines to differentiate between accidental and non-accidental injury.

Secondly: a diagnosis of NAI is important because there is evidence that the occurrence of physical abuse to animals may indicate that similar abuse is being directed against other family members, such as the children. It may also be an early indicator of future violent behaviour by the perpetrator.¹

Will your answers be anonymous?

Yes. Your name and address are not requested.



¹ Arkow, P. (1994) Child abuse, animal abuse and the veterinarian. *Journal of the American Veterinary Medical Association*, 204, 1004-1002.

Note: this questionnaire may be completed collectively by all members of the practice, both veterinary surgeons and nurses.

Section 1

1.1 Do you acknowledge NAI? (please tick)

Yes

No

1.2 Have you ever suspected, or seen, NAI? (please tick)

Yes

↓

Please go to Section 2

No

↓

Please go to Section 3, on the back page

Section 2

Details of suspected or known cases of NAI

To make it straightforward to fill in the questionnaire, case sheets have been provided for *five* cases. Do not worry if you have fewer - just leave the pages blank. Please feel free to give as much detail as you can. Thank you.

If you feel that you have seen more than 5 cases, please tick here

If you have ticked the box, we would be most grateful if you supplied details of these further cases. More case-sheets will be sent to you, on request. (This will result in loss of your anonymity **BUT** all information will be treated as strictly confidential.)

Name

Address:

Please move now to Case 1.

2.1

Case 1

Approximate date:

Species (please tick) Dog Cat

Breed (please specify)

Sex (please tick) male female male neuter female neuter unknown

Age (please tick) under 12 weeks 3-6 months 7 months-2 years over 2 years
unknown

What made you suspect, or allowed you to recognise, NAI? (please specify)

Did this involve: a single episode or more than one episode

What injuries did you see on the:

Head	Eyes
Thorax	Abdomen
Limbs	Other site (please specify)

Please tick one of the following:

Patient: Survived Died of injuries Euthanased because of severity of injuries

If this is your last case, please go to section 3 (back page).

2.2

Case 2

Approximate date:

Species (please tick) Dog Cat

Breed (please specify)

Sex (please tick) male female male neuter female neuter unknown Age (please tick) under 12 weeks 3-6 months 7 months-2 years over 2 years
unknown

What made you suspect, or allowed you to recognise, NAI? (please specify)

Did this involve: a single episode or more than one episode

What injuries did you see on the:

Head	Eyes
Thorax	Abdomen
Limbs	Other site (please specify)

Please tick one of the following:

Patient: Survived Died of injuries Euthanased because of severity of injuries *If this is your last case, please go to section 3 (back page).*

2.3

Case 3

Approximate date:

Species (please tick) Dog Cat

Breed (please specify):

Sex (please tick) male female male neuter female neuter unknown

Age (please tick) under 12 weeks 3-6 months 7 months-2 years over 2 years
unknown

What made you suspect, or allowed you to recognise, NA? (please specify)

Did this involve: a single episode or more than one episode

What injuries did you see on the:

Head	Eyes
Thorax	Abdomen
Limbs	Other site (please specify)

Please tick one of the following:

Patient: Survived Died of injuries Euthanased because of severity of injuries

If this is your last case, please go to section 3 (back page).

2.4

Case 4

Approximate date:

Species (please tick) Dog Cat

Breed (please specify)

Sex (please tick) male female male neuter female neuter unknown Age (please tick) under 12 weeks 3-6 months 7 months-2 years over 2 years
unknown

What made you suspect, or allowed you to recognise, NAI? (please specify)

Did this involve: a single episode or more than one episode

What injuries did you see on the:

Head	Eyes
Thorax	Abdomen
Limbs	Other site (please specify)

Please tick one of the following:

Patient: Survived Died of injuries Euthanased because of severity of injuries

If this is your last case, please go to section 3 (back page).

2.5

Case 5

Approximate date:

Species (please tick) Dog Cat

Breed (please specify)

Sex (please tick) male female male neuter female neuter unknown

Age (please tick) under 12 weeks 3-6 months 7 months-2 years over 2 years unknown

What made you suspect, or allowed you to recognise, NAI? (please specify)

Did this involve: a single episode or more than one episode

What injuries did you see on the:

Head	Eyes
Thorax	Abdomen
Limbs	Other site (please specify)

Please tick one of the following:

Patient: Survived Died of injuries Euthanased because of severity of injuries

If this is your last case, please go to section 3 (back page).

Section 3

Have you seen or experienced any of the following in your patients? (please tick)

- 3.1 unexplained injuries (if yes, please specify) Yes No
- 3.2 more than one fracture, of differing ages, in same animal Yes No
- 3.3 unexplained old rib fractures Yes No
- 3.4 history not consistent with injury (if yes, please specify) Yes No
- 3.5 previous history of unexplained injury/death, with the same owner/family Yes No

Please now complete Section 4, below.

Section 4

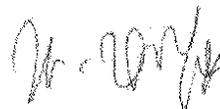
Please use this space for any further comments you may wish to make.

**Thank you very much for completing this questionnaire.
A Freepost envelope is provided in which to return it.
Your help is greatly appreciated.**



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