

APIC State-of-the-Art Report: The implications of service animals in health care settings

Susan L. Duncan, RN

The 1997, 1998, and 1999 APIC Guidelines Committees

The Association for Professionals in Infection Control and Epidemiology, Inc (APIC), is a multidisciplinary organization of more than 12,000 health care professionals who practice infection control and epidemiology within a variety of health care settings. Delta Society is a national not-for-profit organization founded in 1977 that promotes the benefits of animals to human health through research, education, and programs. The National Service Dog Center (NSDC) is a Delta Society program that focuses on the health benefits of service animals for persons with disabilities. The NSDC provides service animal-related education and consultation to researchers, health care providers, persons with disabilities, trainers, policy makers and enforcers, and the general public. Interest in service animals as viable health care interventions has risen dramatically, as evidenced by the increase in requests to the NSDC for information—from a few thousand requests per year in 1995 to more than 34,000 per year in 1999.

During the last 2 decades, service animals that are trained to help persons with disabilities have been making more frequent appearances in health care settings. After a long history of banning animals from these environments, many health care providers now endorse the presence of these animals in clinical and public settings. This APIC State of the Art Report (SOAR) examines the prevailing laws, scientific literature, and anecdotal data about service animals. The document gives an overview of the roles of service animals and their implications for health care providers. This SOAR will also suggest ways to develop prudent policies and practices for infection control and risk management.

From the Delta Society National Service Dog Center.

Reprint requests: APIC, 1275 K Street NW, Suite 1000, Washington, DC 20005-4006.

AJIC Am J Infect Control 2000;28:170-80.

Copyright © 2000 by the Association for Professionals in Infection Control and Epidemiology, Inc.

0196-6553/2000/\$12.00 + 0 **17/52/106056**

doi:10.1067/mic.2000.106056

THE DEFINITION OF SERVICE ANIMALS AND THEIR IMPLICATIONS FOR CIVIL RIGHTS

The Americans with Disabilities Act (ADA) of 1990 is a federal civil rights law that protects persons with disabilities from discrimination in the areas of employment, public services, public accommodations, services operated by private entities, and telecommunications. The ADA specifies who is protected by this law and identifies the relationship of the ADA to other federal, state, and local laws (ie, which law prevails when other laws conflict with the ADA). The purpose of the ADA is to ensure that persons with disabilities have equal opportunity to access employment, goods, and services that are available to the general public.¹ Title III of the ADA mandates that persons with disabilities accompanied by service animals generally must be allowed access with their service animals into places of public accommodation, including restaurants, public transportation, schools, and health care facilities.

Disability, as defined in the ADA, is any physical or mental impairment that substantially limits one or more major life activities, including but not limited to walking, talking, breathing, hearing, or caring for oneself. This legal definition might differ from individual interpretations of the word or from definitions used to determine program eligibility for insurance or entitlement purposes. However, it is this definition that determines whether the ADA protects a person. The ADA recognizes all disabilities that fit this definition as equally legitimate.

Service animal is a legal term defined in the ADA. A service animal is any animal individually trained to do work or perform tasks for the benefit of a person with a disability. Examples of service animals include guide dogs, hearing or signal dogs, seizure alert cats, mobility dogs, and emotional support cats. A service animal is not considered a “pet” because it is specially trained to help a person overcome the limitations caused by his or her disability. Service animals generally work for their handlers (the persons with disabilities who rely on the animals for help, sometimes referred to as “partners”) and usually have little, if any, contact with others.

Service animals are being chosen with increasing frequency to help mitigate the limitations of persons' disabilities because they are portable, multitasking, and cost-effective health care interventions.

Dogs are most often trained for service work. There is no validated evidence that any particular breed is better in the role—service dogs can be any size or any breed. In addition to dogs, other species are sometimes trained as service animals. The ADA definition of service animal does not limit the species of service animals, but, as emphasized by Kauffman,² little is known about the effects of the service role on species other than dogs and cats or the effects that other species in the roles of service animals have on public health and safety.

APPLICATIONS OF SERVICE ANIMALS FOR PERSONS WHO HAVE DISABILITIES

Many persons with disabilities can achieve greater functional independence with the help of service animals. Service animals help persons who have a wide variety of limitations caused by disabilities.³ Reports to the NSDC during the last several years reflect emerging additional roles for service animals. No longer limited to a single role or species, service animals can be trained to:

- Alert persons who are deaf or hard of hearing to the presence of others or to important sounds (eg, sirens and alarms, a person's name being called, traffic, a child crying, etc).
- Provide help with mobility (eg, retrieve objects, help a person to balance while walking, carry items in backpacks, lead persons who have visual impairments around obstacles, etc).
- Alert persons to oncoming seizures, giving those persons time to stop activities and assume safe positions before seizures or alerting caregivers that seizures are imminent. (The mechanism by which an animal perceives an oncoming seizure is unknown; animals that demonstrate this ability are trained to provide a consistent response as an alerting behavior.) Animals that do not alert their handlers to oncoming seizures might help instead by staying with them during seizures and helping them become reoriented and mobile after the seizures. Several animal species, including dogs, cats, and some reptiles, have been reported to alert people to the onset of seizures.
- Provide a consistent, interactive focus to deescalate stress for persons with mental or emotional disabilities.
- Alert their handlers to episodes of hypoglycemia before the people have symptoms, giving those persons time to monitor and correct their glucose level.

- Help persons who have Parkinson's disease by initiating body contact to interrupt episodes of tremor or propulsive walking (the mechanism by which this is effected is not yet empirically substantiated).

The work of a service animal need not be limited to one category. From an occupational therapy perspective, Zapf describes the range of benefits of service animals trained to help people with multiple disabilities.⁴ Allen and Blascovich⁵ analyzed the significant health care dollar savings that can be realized when service dogs replace paid caregivers for people with disabilities.

In addition to the tasks that service animals perform, persons with disabilities can benefit from their relationships with their animals. The majority of published studies about the effects of service and companion animals deal not with task-oriented benefits, such as how consistently a guide dog helps its handler avoid obstacles, but rather with how the presence of, and interaction with, the animal can improve the handler's overall quality of life.⁶⁻⁸ These studies measure how animals mitigate the effects of bereavement,^{9,10} moderate stress and promote response to treatments,¹¹⁻¹⁵ normalize physiologic responses,¹⁶⁻¹⁸ enhance childhood development,¹⁹ improve socialization,^{20,21} and provide older adults with social support and motivation.²²⁻²⁸

HOW SERVICE ANIMALS DIFFER FROM THERAPY ANIMALS

Service animals and therapy animals serve two separate and distinct health-related roles for persons and differ in the way they provide health benefits to people. As defined in the *Standards of Practice for Animal Assisted Activities and Animal Assisted Therapy*,²⁹ therapy animals are usually personal pets that, with their owners, provide supervised, goal-directed intervention to clients in hospitals, nursing homes, special-population schools, and other treatment sites. Therapy animals usually are not service animals. The ADA and other federal nondiscrimination laws have no provisions for therapy animals; however, some states have laws that define therapy animals and provide for their access to public areas, such as health care facilities. Information about state and local laws can be obtained from the state Attorney General's office.

SERVICE ANIMAL TERMINOLOGY AND SUPPLY

The formal training of service animals began at the end of World War I, with dogs trained to lead persons who were blind. However, the terminology used to describe these animals was not standardized until 1990, when the ADA coined the term "service animal." Many terms are still used to describe service animals; they are often referred to by the type of work that they do (eg,

guide dog, hearing cat, emotional support dog). A trend toward use of the term “service animal” or “service [species name]” is developing; many persons prefer this because it is consistent with the law and describes the role of the animal without disclosing the nature of the person’s disability. It is also useful when an animal cannot be readily categorized because it is cross-trained to help a person who has multiple disabilities.

There have never been recognized standards that are applied uniformly to all service animal trainers, handlers, or service animals. Duncan³⁰ summarizes the field of service animal training and supply: In most states only a business license is necessary to train a service animal for someone else. Training can be provided by career service animal trainers, independent trainers, or by persons with disabilities. Many persons with disabilities choose to hire an independent trainer or train a service animal themselves to avoid nonreimbursable costs, extensive travel, arbitrary qualification criteria, or long waits (reported to the NSDC by consumers and trainers to range from several months to as long as 9 years). There is no readily recoverable data that indicate any differences in the quality of training, or reliability, of service animals trained by these different sources.

HOW HEALTH CARE FACILITIES ARE AFFECTED BY LAWS THAT APPLY TO SERVICE ANIMALS

Health care facilities—hospitals, clinics, doctors’ and dentists’ offices, laboratories, imaging services, and others—are covered under the ADA (see Technical Assistance Letter from the US Department of Justice, 1993, Appendix I) and considered places of public accommodation. Title III of the ADA requires that places of public accommodation, including health care facilities, modify their policies and practices to permit the use of a service animal by a person with a disability, unless doing so would create a fundamental alteration or a direct threat to the safety of others or to the facility. For example: a service animal may howl through the night and prevent people from sleeping, or it may, in a nonthreatening manner, block a health care provider from administering care to a client. In contrast, a direct threat would occur were a service animal to growl at or bite someone or “get underfoot” and impede a person’s safe travel.

State or local government-owned or funded facilities and service providers have similar responsibilities under Title II of the ADA, which has provisions similar to Title III. Facilities and service providers that are owned or funded by the federal government (such as Veteran’s Administration facilities and programs) have responsibilities under Section 504 of the Rehabilitation Act, which are also similar to ADA Title III provisions. Health care programs and facilities owned by religious

organizations may be exempt from federal law. For information about the status of any facility, contact the US Department of Justice ADA Information Line at 800-514-0301.

Since service animals meet disability-related needs, they might be found in various areas of the health care system, accompanying persons with disabilities who are employees, patients, visitors, instructors, volunteers, students, or others. Health care facilities may receive conflicting directives about having animals on the premises. States and localities might have laws that also affect service animals. When these laws conflict with federal laws, the law that provides greater protection to *the person with the disability* is the law that prevails; that is, the law that is less restrictive for the person with the disability takes precedence. When conflicting federal laws affect health care facilities, contact the US Department of Justice as above for clarification about the facility’s responsibilities.

IDENTIFICATION OF PERSONS WITH DISABILITIES AND SERVICE ANIMALS: CERTIFICATION AND OTHER MYTHS

Public accommodations often have concerns about how to ensure that an animal is really a service animal, fearing that persons will try to present their pets as service animals. The intent of the ADA is not to put a public accommodation into the role of policing the legitimacy of a person’s claim of disability or of an animal’s function. Rather, its aim is to ensure that the goods and services of a public accommodation are readily accessible to persons with disabilities, regardless of their types of disabilities or the assistive equipment they might use.

A popular belief is that “legitimate” service animals must be “certified.” Some trainers offer certification, but without uniform standards for this process, it merely represents the opinion of an evaluator that the animal is capable of doing the work for which it was trained. Certification is not a guarantee of quality or predictability of behavior. The ADA prohibits public accommodations from requiring “certification” or proof of an animal’s training, or proof of a person’s disability, for the purposes of access.

There is no legal requirement that a service animal wear special equipment or tags. Service animals usually wear the equipment necessary for the work they do; this might be simply a collar and leash.³¹ Some localities offer licensing tags for pets and for service animals, but these cannot be required for the purposes of access under the provisions of the ADA.

Health care facilities, like other places of public accommodation, are advised by the US Department of Justice Civil Rights Division to accept the verbal reassurance of the person that he or she has a disability

(and is protected by the ADA), and that the animal is a service animal.³² Unnecessary inquiry into the nature of the disability, or requiring “proof” or identification of the person’s disability or the animal’s training, is prohibited by the ADA and other federal nondiscrimination laws. Minimal inquiry is best; this acknowledges the privacy needs of the person with a disability.

Subsequent observation of the behavior of the animal should help in assessing whether the animal constitutes a direct threat to health or safety or a fundamental alteration to the nature of the business. If the animal’s presence or behavior creates such a direct threat or fundamental alteration, it does not have to be tolerated by the health care facility. Although “misbehavior” does not necessarily indicate that an animal does not meet the definition of service animal, the health care facility has recourse to protect itself by requiring the removal of the animal from the premises if its presence or behavior creates a direct threat to safety or a fundamental alteration.

IMPLICATIONS OF SERVICE ANIMALS FOR INFECTION CONTROL AND RISK MANAGEMENT

Effective policy development will consider all the facility areas open to persons and the effects a service animal would have on those areas and on the persons within them. Risk assessment will be based on demonstrable factors, not on speculation about what an animal “might” do or whether an area “might” be unsafe for an animal.

It is important for health care providers to differentiate between actual risks posed by a service animal and mere inconvenience or displeasure with the presence of a service animal. Health care providers must make their goods and services available to persons accompanied by service animals without isolating, segregating, or otherwise discriminating against those persons. Published studies about risks posed by animals include zoonotic disease transmission,³³⁻³⁹ trauma,⁴⁰⁻⁴² the triggering of allergic reactions,⁴³ and disruptive or destructive behaviors. The actual risk that a service animal presents will be affected by many factors including its health and hygiene, its behavior, its contact with others, the frequency of that contact, the environment, the ability of its handler to manage its behavior, and the effects of simple preventative measures (eg, handwashing) to reduce the risk of disease transmission.⁴⁴

HANDWASHING FOR EMPLOYEES, CLIENTS, HANDLERS, AND VISITORS

Handwashing is an essential activity in the health care setting. Persons should wash their hands with soap and water after direct contact with the service animal, its equipment, or other items with which it has been in

contact. Antimicrobial soap is not required. If there is no running water available, a waterless agent approved for use in the facility may be used.

HANDLER AND CLIENT EDUCATION

Handlers, whether employee, visitor, or patient, must understand that the animal is not allowed to come in contact with any patient’s nonintact skin (surgical sites, drainage tubes, wounds, etc). Handlers should be informed of any facility areas that are usually open to them, but which are off-limits to service animals. Facilities should not permit handlers with service animals to act as self-appointed animal-assisted therapy (“pet therapy”) providers. Education may also be required for roommates and visitors regarding their interactions with the service animal.

STAFF EDUCATION

Staff may not be well-informed about the roles of service animals and their benefits to the persons who have them. Comprehensive staff education must be provided that includes:

- How service animals are defined
- Ownership and identification criteria
- Laws and policies that apply to service animals and their handlers.
- How to interact appropriately with persons and their service animals.

Such education is vital to prepare staff to competently and confidently address service animal issues (see Resources). Staff education should also include risk-reduction activities, such as handwashing, appropriate use of personal protective equipment (PPE), responsibilities of staff and owner for handling and cleaning issues, and amount and type of client education.

SERVICE ANIMALS IN SPECIFIC CLINICAL AREAS

A service animal may be restricted or denied access to areas where its handler would generally be allowed only when it can be demonstrated that the presence or behavior of that particular animal would create a fundamental alteration or a direct threat to other persons or to the nature of the goods and services provided. Although it may be possible to identify certain areas where a service animal could not reasonably be permitted (eg, an operating room where gowns and masks are required to reduce contamination), other areas may be subject to a case-by-case determination, based on the circumstances and the individual service animal. A birthing room is one example. If persons are allowed to be present without being required to observe special precautions (gowning, scrubbing, etc), it would be difficult to argue that a clean, healthy, well-behaved service animal should be denied entrance. However, if the

service animal causes a fundamental alteration or direct threat, the health care facility may require that the risk be controlled. If it cannot be controlled, then the service animal may be removed from the premises. Similarly, the emergency department, intensive care unit, recovery room, and other areas may require a case-by-case determination to assess actual risk. Some facilities have a crate on site in which a service animal can be temporarily contained while the handler is in a restricted area or if the handler is unable to provide for the stewardship of the service animal.

HIGH-RISK CLIENT POPULATIONS

The basis for determining the risk to clients of contact with a service animal will be the effects of that contact on the client. While health care providers should be aware of potential zoonotic and trauma risks, each case should be evaluated in terms of the condition of the client and the actual risk associated with the individual animal. For example, persons who are immunosuppressed or otherwise debilitated are not necessarily pre-empted from being in the presence of a service animal. Likewise, an immunocompromised client who is permitted to have contact with visitors without requiring them to wear masks or gowns may not be at any greater risk if a visitor is accompanied by a service dog. Angulo et al³³ and the Centers for Disease Control and Prevention (CDC)⁴⁵ describe how immunocompromised persons may have some immunities that protect them from substantial risks through contact with their own animals. Another example is when a person with visual impairments who depends on a guide dog to help him or her forward has spinal surgery; it might be necessary to modify the way in which the dog leads the person, to avoid trauma to the surgical site or to more therapeutically accommodate the person's gait. A third example is when a client who is recovering from severe burns has a visitor who is accompanied by a service dog; if the client avoids direct contact with the service dog, there might be no reason to deny access to the service animal.

ZOOONOTIC RISKS

Animals, like persons, can host a wide variety of organisms that are potential pathogens for persons and other animals. There are no substantiated, published studies that have determined the statistical risks associated with healthy, vaccinated, well-cared-for, and well-trained service animals. Nor is there substantial case-reporting data to indicate that service animals pose any greater threat than the average person.⁴⁶ Threats of infectious diseases have been well-documented in wild populations of dogs, cats, rodents, turtles, birds⁴⁷; non-human primates⁴⁸⁻⁵⁰; laboratory animals; and in some

domesticated companion animals.⁵¹⁻⁵³ However, these findings do not necessarily apply to healthy, vaccinated, well-maintained service animals. Avoiding contact with animal urine and feces and good handwashing after contact with the animal can effectively reduce the risks of zoonotic disease transmission.

There are many biosafety and bioethical concerns about exotic (wild) species, such as reptiles, birds, and nonhuman primates (NHPs) in the roles of service animals.^{2,54} Whether these animals can be trained to reliably perform tasks is questionable. Their impact on public health and safety is controversial, as are the effects on the animals of the role and lifestyle of service animal. Some species have no available vaccinations to prevent them from contracting and transmitting similar zoonoses that are preventable in dogs and cats. Many exotic species require specific handler permits and are affected by federal, state, and local laws that define where and how the animal may be kept and exhibited. For example, Federal Quarantine Regulations⁵⁵ restrict the importation, and sale or distribution, of nonhuman primates because the communicable disease risk from these animals is so great. Importers must register with the CDC, they must implement disease control measures, and they may distribute nonhuman primates only for bonafide scientific, educational, or exhibition purposes. These restrictions also apply to the reimportation of nonhuman primates that originate in the United States.^{55,56}

In 1996, the CDC issued a memo to registered importers of nonhuman primates reiterating the public health necessity to limit the distribution of imported nonhuman primates to prevent the introduction and spread of communicable diseases.⁵⁶ The use of imported NHPs, including capuchin monkeys, as service animals does not comply with these quarantine regulations. The high rate of injuries caused by their biting, and the zoonotic diseases they transmit, also make these species generally unsuitable as service animals. As described by Johnson-Delaney⁵⁷ and Shoemaker,⁵⁸ nonhuman primates born in captivity are not considered "domesticated" and still retain wild animal characteristics, including health and behavior risks. Further, all NHP zoonotic disease risks cannot be effectively eliminated through captive breeding. Although training monkeys as service animals may seem appealing because of their high level of dexterity, agility, and problem-solving capabilities, little has been published about the effects on the person who has a monkey as a service animal. However, persons who have monkeys as pets report incidents of bites and the need to remove many of the monkeys' teeth to reduce damage from these bites; increasingly aggressive and difficult-to-control behaviors as a monkey

Table 1. Possible zoonotic risks among dogs, cats, and nonhuman primates (NHPs)

Animal	Disease	Organism	Source	Prevention	
All	Rash; infection in, or allergic reaction to, bites	Variety	Fleas, mites Feces	Eradication of fleas and mites Handwashing	
Dog	Bacterial diarrhea	Variety of organisms: <i>campylobacter</i> , etc			
	Dermatophytosis (ringworm)	Tinea (Microsporium spp, Trichophyton spp, others)	Contact	Handwashing	
	Giardia	Giardia protozoan	Feces	Handwashing	
	Leptospirosis	<i>Leptospira interrogans</i>	Urine	Handwashing	
	Lyme disease	<i>Borellia burgdorferi</i>	Vector: tick Tick bite	Eradication of ticks	
	Rabies	<i>Lyssavirus rhabdovirus</i>	Saliva	Vaccination of animal	
	Rocky Mt Spotted Fever	<i>Rickettsia rickettsii</i>	Vector: tick Tick bite	Eradication of ticks	
	Scabies	<i>Sarcoptes, cheyletiella</i>	Mites	Eradication of mites	
	Toxocariasis (Larval migrans)	<i>Toxocara canis</i> and <i>T cati</i>	Feces	Handwashing	
	Cat	Bacterial diarrhea	Variety of organisms: <i>campylobacter</i> , etc	Feces	Handwashing
Cat scratch disease		<i>Bacillus</i>	Cat scratch, bite, lick, or other exposure (usually to kitten)	Handwashing	
Cryptosporidiosis		Cryptosporidium protozoan	Feces	Handwashing	
Dermatophytosis (Ringworm)		Tinea (Microsporium spp, Trichophyton spp, others)	Contact	Handwashing	
Rabies		Lyssavirus rhabdovirus	Saliva	Vaccination of animal	
Rash; infection in, or allergic reaction to, bites			Fleas, mites	Eradication of fleas and mites	
Toxocariasis (Larval migrans)		<i>Toxocara canis</i> and <i>T cati</i>	Feces	Handwashing	
Toxoplasmosis		<i>Toxoplasma gondii</i>	Feces	Handwashing	
Nonhuman primates (NHPs)		Bacterial diarrhea	Variety of organisms: shigellosis, (59), etc	Feces	Handwashing
		Pneumonia	Bacteria, viruses, etc	Undefined—may include direct and indirect contact with secretions; airborne	Prevent exposure to host
	Rabies	Lyssavirus rhabdovirus	Saliva	Vaccination of animal*	
	Tuberculosis	Mycobacterium tuberculosis	Airborne droplet nuclei	Prevent exposure to host	
	Viral, including rhinovirus, influenzas, diphtheria, pertussis, herpesvirus, and	Variety of viruses	Direct or indirect contact; airborne	Prevent exposure to host	
	Hepatitis A	Hepatitis A virus (HAV)	Feces	Vaccination of animal*	
	Hepatitis B	Hepatitis B virus (HBV)	Body fluids	Vaccination of animal*	
	Mumps	Paramyxovirus	Droplet and direct contact with saliva	Prevent exposure to host	
	Measles	<i>Paramyxoviridae morbillivirus</i>	As above, and with freshly contaminated articles	Vaccination of animal*	
	Polio	Poliovirus	Fecal, pharyngeal secretions	Vaccination of animal*	

*Indicates few challenge studies available to definitively assess efficacy of vaccine.⁵⁷

matures; the difficulty to achieve durable training; and other wild traits.⁵⁸

Without studies specific to service animals, it is difficult to note which infectious diseases might reason-

ably be expected in service animals. Risk assessment should include all factors of disease transmission and susceptibility. The likelihood that circumstances will occur in which the animal may become infected, and

transmit the disease, as well as the possibility that a person could transfer a disease or infestation to the animal, should be considered. For example, when a person has no direct contact with feces from a dog that harbors intestinal giardia, there may be little risk to human health. A monkey that harbors giardia may present a much greater risk because monkeys generally cannot be reliably housetrained or prevented from touching their anal areas then touching persons or items that persons handle. Table 1 lists some zoonotic diseases that can occur among domesticated dogs and cats⁴⁴ and among monkeys.⁵⁷ For more information about transmission, effects, treatments, and preventions, consult a reference such as *Control of Communicable Diseases in Man*.⁵⁹ For information about local, animalborne disease concerns, consult the local Department of Public Health.

SERVICE ANIMAL HEALTH

If a service animal is epidemiologically linked to an infection or outbreak, the animal should be examined by a veterinarian. Assumptions about the service animal's health should not be made by nonveterinary health care providers. If disease transmission occurs because of inadequate use of prudent prevention techniques (such as handwashing), then appropriate interventions should be developed on the basis of the findings. If a service animal does exhibit a condition that presents a direct threat to the health or safety of others, then the animal may be removed, restricted, or denied access to the area, or additional information may be required about the animal if it is necessary to protect public health and safety. For example, it may be possible that proof of rabies vaccination in service dogs for the purpose of access would be allowable in an area with a high prevalence of dog rabies, if it could be demonstrated that requiring such documentation was necessary to protect public health and safety. Consult the US Department of Justice ADA Information Line, (800) 514-0301, for guidance about initiating restrictive policies.

AREA CLEANUP

No special housekeeping methods are needed, provided there is no contamination with animal urine, feces, vomit, or blood (organic debris). If the animal contaminated the area, the cleanup procedures should be performed by using appropriate personal protective equipment (PPE). Gloves are the minimum protection that should be used. The spill should be removed with paper towels, which should be placed in a plastic bag in the trash container, similar to the disposal of diapers. After removal of the organic debris, the area of the spill should be cleaned with a facility-approved disinfectant,

following label instructions for adequate contact time to ensure disinfection.

ALLERGIES

Allergic reactions to the animal can occur among staff or other clients.^{60,61} Avoiding or limiting contact with the service animal's saliva, dander, and urine will help mitigate allergic reactions.⁶² According to the American Academy of Allergy, Asthma & Immunology, dog or cat allergies occur in approximately 15% of the population.⁶² If the allergy is severe enough to cause impairments that substantially limit one or more major life activities (ie, causes a disability as defined in the ADA), both the person with the allergy and the person with the service animal are protected by the ADA, and the facility is obligated to ensure their access to its goods and services. If the effects of the allergy⁶³ do not meet the definition of disability, the ADA does not protect the person with the allergy and the facility does not have an ADA obligation toward the person who has the allergy.

ROOMMATE ISSUES

Health care facilities should establish policies for accommodating service animals when private rooms are not available. These policies should include guidance about nondiscriminatory actions to take when roommates have conditions or preferences precluding them from being in the presence of a service animal.

The ADA provides the minimum parameters required for access by persons with disabilities who are accompanied by service animals. Policy development should differentiate between modifications of policies and practices made to comply with legal requirements and those made as elective customer service interventions. This will provide rationale if a facility initiates policies that provide fewer access restrictions than those mandated by the laws.

STEWARDSHIP OF THE SERVICE ANIMAL: ITS CARE AND BEHAVIOR MANAGEMENT IN THE HEALTH CARE FACILITY

The ADA specifies that the care and behavior management (stewardship) of the service animal is the responsibility of the handler. Because of the many health benefits a service animal can provide, facilities may elect to support the presence of the animal by providing a system to obtain emergency stewardship when the patient needs help but has no one to assist with the animal's care. In-house or community volunteer services, animal welfare organizations, community service organizations, animal caregivers (eg, veterinary, boarding, grooming, or walking/sitting services), and dog training and breed fancy clubs may be among the

resources available to help provide stewardship for a client's service animal. Legal services should be consulted regarding any formal consent needed when the handler transfers responsibility for service animal stewardship to a facility representative. Other issues that must be addressed on a case-by-case basis include, but are not limited to, exercise of the animal, cleanup of excrement in the toileting area, and storage of the animal's food and water.

It would be a reasonable modification of policies and practices to identify an area accessible to the handler where the service animal could toilet and to permit the service animal to be exercised by another person, if the handler was unable.

Temporary confinement of the service animal provided by the health care facility

If the handler is unable to care for his or her service animal while receiving treatment or services from a facility, the facility may elect to provide a crate or other containment for the animal for a short term (24 hours or less). This situation brings up many issues that must be addressed, such as cleaning and disinfection of the crate during and after use, as well as feeding, watering, and exercising the animal during its confinement. These issues should be discussed with the facility's risk management or legal department for guidance about facility and personal liability, insurance considerations, necessary handler consent, and other related factors.

Facility-provided housing

When facilities provide or contract to provide housing, such as that provided for significant others or for clients undergoing outpatient treatment, the facility is obligated to permit the use of service animals by persons with disabilities, unless the service animals create fundamental alterations or safety hazards. This is covered by provisions of the ADA or of the Fair Housing Amendments Act.

"No pets" policies

"No pets" policies may not be applied automatically to service animals. Legally, service animals are not considered "pets." Facilities must be able to demonstrate that the presence or behavior of an animal would create a fundamental alteration or direct threat in the area in question.

Persons accompanied by service animals may be informed of any areas that are off-limits to service animals. This may occur when the person enters the facility and should be done in a polite and respectful manner. Policies must be communicated to the person in a way that is accessible and understandable for that per-

son (eg, verbal, print, sign language interpreted, or lip-read). If a person with a service animal must have access to an area that is off-limits to service animals, it is the responsibility of the person to provide alternate stewardship for the animal during the time he or she is in the area. See also *Stewardship of the Service Animal: Its Care and Behavior Management in the Health Care Facility and Temporary Confinement of the Service Animal Provided by the Health Care Facility*.

INCIDENTS INVOLVING SERVICE ANIMALS AND FIRST AID

Any injuries caused by a service animal must be evaluated and treated promptly by medical personnel following protocols for the type of injury, in an emergency department or urgent care facility, if necessary. Report the injury to the owner of the animal and to the local enforcement agency (often this is Animal Control), which can obtain vaccination verification and enforce animal control regulations. Any incident involving a service animal, whether the service animal caused the incident or was affected by the incident, must be comprehensively documented. If a service animal damages property, the handler may be held responsible for those damages, provided a policy already exists—and is enforced—that would require payment if a person caused similar damages. If a service animal is injured, prompt evaluation and treatment of injuries should be provided by a veterinarian.

CONCLUSION

Service animals provide persons with disabilities a dignified way to remain integrated in their communities. In the 80 years that service animals have been trained and used in the United States, there is no appreciable body of evidence to suggest that healthy, vaccinated, well-trained service dogs pose any threat to public health and safety that is significantly greater than the risks posed by the general public. Through a literature review and queries to the CDC, the US Department of Justice Civil Rights Division, APIC, and Delta Society (NSDC), no reported clusters or epidemics of incidents have been attributed to service animals. This absence of data implies that the health and behavior management of service dogs has generally been adequate to control their risks as sources of zoonoses. Additional research about the specific effects of service animals on public health and safety, including species related information, is necessary to develop more sophisticated risk-management guidelines and recommendations for health care practices.

Service animals meet their handler's disability-related needs, often more efficiently than other persons or equipment. They provide their handlers with enhanced

functional ability and quality of life. All health care workers and ancillary staff that have contact with patients or the public must understand their rights and their obligations to persons with disabilities who are accompanied by service animals. Welcoming persons with service animals into health care facilities is not just the law—it is good community support.

Any information provided in this SOAR about the laws that apply to service animals is intended only as technical assistance. It is not legal advice, and is not binding on APIC or Delta Society.

RESOURCES

Additional information about service and therapy animals is available from Delta Society. Health care facilities will be particularly interested in *Service Dogs Welcome!*, an education system that prepares health care employees to respond competently to service animal issues; the *Standards of Practice for Animal Assisted Activities and Therapy* for practitioners and facilities; and the standards-based Pet Partners system for animal-assisted activities and therapy. For a free catalog of courses, products, and services, contact: Delta Society, 289 Perimeter Rd E, Renton, WA 98055; Web site: www.deltasociety.org; fax: (425) 235-1076; e-mail: NSDC@deltasociety.org; telephone: (800) 869-6898 (206-226-7357 outside of the United States).

References

- Americans With Disabilities Act, 28 CFR § 36.102 et seq. (1990).
- Kauffman M. The controversy over exotic service animals. *Alert* 1996 7(3).
- Delta Society. Healthcare options: service dogs for people who have disabilities [brochure]. Renton (WA): Delta Society; 1995, rev. 1996.
- Zapf SS. Functional independence in occupational performance areas and psychosocial components in individuals with spinal cord injury who use assistance dogs [thesis]. Houston (TX): Texas Women's Univ; 1995.
- Allen KM, Blascovich J. The value of service dogs for people with severe ambulatory disabilities. *J Am Med Assoc* 1996;275(13):1001-6.
- Ahmedzai S. Individual quality of life: companion animals affect categories nominated. In: Ahmedzai S, Follin T, Turner DC, Wilson CC, editors. *Animals, health and quality of life. Proceedings of the 7th International Conference on Human-Animal Interactions*; 1995 Sep 6-9; Geneva, Switzerland. UK; 1995. p. 35.
- Bulcroft K. The benefits of animals to our lives: a four-part review. *Pets in the American family. People, Animals, Environ* 1990;8(4)Pt 1:13-4.
- Stallones L, Marx MB, Garrity TF, Johnson TP. Pet ownership and attachment in relation to the health of US adults, 21 to 64 years of age. *Anthrozoos* 1990;4(2):100-12.
- Akiyama H, Holtzman JM, Britz WE. Pet ownership and health status during bereavement. *Omega: J Death Dying* 1987;17:187-93.
- Bolin SE. The effects of companion animals during conjugal bereavement. *Anthrozoos* 1987;1(1):26-35.
- Allen KM, Blascovich J, Tomaka J, Kelsey RM. Presence of human friends and pet dogs as moderators of autonomic responses to stress in women. *J Personality Social Psychol* 1991;61:582-9.
- Beck AM, Seraydarian L, Hunter GF. Use of animals in the rehabilitation of psychiatric in-patients. *Psychol Rep* 1986;58:63-6.
- Catanzaro TE. Companion animals: considerations in holistic health care for the family. *Veterinary Medicine/Small Animal Clinician* 1982;March:349-50.
- NIH Technology Assessment Workshop. Health benefits of pets. Summary of working group September 10-11, 1987. Washington (DC): US Department of Health & Human Services, Public Health Service, National Institutes of Health, 1988.
- McCulloch MJ. The pet as prosthesis: defining criteria for the adjunctive use of companion animals in the treatment of medically ill, depressed outpatients. In: Fogle B, editor. *Interrelations between people and pets*. Springfield (IL): Charles C. Thomas; 1981. p. 101-23.
- Baun MM, Bergstrom N, Langston N, Thomas L. Physiological effects of human companion animal bonding. *Nurs Res* 1984;50:126-9.
- Friedmann E, Thomas SA. Pet ownership, social support and one year survival among post-myocardial infarction patients in the cardiac arrhythmia suppression trial (CAST). In: Ahmedzai S, Follin T, Turner DC, Wilson CC, editors. *Animals, health and quality of life. Proceedings of the 7th International Conference on Human-Animal Interactions*; 1995 Sep 6-9; Geneva, Switzerland. UK; 1995. p. 54.
- McLaughlin C. Bow-wow, what a difference animal assistance can make. *Adv Phys Therapists* 1996;7(4):10-1.
- Bryant BK. The relevance of family and neighborhood animals to social-emotional development in middle childhood. In: Hines L, editor. *Proceedings of the Delta Society International Conference*, Boston, MA; 1986. p. 17-21.
- Hart LA, Hart BL, Bergin B. Socializing effects of service dogs for people with disabilities. *Anthrozoos* 1987;1(1):41-4.
- Lockwood R. The influence of animals on social perception. In: Katcher AH, Beck AM, editors. *New perspectives on our lives with animal companions*. Philadelphia: University of Pennsylvania Press; 1983. p. 64-71.
- Cookman CA. Filling the void: a descriptive study of the process of attachment between elderly people and their pets [thesis]. Flagstaff (AZ): Univ of Arizona; 1988.
- Garrity TF, Stallones L, Marx MB, Johnson TP. Pet ownership and attachment as supportive factors in the health of the elderly. *Anthrozoos* 1989;3(1):35-44.
- Lago D, Delaney M, Miller M, Grill C. Companion animals, attitudes toward pets, and health outcomes among the elderly: a long-term follow-up. *Anthrozoos* 1989;3(1):25-34.
- Robb SS, Stegman CE. Companion animals and elderly people: a challenge for evaluators of social support. *Gerontologist* 1983;23(3):277-82.
- Serpell JA. Beneficial effects of pet ownership on some aspects of human health and behaviour. *J Royal Soc Med* 1991;84:717-20.
- Wilson CC, Netting FE. New directions: challenges for human-animal bond research and the elderly. *J Appl Gerontology* 1987;6:189-200.
- Wilson CC. The pet as an anxiolytic intervention. *J Nervous Mental Dis* 1991;179:482-9.
- Delta Society. *Standards of practice for animal assisted activities and animal assisted therapy*. Renton (WA): Delta Society; 1996.
- Duncan SL. The importance of training and standards for service

- animals. In: Wilson C, Turner D, editors. Companion animals in human health. Thousand Oaks (CA): Sage; 1998. p. 251-66.
31. Delta Society. Facts you should know about service dogs [brochure]. Renton (WA): Delta Society; 1995, rev. 1997.
 32. US Department of Justice Civil Rights Division Disability Rights Section. Commonly asked questions about service animals in places of business [brochure]. Washington, DC; 1998.
 33. Angulo FJ, Glaser CA, Juranek DD, Lappin MR, Regnery RL. Caring for pets of immunocompromised persons. *J Am Veterinary Med Assoc* 1994;205(12):1711-7.
 34. Tan JS. Human zoonotic infections transmitted by dogs and cats. *Arch Intern Med* 1997;September 22:1-17.
 35. Truman R, Alexander SA, Hoskins JD. Tuberculosis in the cat and dog. *Perspectives* 1994;July/August:6-11.
 36. Gorczyca K. Pets and the immunocompromised patient. *Syntax J Rounds* 1992;2(3):4-6.
 37. Scott GM, Thomson R, Malone-Lee J. Cross-infection between animals and man: possible feline transmission of *Staphylococcus aureus* infection in humans? *J Hosp Infect* 1988;12:29-34.
 38. Leftwich MW, Carey DP, editors. Handbook of diseases transmitted from dogs and cats to man. *California Veterinarian Handbook* September 1982;Suppl:2-15.
 39. Bond C, Cleland LG. Rheumatoid arthritis: are pets implicated in its etiology? *Semin Arthritis Rheumatism* 1996;25(5):309-17.
 40. Berzon DR. The animal bite epidemic in Baltimore, Maryland: review and update. *Am J Public Health* 1978;68:377-81.
 41. Karlson TA. The incidence of facial injuries from dog bites. *JAMA* 1984;251:3265-7.
 42. Mann JM, Rollag OJ, Hull HF, Montes JM. Animal bites as an occupational hazard among animal control officers. *Am J Public Health* 1984;74:255-6.
 43. Department of Health and Human Services. NIOSH alert: preventing asthma in animal handlers. DHHS (NIOSH) Pub. No. 97-116 January, 1996.
 44. Waltner-Toews D, Ellis A. Good for your animals, good for you, how to live and work with animals in activity and therapy programs and stay healthy. Guelph, Ontario (CAN): University of Guelph; 1994.
 45. HIV/AIDS [brochure]. Atlanta (GA): Centers for Disease Control and Prevention; 1998.
 46. Patients' best friend? Hospital dogs raise spirits, not infection rates. *Hosp Infect Control* 1992;December:162-4.
 47. Fowler ME, editor. Zoo and wild animal medicine, current therapy 3. CO: WB Saunders Co; 1993.
 48. Ostrowski SR, Leslie MJ, Parrott T, Abelt S, Peirce PE. B-virus from pet macaque monkeys: an emerging threat in the United States? *Emerg Infect Dis* 1998;4(1):January-March.
 49. Rupprecht CE, Smith JS, Krebs J, Niezgoda M, Childs JE. Current issues in rabies prevention in the United States health dilemmas. Public coffers, private interests. *Public Health Report* 1996;Sep-Oct 111(5):400-7.
 50. Mulder JB. Shigellosis in nonhuman primates: a review. *Lab Animal Sci* 1971;21(5):734-8.
 51. Chang HJ, Miller HL, Watkins N, Arduino MJ, Ashford DA, Midgley G, et al. An epidemic of malassezia pachydermatis in an intensive care nursery associated with colonization of health care workers' pet dogs. *N Engl J Med* 1998;March 12(338):706-11.
 52. Marcus LC, Marcus E. Nosocomial zoonosis [letter]. *N Engl J Med* 1998;March 26(338):11.
 53. Scott GM, Thomson R, Malone-Lee J. Cross-infection between animals and man: possible feline transmission of *staphylococcus aureus* infection in humans? *J Hosp Infect* 1988;12:29-34.
 54. Centers for Disease Control and Prevention. Division of quarantine monitors exotic pet importations. *Focus* 1997;6(6).
 55. Quarantine, Inspection and Licensing, Subpart F—Importations. 42 C.F.R. Sect. 71.53 (1986).
 56. Centers for Disease Control and Prevention. Memo to Registered Importers. Atlanta (GA): CDC; May 31, 1996.
 57. Johnson-Delaney CA. Primates. *Veterinary Clin North Am Small Animal Pract* 1994;24(1)January:121-56.
 58. Shoemaker VF. Judy's story. *The Simian* 1997;39(2)March:25-32.
 59. Benenson AS, editor. Control of communicable diseases in man. 16th edition. Washington, DC: American Public Health Administration; 1995.
 60. Criepp CH. Chapter 18. In: Allergy and clinical immunology. New York: Grune & Stratton; 1982. p. 147-60.
 61. Murray AB, Ferguson A, Morrison BJ. The frequency and severity of cat allergy vs. dog allergy in atopic children. *J Allergy Clin Immunol* 1983;72:145-9.
 62. American Academy of Allergy, Asthma and Immunology. Allergies to animals [brochure]. Milwaukee (WI): The Academy; 1995.
 63. Humphries J. Important questions & answers about allergies to pets. Proceedings of the Delta Society 13th Annual Conference; 1994 Oct 13-15; New York, NY.

APPENDIX I.

TECHNICAL ASSISTANCE LETTER FROM THE US DEPARTMENT OF JUSTICE

Reprinted 5/28/98 from the Department of Justice's Web site under the Freedom of Information Act.

Cltr066.txt @ www.usdoj.gov

#66

III-4.2300 May 10, 1993

The Honorable John C. Danforth

United States Senator

8000 Maryland Avenue

Suite 440

Clayton, Missouri 63105

Dear Senator Danforth:

This letter is in response to your inquiry on behalf of your constituent, _____, and her concern about the Americans with Disabilities Act (ADA) and service animals in hospitals.

The ADA authorizes the Department of Justice to provide technical assistance to individuals and entities having rights or obligations under the Act. This letter provides informal guidance to assist _____ in understanding the ADA's requirements. This technical assistance, however, does not constitute a determination by the Department of Justice of rights or responsibilities under the ADA, and does not constitute a binding agreement by the Department of Justice.

Unless it is a religious entity or under the control of a religious organization, a health care facility, such as a hospital, is covered by the provisions of title III of the ADA and the Department's title III regulation as a place of public accommodation (see section 36.104 of the enclosed regulation). According to section 36.302 (C), a public accommodation is required to modify policies, practices, or procedures to permit the use of a service

animal by an individual with a disability. The intent of this regulation is to ensure that the broadest feasible access be provided to service animals in all public accommodations, including hospitals and nursing homes. This regulation also acknowledges that in rare circumstances, if the nature of the goods and services provided or accommodations offered would be fundamentally altered, or if the safe operation of a public accommodation would be jeopardized, a service animal need not be allowed to enter.

A showing by appropriate medical personnel that the presence or use of a service animal would pose a significant health risk in certain areas of a hospital may serve as a basis for excluding service animals in those areas. In developing a list of areas from which service animals may be excluded, a hospital facility must designate only the exact areas where exclusion is appropriate. For example, if a hospital facility does not allow the presence of a service animal used by an individual receiving out-patient care, this decision must be based on a medical determination that the presence of the ser-

vice animal would pose a significant health risk, or that the services provided by the hospital would be fundamentally altered. If a service animal must be separated from an individual with a disability, in order to avoid a fundamental alteration or a threat to safety, it is the responsibility of the individual with a disability to arrange for the care and supervision of the animal during the period of separation. See section 36.302 © (2).

For your information, we have also enclosed a copy of a 1988 memorandum interpreting the application of section 504 of the Rehabilitation Act of 1973, as amended, to the presence of service animals in health care facilities. As you can see, the Federal government's policy on this issue has been consistently applied for a lengthy time period.

I hope this information is helpful in responding to _____'s concerns.

Sincerely,
James P. Turner
Acting Assistant Attorney General
Civil Rights Division



*The following article is an AJIC Online Exclusive.
Full text of this article is available at no charge at our Web site:
www.mosby.com/ajic.*

APIC Commentary on "Healthcare Waste Management: A Template for Action"

Susan Blumstein MT, CIC, Jolynn Zeller RN, BS, CIC, and Bob Sharbaugh PhD, CIC