

2025 AAHA One Health Guidelines: Navigating Cross-Disciplinary Partnerships

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ABSTRACT

Veterinary medicine is centered on the animal patient, and similarly, human medicine is centered on the human patient. Yet animal health, human health, and the environment intersect in myriad ways. Despite this intersection, there are few resources that take a family-centered, collaborative approach to human, animal, and environmental health. To help address this gap, AAHA has brought together a task force of human and veterinary medical professionals with the goal of improving collaboration between professions to facilitate better outcomes for families with pets. These guidelines address common scenarios (e.g., zoonotic disease, disability, intimate partner violence) that intersect with human and animal health and provide strategies for greater communication and collaboration between the professions. The guidelines cover (1) terms and definitions to establish a common language between professions; (2) how to determine if a case requires a One Health approach; (3) how and when to reach out to other professionals for a case (e.g., social worker, physician, other medical professionals); and (4) how and when to follow up and close cases. These guidelines also offer case studies illustrating One Health scenarios that connect with human/family health, with supplemental materials available on the AAHA website at aaha.org/one-health.

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These guidelines were prepared by a task force of experts convened by the American Animal Hospital Association. This document is intended as a guideline, not an AAHA Standard of Care. These guidelines and recommendations should not be construed as dictating an exclusive protocol, course of treatment, or procedure. Variations in practice may be warranted based on individual patient needs, resources, and limitations unique to each practice setting. Evidence-guided support for specific recommendations has been cited whenever possible and appropriate. Other recommendations are based on practical clinical experience and a consensus of expert opinion. More research is needed to further substantiate some recommendations. As each case is different, veterinary teams must base their decisions on the best available scientific evidence in conjunction with their knowledge and experience. All task force members contributed to the development of the guidelines. Although task force members attempted to reach an expert consensus, individual members of the task force are not responsible for the final guidelines or specific aspects of the guidelines.

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Abbreviations and acronyms

ADA, Americans with Disabilities Act; APP, advanced practice provider OR advanced practice pharmacist; CDC, U.S. Centers for Disease Control and Prevention; CNM, certified nurse midwife; CrVT, credentialed veterinary technician (LVT, RVT, CVT, LVMT [also includes veterinary technologists]); HIPAA, Health Insurance Portability and Accountability Act; IPEC, Interprofessional Education Collaborative; IPV, intimate partner violence; MRSP, methicillin-resistant *Staphylococcus pseudintermedius*; NP, nurse practitioner; PA, physician assistant OR physician associate; PHI, protected health information; RMSF, Rocky Mountain spotted fever; RN, registered nurse; SDOH, social determinants of health; TPLO, tibial plateau leveling osteotomy; VCPR, veterinarian-client-patient relationship; VTS, veterinary technician specialist.

Introduction

In the daily practice of human and veterinary medicine, health care professionals recognize that interactions between people, animals, and the environment impact the health of their patients. This recognition is central to developing a One Health approach to health care, which prioritizes “an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals and ecosystems.”¹ When health care practices in both human and veterinary medicine are firmly centered within a One Health system, this establishes companion animal health within the broader and more inclusive context of individual, community, and societal health.

Veterinary teams are well versed in addressing the clinical aspects of disease and injury, but they may not be aware of the many ways in which they can support human family members to improve health outcomes for the whole family. Human health care professionals may benefit from veterinary professionals’ insights into zoonotic disease, animal behavior, and the human-animal bond. Enhancing communication and collaboration between the veterinary and human health care professions within a One Health system has the potential to improve individual patient and family outcomes, strengthen mental health and wellbeing through promotion of the human-animal bond, and support public health initiatives.

What can One Health practice look like?

One Health veterinary medicine may look like a clinic that treats both humans and their animal companions, such as the One Health Clinics developed by the University of California, Davis, and the University of Washington/Washington State University.

For others in private veterinary practice settings, One Health practice entails treating the whole family by recognizing the points of intersection between the health of clients, companion animals, and their environments and taking those into consideration when making clinical recommendations.

The need for a multidisciplinary approach

Although protocols exist for collaboratively addressing zoonotic diseases (e.g., rabies), the lack of overarching guidelines on how and when collaboration between animal and human health professionals should occur currently limits this type of interaction. A One Health system emphasizes the need for a multidisciplinary, unifying approach to health care in which human and veterinary health care professionals collaborate to address the dynamic and interdependent health of people, animals, and the environment. By working together and breaking down barriers between human and veterinary medicine, practitioners can better understand and address the complex health issues that affect both humans and animals. These guidelines propose a roadmap to guide veterinary teams in establishing a One Health system within their practice to help them decide when and how to reach out to other medical professionals.

In practice, tackling One Health problems on top of a daily caseload may feel overwhelming to busy veterinary teams. However, putting in the effort to adopt a One Health approach provides the support and network to address challenges in clients’ lives that would otherwise interfere in ensuring patient care. Having a plan of action ready for when these issues arise mitigates stress for the veterinary team and allows for interdisciplinary learning and camaraderie.

The role of expert consensus and evidence in developing the Guidelines

There is limited evidence-based programmatic and systematic guidance specific to providing One Health family-centered care. As a result, these guidelines rely upon expert consensus to offer strategies for communication and collaboration among professionals involved in the care and protection of families.

What is in the Guidelines?

Section 1, Definition of Terms and Professional Considerations: introduces a common language for communication between veterinary and human health care disciplines, and includes key considerations for interdisciplinary collaboration.

Section 2, The Need for a One Health Family-Centered System: establishes the basis of a One Health family-centered clinical practice, including recognizing and responding to needs that may be overlooked in veterinary practice, along with challenges this approach brings.

Section 3, Grounding Principles of a One Health System: includes an interdisciplinary team approach, collaborative communication, and ethical considerations.

Section 4, The One Health System Roadmap: outlines steps for communication and coordination among veterinary and human medical professionals to benefit both human and animal patients.

Section 5, Case Scenarios: offers some common scenarios illustrating the steps outlined in the One Health System Roadmap. Scenarios include zoonotic disease, cognitive impairment and older adults, physical disability, and intimate partner violence.

Section 1: Definition of Terms and Professional Considerations

Common language and terms can provide a critical baseline for cross-disciplinary communication for health professionals within a One Health System. Although not exhaustive, the list in Table 1.1 outlines key terms required for discussions of One Health strategies.

Considerations for contacting human health care professionals

It is beyond the scope of these guidelines to outline all the professions veterinary teams may encounter in a One Health system; however, consider these key clarifications:

1. In addition to MD/DO, advanced practice providers such as nurse practitioners (NP), certified nurse midwives (CNM), physician assistants/physician associates (PA), and advanced practice pharmacists complete advanced training and provide advanced practice roles, performing functions that include diagnosing, managing, prescribing, and treating health conditions and injuries. The scope and degree of autonomy varies by profession and, in some cases, by state.
2. Nursing, social work, physical therapy, occupational therapy, speech therapy, and others exist as unique disciplines grounded in their own professional practice and bodies of knowledge.

TABLE 1.1

Definition of Terms

Term	Definition	Application & Use in Guidelines
Companion animals/pets	Nonhuman members of the family	In these guidelines, “pets” is used as a general term to include dogs and cats living in companionship with humans in a family context, including service and support animals. Although many other companion animals live within human families, a discussion of other species is beyond the scope of these guidelines.
Doctor	A health care professional with a doctorate degree (i.e., MD/DO, DVM/VMD, DNP, PhD, PharmD, DPT, etc.).	
Family	Refers to the bonded family unit that includes humans, regardless of biological or legal relationships, and companion animals. A family may include one individual person and their pet(s) or multiple people in a home with their pet(s).	While other domesticated and free-living animals are included in the One Health model, a discussion of these relationships is outside the scope of these guidelines.
Family-centered care	A comprehensive and coordinated approach to health care that focuses on the entire family as defined above.	By viewing pet caregivers and pets as existing in an interconnected system, comprehensive, coordinated care strives to address the patient’s health needs within the context of the family and environment.
Health care provider or health care professional	An expansive term that refers to the many professions that provide health care to humans and animals.	When specificity is required, these guidelines use “human health care professional” or “veterinary health care professional.”
Health care silos	In health care, this term describes “the physical and non-physical boundaries arising between divisional units of a health system. They often evolve from complex governance structures and disparate financing models.” ^a	While not inherently destructive, silos may impede communication and collaboration and result in inefficiency and poorer outcomes for those seeking health care. ^a

(Continued on next page)

TABLE 1.1, CONTINUED

Definition of Terms

Term	Definition	Application & Use in Guidelines
Health Insurance Portability and Accountability Act (HIPAA)	HIPAA limits human health care providers from disclosing protected information, with a few exceptions, to anyone other than the patient and the patient's authorized representatives without their consent. Certain states also have laws that require that information regarding veterinary care be protected from disclosure.	While veterinary health care professionals are advised to get written permission from a client to speak with their human health care providers, in most cases written consent <i>is required</i> for a human health care provider to discuss patient health information. HIPAA allows for communication between providers in certain situations (e.g., communicable disease reporting to a public health agency.) ^b Public health agencies can provide a useful bridge for collaborating across sectors when data sharing is a concern.
Human-animal bond	"The human-animal bond is a mutually beneficial and dynamic relationship between people and animals that is influenced by behaviors considered essential to the health and wellbeing of both. This bond is beneficial to the mental, physical, and social health of people and animals." ^c	Abundant literature documents that humans and animals share a special, mutually beneficial relationship ^{d,e,f,g,h,i} When the bond is challenged by illness, ^j violence, ^k or lack of resources, ^l it can have negative impacts for both people and animals.
Human health care team	A group of physicians, registered nurses, advanced practice providers (e.g., nurse practitioners, physician assistants/physician associates) and numerous other types of licensed and unlicensed health care professionals.	
Interprofessional collaboration or collaborative care	Members of two or more professions that work together toward a shared goal or outcome. ^d Sharing care for patients and clients between different health care professionals across different institutions and organizations.	Interprofessional Collaboration or Collaborative Care outlines 4 core competency areas for successful interprofessional collaboration: 1. Values and ethics 2. Roles and responsibilities 3. Communication 4. Teams and teamwork. ^m
One Health	As defined by the United Nations' One Health High Level Expert Panel, "...an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals and ecosystems. It recognizes that the health of humans, domestic and wild animals, plants, and the wider environment (including ecosystems) are closely linked and interdependent." ⁿ	While acknowledging that One Health encompasses a much broader approach, these guidelines focus specifically on One Health as it relates to human and companion animal interactions and connections.
One Health system	A One Health family-centered system is a team-based approach to animal and human health care that includes the participation of veterinarians, veterinary technicians and assistants, physicians, nurses, social workers, policymakers, and others helping to provide comprehensive and personalized services.	For the purposes of these guidelines, the term "One Health system" will encompass "One Health family-centered system," "One Health family-centered clinical practice," and "One Health family-centered health care."
Patient	The individual(s) receiving care (e.g., veterinary patient, human patient).	
Physician	A health care provider with an MD, DO, or equivalent international degree.	Preferred term for these medical professionals.

(Continued on next page)

TABLE 1.1, CONTINUED

Definition of Terms

Term	Definition	Application & Use in Guidelines
Physician Assistant/Physician Associate	An advanced practice provider who works as a member of the human health care team.	The PA professional organizations at the national and state level are advocating to change their title from Physician Assistant to Physician Associate (PA), with Oregon passing a law with the title change in July 2024. Given the changing nomenclature, these guidelines will use the abbreviation PA or Physician Assistant/Physician Associate.
Social determinants of health (SDOH)	“The non-medical factors that influence health outcomes. They are the conditions in which people are born, work, live, and age, and the wider set of forces and systems shaping the condition of daily life.” ^o	SDOH are grouped into 5 key domains: (1) economic stability; (2) education access and quality; (3) health care access and quality; (4) neighborhood and built environment; and (5) social and community context. ^p
Veterinarian	A health care provider with a DVM, VMD, or equivalent international degree.	
Veterinary health care team	The group of professionals within a veterinary practice responsible for establishing and maintaining the veterinary-client-patient relationship (VCPR) with pet caregivers and their animals for ongoing care.	This team typically includes veterinarians, veterinary technicians, veterinary assistants, client service representatives, practice managers, and support staff. Depending on the type of practice, this team may also include board-certified veterinary specialists and veterinary technician specialists.

- a Peiris D, Feyer AM, Barnard J, et al. Overcoming silos in health care systems through meso-level organisations - a case study of health reforms in New South Wales, Australia. *Lancet Reg Health West Pac* 2024;44:101013.
- b US Department of Health and Human Services. HIPAA for Professionals. 2021. Available at: <https://www.hhs.gov/hipaa/for-professionals/index.html>. Accessed July 11, 2024.
- c Human Animal Bond Research Institute. About HABRI. [habri.org](https://habri.org/about/). N.d. Available at: <https://habri.org/about/>. Accessed November 5, 2024.
- d Brooks HL, Rushton K, Lovell K, et al. The power of support from companion animals for people living with mental health problems: a systematic review and narrative synthesis of the evidence. *BMC Psychiatry* 2018;18(1):31.
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- j Spitznagel MB, Hillier A, Gober M, et al. Treatment complexity and caregiver burden are linked in owners of dogs with allergic/atopic dermatitis. *Vet Dermatol* 2021;32(2):192–e50.
- k Mota-Rojas D, Monsalve S, Lezama-García K, et al. Animal abuse as an indicator of domestic violence: One Health, One Welfare Approach. *Animals* 2022;12(8):977.
- l LaVallee E, Mueller MK, McCobb E. A systematic review of the literature addressing veterinary care for underserved communities. *J Appl Anim Welf Sci* 2017;20(4):381–94.
- m Interprofessional Education Collaborative. IPEC Core Competencies for Interprofessional Collaborative Practice: Version 3. 2023. Washington, DC: Interprofessional Education Collaborative.
- n World Health Organization. One Health High Level Expert Panel Annual Report 2021. March 31, 2022. Available at: <https://www.who.int/publications/m/item/one-health-high-level-expert-panel-annual-report-2021>. Accessed January 16, 2025.
- o World Health Organization. Social determinants of health. 2024. World Health Organization. Available at: https://www.who.int/health-topics/social-determinants-of-health#tab=tab_1. Accessed June 28, 2024.
- p Office of Disease Prevention and Health Promotion. Social determinants of health. Healthy People 2030. U.S. Department of Health and Human Services. N.d. Available at: <https://odphp.health.gov/healthypeople/priority-areas/social-determinants-health>. Accessed May 8, 2024.

3. Veterinary teams may need to engage with professionals in a variety of these roles. Consider these examples:
 - Advanced practice providers, working in primary care settings, may be the point of contact for zoonotic disease exposure.
 - Nurses may interface with the veterinary team regarding support for a pet while the pet's human family member is undergoing medical treatment, or more broadly with population or public health concerns.
 - Physical or occupational therapists may provide insights into a veterinary client's abilities and challenges if pets need care that requires certain levels of mobility or fine motor skills.
 - Social workers may be a resource for situations where the family needs help with access to food, shelter, and/or mental health support.
 - Animal behaviorists and human mental health care professionals may collaborate on family-behavioral support.

Section 2: The Need for a One Health Family-Centered System

Top 3 Takeaways

1. The human-animal bond is more important than ever, yet millions of pet caregivers struggle with access to veterinary care.
2. Veterinary and human health professionals occupy integral roles in a One Health system by providing inclusive, equitable, and holistic health care for families and by promoting positive social, economic, and environmental determinants of health.
3. Transitioning to a One Health system presents several short-term and long-term challenges that must be addressed to achieve an integrated approach to human and animal health care.

Veterinary Medicine and the Human-Animal Bond

Today, animals are regarded as cherished members of families.^{2,3,4} A recent Pew Research Center survey revealed that nearly all respondents (97%) consider their companion animals to be a part of their family, with about half (51%) viewing them as equivalent to a human member. This sentiment was particularly strong among women, individuals with lower family incomes, and those living in urban areas.³ These strong familial ties support the need for a One Health family-centered system, where the health of both animals and their human caregivers are addressed comprehensively (Figure 2.1).

Humans and animals experience benefits from interspecies relationships, particularly if they enjoy access to necessary resources and support (Table 2.1). Both adults and children may experience mental and physical health benefits in the short and long term from healthy relationships with animals.^{5,6} According to a report commissioned by the Human Animal Bond Research Institute (HABRI), animal family members save the U.S. health care system an estimated \$22.7 billion annually.⁷ Savings result from fewer doctor visits, reduced obesity rates, lower infection rates, and improved mental health outcomes for children, seniors, and veterans.

Despite the bonds people share with their companion animal family members, millions of pet caregivers struggle to access and provide their pet(s) with health care.^{8,9} Obstacles that impact determinants of human health—such as education, employment, and housing—can limit access to health care services including veterinary care. As a result, both human and veterinary health care professionals must confront and address financial constraints, language and health literacy barriers, geographic and transportation challenges, and other factors that influence care delivery.¹⁰

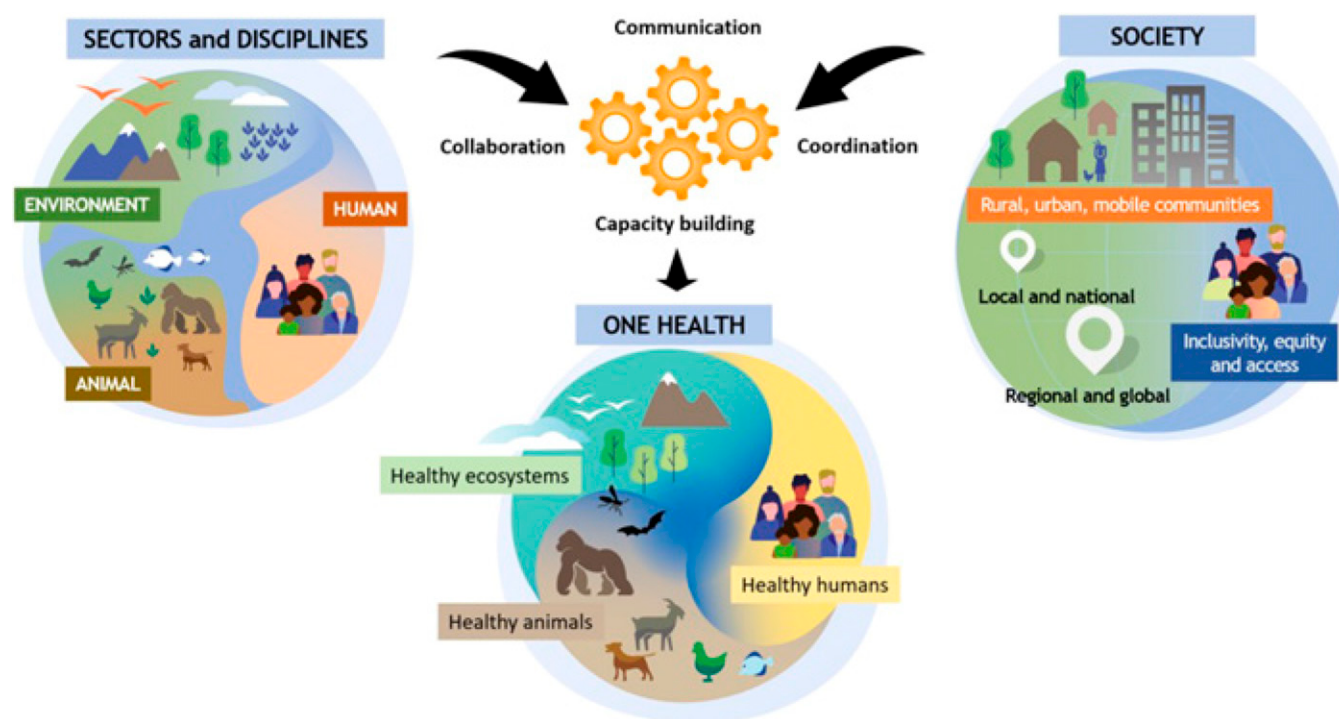
Family members face similar risks in shared environments and ecosystems, including communicable and noncommunicable diseases, malnourishment and lack of physical activity and related diseases, and toxins or other environmental exposures.^{11,12} A rapidly changing climate and related health risks such as natural or weather disasters and heat exposure may exacerbate challenges for vulnerable families. Health professionals within the One Health framework must address violence within the home from a holistic perspective considering the well-established links between violence against animals, children, and vulnerable adults.¹³ In addition, humans and animals in families may need grief support following the loss of a family member^{14,15} as well as during an illness due to caregiver burden.¹⁶

A One Health approach enriches veterinary services by addressing the social, emotional, and environmental factors that influence both pet and client well-being. This includes recognizing and responding to mental or physical health issues, transportation limitations, and financial barriers clients face, which significantly impact the care provided to animal patients. Animal and human patients can benefit from this approach, and veterinary and human health professionals may also benefit from cross-discipline learning. A supportive One Health system may reduce moral distress, burnout, and compassion fatigue among health professionals caring for families.

TABLE 2.1
Benefits of the Human-Animal Bond^a

Physical	Increased physical activity Decreased physical isolation Hypertension management and prevention Cardiovascular risk reduction
Emotional	Joy Emotional comfort Security Companionship Decreased social isolation

a Wein H, ed. The power of pets. NIH News in Health. March 6, 2018. Available at: <https://newsinhealth.nih.gov/2018/02/power-pets>. Accessed January 10, 2023.

**FIGURE 2.1**

The One Health System

Source: Image reprinted from One Health High-Level Expert Panel (OHHLEP), Adisasmito WB, Almuhairei S, et al. One Health: A new definition for a sustainable and healthy future. *PLoS Pathog* 2022;18(6):e1010537. The work is made available under the Creative Commons CC0 public domain dedication.

TABLE 2.2

Challenges in Achieving a One Health System

Short-Term Challenges	Integrated Information Gathering and Outcomes: Ensuring records incorporate questions related to One Health issues such as zoonoses, travel, occupation/activities, and safety.
	Willingness to Embrace Change: Adopting new roles and embracing interprofessional collaborations, e.g., expanding the role of social workers in veterinary health teams.
	Solutions to Time Constraints: Developing solutions to the time demands veterinary professionals face to allow for implementation of One Health protocols.
Long-Term Challenges	Commitment to Integrate: Achieving support for building a unified One Health strategy across health disciplines, academia, private sector, and government requires long-term commitment.
	Evolution of Information Exchange and IT Systems: Developing robust, secure IT systems for seamless information exchange between human and veterinary health services where needed and as appropriate that comply with legal standards across health care domains.
	Education: Enhancing public health education and training for a variety of roles in veterinary medicine, including more robust training for credentialed veterinary technicians (CrVTs).
	Holistic Treatment Approaches: Establishing veterinary guidelines and protocols for treating families holistically, considering both human and animal health.
	Financial Support and Assistance: Developing financial support mechanisms to make veterinary and human health care affordable and accessible, especially for underserved communities.

Challenges in Achieving a One Health Family-Centered System

A One Health system requires a team-based approach, including the participation of veterinary and human health care professionals, policymakers, and others helping to provide comprehensive and personalized services. However, achieving this integrated approach faces both short-term and long-term challenges (Table 2.2), primarily due to the current segmentation and siloed nature of health care systems and the traditionally independent structures of veterinary and human health care. Addressing these challenges requires a concerted effort from policymakers, health care providers, and the community to create a sustainable and effective One Health system.¹⁷

Section 3: Grounding Principles of a One Health System

Top 3 Takeaways

1. In a functional One Health system, human and veterinary health care teams collaborate to ensure the health and wellbeing of people and animals.
2. Achievement of One Health goals requires strong interdisciplinary coordination and communication.
3. Professional drivers and ethics likely differ among roles in One Health systems and will require proactive transparency and discussion to navigate points of possible role challenges.

Grounding Principles

Principle 1—One Health System: A One Health system requires an interprofessional team approach to be successful. One Health encompasses the health of the animal, the person(s), and their home/external environment; this results in the need for different skill sets and professions depending on the context of the health challenge faced (Figure 3.1). Licensure, liability, and care regulations may limit the scope of how and when a professional may participate in addressing a One Health issue. As the One Health system expands beyond the scope of traditional veterinary and medical practice, certain roles may be missing—for example, a person prepared to address temporary housing and care for the pets of a hospitalized person.

Principle 2—Collaborative Communication: Success in a One Health approach requires *collaborative communication*, whereby individuals from multiple professions communicate with one another in a seamless fashion as they work toward solutions.

Communication among disciplines needs to be respectful, proactive, multimodal (e.g., phone, fax, in-person), and appropriately timed. The development of strong networks within a community can facilitate collaborative communication. During network development, professionals can identify communication barriers and strategies to overcome them, including determining methods of communication to clients and communities to limit misinformation

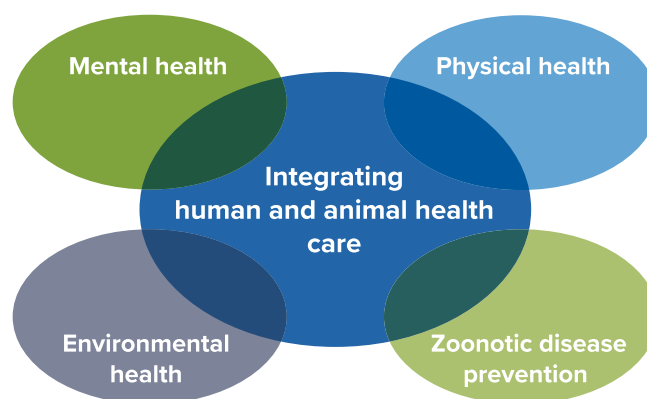


FIGURE 3.1

Integrating Health Care in a One Health System

and provide resources. In developing a network, communication through a direct phone line, email, online platform, or text may facilitate timely and meaningful contact.

With the recognition that today's complex health care problems demand such collaboration, a variety of health care professions now feature integrated education on interprofessional communication in their academic curricula.

Public health professionals can play an important role in facilitating communication between veterinary and other human health care professionals, especially during infectious disease outbreaks or public health emergencies. Public health officials can review clinical data on patients during investigations without HIPAA authorization (45 CFR 164.512(b), <https://www.hhs.gov/hipaa/for-professionals/privacy/guidance/disclosures-public-health-activities/index.html>).

Depending on clinical or other situations, veterinarians may opt to reach out to human health professionals either directly or via public health agencies. Depending on the situation and amount of case information discussed, some systems may require written authorization from the client, typically on a form provided by the human health provider's organization.

As part of developing a One Health network, identifying key contacts within local public health jurisdictions is strongly recommended. Reach out and develop relationships with local public health officials such as epidemiologists, public health veterinarians, or zoonotic disease personnel. Veterinary teams do not need to wait until an urgent case occurs. Rather, reaching out to ask about rabies policies or leptospirosis in the area are good conversation starters. Inviting a public health official to the clinic to conduct a staff training is another good way to start a relationship and develop ongoing communication channels.

Subcompetency C2 of the Interprofessional Education Collaborative (IPEC) "Communication" competency^a states, "Use communication tools, techniques, and technologies to enhance team function, well-being, and health outcomes."¹⁸ Health care teams can leverage

technology to support communication efforts such as electronic health care records tools that prompt professionals to ask One Health questions and communicate with one another when making certain diagnoses (e.g., zoonotic diseases).

Principle 3— Ethics and Drivers: Attention to values and ethics in One Health collaborative communication is important.

The four overarching principles put forth by Beauchamp and Childress in 1979 that influence the work of health and helping professions are (1) autonomy—the right to choose for oneself; (2) justice—fair treatment and allocation of resources; (3) beneficence—the intent to do good; and (4) nonmaleficence—the effort to do no harm in the process of caring.¹⁹ In practice, these principles often conflict with each other. For instance, informed consent, truth-telling, and confidentiality ensure patient autonomy but can conflict with

beneficence when a patient is unable to choose a beneficial course of treatment. In veterinary medicine and human health care disciplines like pediatrics, human surrogates make decisions for the patient, creating even more complexity in applying the four principles.

Conflicts can arise due to differences between the medical professional's goals for care and the patient's/surrogate's goals for care.²⁰ Conflicts also can arise between professions that have an interest in a One Health approach to a health issue. For instance, a human medical practitioner may recommend a pet be removed from a home environment because of allergy or immunodeficiency; however, the veterinarian may be more driven to work with the client to find solutions for the family to keep the pet.

Other ethics-based conflicts vary by profession, such as social workers' commitment to client self-determination, which can conflict with veterinarians' commitment to reducing animal suffering. Ethical decisions in One Health systems also can feature both micro-level concerns such as individual patient care and macro-level population-based concerns such as zoonotic diseases that involve multiple animal host species.

Considering and balancing professional values and ethics, stakeholder interests (i.e., clients and communities), and ethical perspectives that influence each is paramount to effective One Health treatment decision-making and action.²¹ One IPEC subcompetency (VE7) within the Values and Ethics competency states, "Practice trust, empathy, respect, and compassion with persons, caregivers, health professionals, and populations."^a Putting this into action means asking others in the One Health system about the professional values and key interests that influence their perspective and decision-making when addressing the presenting issue.

Section 4: One Health System Roadmap

The One Health System Roadmap (Figure 4.1) is a decision tree outlining the steps for communication and coordination among veterinary and human medical professionals within a One Health system. Table 4.1 offers guidance on which professional to contact, depending on the case and situation.

To illustrate the practical uses of the One Health System Roadmap, the guidelines provide common scenarios that may be seen in

Ideas for Developing Interdisciplinary Relationships

- Ask local veterinary medical associations, county public health departments, academic institutions, or industry groups to facilitate continuing education events that bring together experts from different professions to discuss One Health problems, such as emergency preparedness or zoonotic diseases. Attend multidisciplinary continuing education events and get involved in the broader academic community.
- Foster dialogue and open communication channels through discussions of specific One Health case scenarios.
- Reach out to human health care professionals and ask if they know of local organizations in their respective fields that may be interested in joint educational activities.
- Work with community organizations to establish local meet-and-greet activities for One Health purposes.
- Provide education on dog parks, community activities, and resources to increase health outcomes for people and pets.
- Consider offering clinic shadow days and/or clinic "open houses" for those from other professions.
- Establish a One Health journal club.
- Become involved in disaster preparedness for the community.
- Organize "Health Fairs" for people and pets to illustrate the One Health concept and encourage collaboration and discussion from both animal and human health sectors.

a The Interprofessional Education Collaborative (IPEC) developed four core competencies for interprofessional collaborative practice [JS1] : Values and Ethics, Roles and Responsibilities, Communication, and Teams and Teamwork (2023). Within these are 33 subcompetency statements, which were endorsed by several professional organizations including the American Association of Veterinary Medical Colleges. The One Health task force supports the application of these statements to optimize professional collaboration. The statements include recommendations such as valuing diversity; maintaining professional competence; incorporating complementary expertise to meet health needs; practicing cultural humility in interprofessional teamwork; practicing active listening; and applying interprofessional conflict management methods. https://ipec.memberclicks.net/assets/core-competencies/IPEC_Core_Competencies_Version_3_2023.pdf

HIPAA Considerations for Veterinarians

The Health Insurance Portability and Accountability Act (HIPAA) limits human health care providers from disclosing protected health information (PHI), with a few exceptions, to anyone other than the patient and the patient's authorized representatives without their consent. Certain states also have laws that require information regarding veterinary care be protected from disclosure. Veterinarians should review their state veterinary practice acts.

What is allowed under HIPAA?

- Patients can authorize the sharing of their health care information with anyone they choose, and with appropriate consent, sharing and/or exchange of information is possible.
- With client consent, veterinary and human health care teams can exchange information. Human health care teams cannot discuss or share patient health information without consent, and it is advised that veterinary health care teams follow this same procedure regardless of legal allowances.
- An *authorization to communicate* allows the human health care team to share PHI with another entity, for example, another clinic, family member, or lawyer. This is best achieved using a signed form.
- A *release of information* authorizes the human health care team to release documents to another facility. This can be achieved using either the requesting or releasing site's form, as long as the form includes the following:
 - Who is releasing the information
 - Who is receiving the information
 - What is being released and over what time frame
 - The signature of the human patient or the pet's owner



Veterinary health care teams should be aware of local laws surrounding confidentiality and disclosure of health care information to facilitate collaborative communication in a way that respects the privacy of all family members.

Veterinarians can also meet with other health care professionals in their community to discuss mechanisms that allow for legal exchange and documentation of health care information to promote One Health.

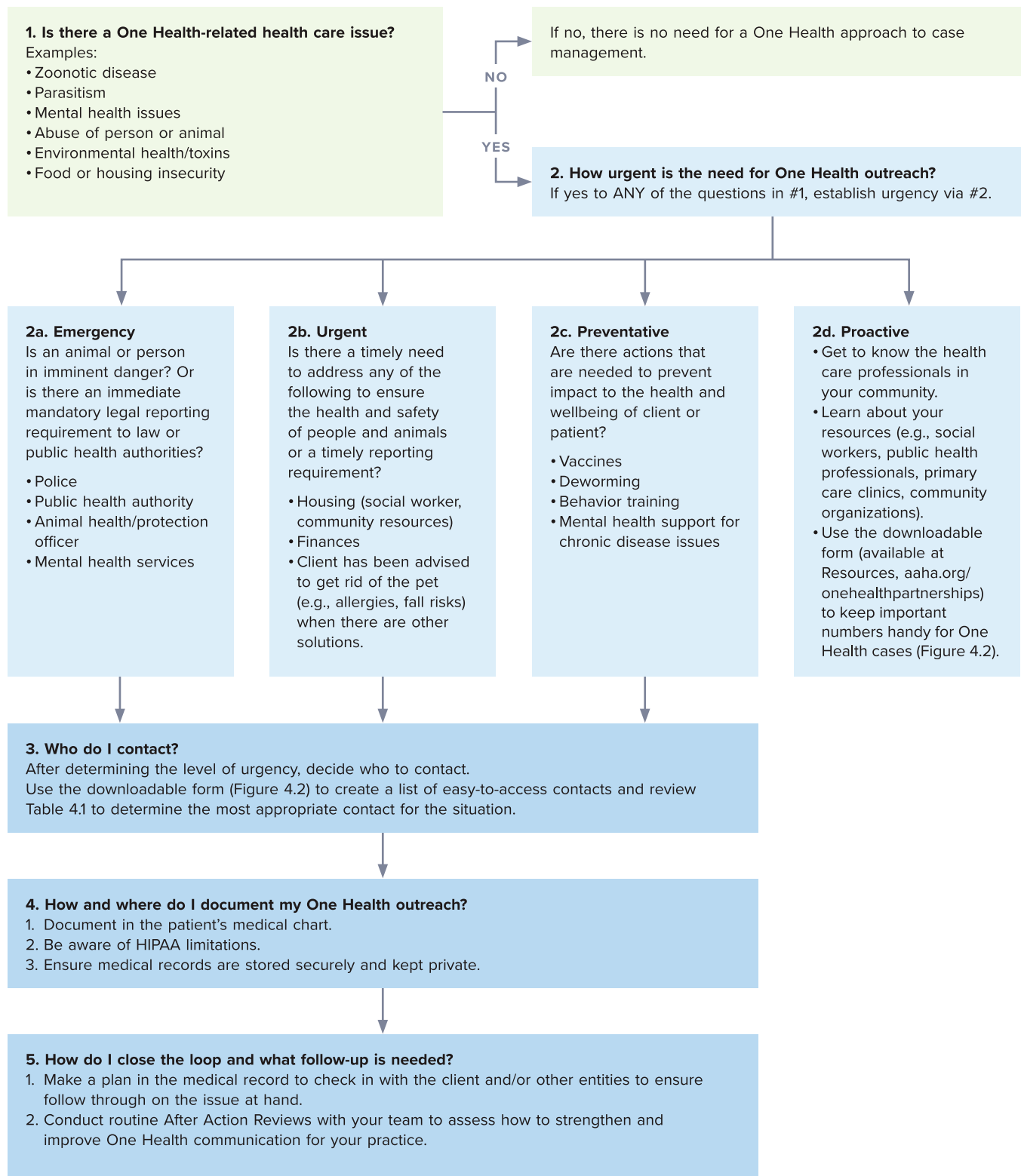
practice (e.g., zoonoses, disabilities, intimate partner violence) using the following questions:

1. Is a One Health approach required for this case? Is outreach needed to a human health care provider, public health professional, or social worker?
2. Who should be contacted and when? Is the situation urgent or emergent?
3. How should contact be made?
4. How should One Health outreach be documented?
5. What follow-up is needed?

Section 5: One Health Scenarios

The One Health system encompasses innumerable situations in which the wellbeing of pets and people must be addressed using a multidisciplinary approach. The following scenarios are intended to guide veterinary professionals through common challenges and potential solutions using the One Health System Roadmap (Figure 4.1). It is important to note that these examples address using a One Health approach after a situation arises. Ideally, relationships will be

Is a One Health approach indicated for this case?

**FIGURE 4.1***The One Health System Roadmap*

Download and fill out this sheet with local and state numbers for
One Health case management. Keep handy for easy access.

Resources and Contacts for One Health Case Management

Human health care professionals (MD/DO, PA, RN, etc.)

Where to find: personal outreach, professional outreach, CE events, networking events

NAME	PROFESSION	EXPERTISE
TELEPHONE	EMAIL	WEBSITE

NAME	PROFESSION	EXPERTISE
TELEPHONE	EMAIL	WEBSITE

NAME	PROFESSION	EXPERTISE
TELEPHONE	EMAIL	WEBSITE

Veterinary health care professionals (DVM/VMD, CrVT, VTS, etc.)

Where to find: personal outreach, professional outreach, CE events, networking events

NAME	PROFESSION	EXPERTISE
TELEPHONE	EMAIL	WEBSITE

NAME	PROFESSION	EXPERTISE
TELEPHONE	EMAIL	WEBSITE

NAME	PROFESSION	EXPERTISE
TELEPHONE	EMAIL	WEBSITE

ments:
epartments.html

WEBSITE

ICIALS.pdf

WEBSITE

ake shelter

WEBSITE

l worker boards, 211 number/app

WEBSITE

in the listserve or pose a question to the
89

TELEPHONE EMAIL WEBSITE

Emergency medical services

NAME
TELEPHONE EMAIL WEBSITE

FIGURE 4.2

One Health Contact Sheet

For a downloadable form to customize and list important contacts for One Health case management, see Resources at aaha.org/onehealthpartnerships.

TABLE 4.1**One Health System Contacts**

Contact/ Resource	Workplace	Scope of care	Contact recommendations	Special considerations
Human health care professionals (MD/DO, NP, PA, RN, LPN, etc.)	Clinics and hospitals	• Diagnose, manage, prescribe, and treat health conditions and injuries. • The scope and degree of autonomy varies by profession and, in some cases, by state. • May be first contact for potential zoonotic disease exposure.	Cases of zoonotic disease exposure, injury, or other illness where One Health management is indicated.	Obtain client consent before contacting. Be aware of HIPAA limitations on the sharing of medical information.
Local health jurisdictions	Local health departments	• Zoonotic disease prevention and control • Vector prevention • Animal bite prevention and management • Toxic exposures • Food- and waterborne diseases • Natural disasters response^a	Prevention and control of zoonotic diseases, animal bites, and other exposure to animals and animal products. ^a	Contact information for county health departments by state can be found here: https://www.naccho.org/membership/lhd-directory . In states with centralized public health, the state health department will be the primary contact.
State public health veterinarian (SPHV)	State health departments	• Zoonotic disease prevention and control • Vector prevention • Animal bite prevention and management • Toxic exposures • Food and water-borne diseases • Natural disasters response^a	Prevention and control of zoonotic diseases, animal bites, and other exposure to animals and animal products. ^a	Contact information for SPHVs can be found here: https://www.nasphv.org/Documents/StatePublicHealthVeterinariansByState.pdf .

(Continued on next page)

TABLE 4.1, CONTINUED

One Health System Contacts

Contact/ Resource	Workplace	Scope of care	Contact recommendations	Special considerations
State veterinarian	State agriculture departments	- Prevent, detect, contain, and eliminate farmed animal diseases. - Disease surveillance for farmed animal diseases and those which may impact companion animals. - Regulate importation, transportation, and processing of animals. - Oversee emergency response to disease outbreaks. - Serve as liaison between state and federal agencies and local veterinarians to support natural disaster response.	Reportable or zoonotic disease diagnosis, questions about animal transportation, and reporting sick or dead farmed animals, birds, or aquatics.	Contact information for state veterinarians by state can be found here: https://www.usaha.org/upload/Federal%20and%20State%20Health/STATE_ANIMAL_HEALTH_OFFICIALS.pdf. For a list of national reportable diseases, see: https://www.aphis.usda.gov/livestock-poultry-disease/surveillance/reportable-diseases. For a list of state reportable diseases, consult your State Department of Agriculture website.
Local animal control officer and humane law enforcement officer	Animal care and control agencies and/or municipal shelters and/or humane societies	- Enforce state and local animal care and control laws and investigate complaints. - Capture and contain dangerous, stray and unlicensed animals. - Support natural disaster response.	Cases of suspected cruelty and/or neglect (if not immediately life-threatening), lost, abandoned, or dangerous animals, and housing for displaced animals during a disaster.	If the abuse is currently happening and/or an animal's life is in danger, calling 911 or the police is indicated. In some states, animal control laws and animal cruelty laws are managed by the municipal shelter; in other states, the animal cruelty laws are enforced by humane societies. Be aware of state mandatory reporting and immunity laws for veterinarians. For a table of laws by state, see https://www.animallaw.info/topic/table-veterinary-reporting-requirement-and-immunity-laws.

(Continued on next page)

TABLE 4.1, CONTINUED**One Health System Contacts**

Contact/ Resource	Workplace	Scope of care	Contact recommendations	Special considerations
Human health care social worker	Hospitals and health care agencies, government agencies, schools, community outreach agencies, clinics, etc.	Provide psychosocial support, resources, and services to help individuals and families overcome challenges and address their needs.^b	Challenges with physical and/or mental health, disability, family and home life issues, unemployment, addiction, and other issues.	Obtain client consent before contacting, unless the person is a danger to self or others. Be aware of HIPAA limitations on the sharing of medical information.
Veterinary social worker	Veterinary hospitals and clinics, colleges of veterinary medicine, animal-assisted therapeutic programs	- Attend to the welfare of humans and animals by focusing on four areas: - animal-assisted interventions - compassion fatigue and conflict management - the link between human and animal violence - animal-related grief and bereavement - Support the veterinary health care team as well as families seeking veterinary care.^{c,d}	Crisis support and intervention, ongoing counseling, education and training, conflict mediation, consultations on ethical decision making, liaison between family and veterinary team, end-of-life support and bereavement counseling. ^{c,d}	Depending on the situation, may need to obtain client or staff member consent before contacting. The Veterinary Social Workers community does not yet have a clearinghouse for information on how to locate a veterinary social worker in a given area. The Center for Veterinary Social Work has a listserv. Interested people can join the listserv or pose a question to the listserv, and they will post the question. Email: vetsocialwork@utk.edu Phone: 865-755-8839
Police	City or county police stations, jails, etc.	- Enforce laws. - Investigate crimes. - Maintain public order.	Imminent danger to a person's or animal's life.	For crises where someone's life is not in danger or a law has not been broken, it may be best to contact community-based services or other health professionals.

(Continued on next page)

TABLE 4.1, CONTINUED

One Health System Contacts

Contact/ Resource	Workplace	Scope of care	Contact recommendations	Special considerations
Child Protective Services	State or county agencies	Investigate child abuse and/or neglect cases.	Suspected child abuse and/or neglect.	Some states require anyone suspecting child abuse/neglect to report it. Some states may also require veterinarians to report suspected abuse. For state and territory reporting information, see https://childcare.gov/health-and-safety-reporting. For general information, see https://childcare.gov/consumer-education/child-protective-services.
Community-based alternatives to calling the police	N/a	A list of resources, e.g., housing, mental health, domestic violence, elder resources, etc. are available by city here: https://dontcallthepolice.com/.	No imminent danger to a person's or animal's life.	If a person or animal is in danger, calling 911 or the police is indicated. Be aware of state mandatory reporting and immunity laws for veterinarians.
211 number/app	N/a	- Connects individuals and providers to resources such as housing, food, utility assistance, childcare, and transportation. - Free and confidential. - Available in all 50 states.		

a NASPHV. About State Public Health Veterinarians. [nasphv.org](https://www.nasphv.org/aboutPHVs.html). N.d. Available at: <https://www.nasphv.org/aboutPHVs.html>. Accessed November 7, 2024.

b NASW. About Social Workers. [socialworkers.org](https://www.socialworkers.org/News/Facts/Social-Workers#:~:text=Social%20workers%20help%20individuals%2C%20families,social%20and%20community%20service%20directors). N.d. Available at: <https://www.socialworkers.org/News/Facts/Social-Workers#:~:text=Social%20workers%20help%20individuals%2C%20families,social%20and%20community%20service%20directors>. Accessed November 7, 2024.

c Center for Veterinary Social Work. What is veterinary social work? vetsocialwork.tennessee.edu. N.d. Available at: <https://vetsocialwork.tennessee.edu/>. Accessed November 7, 2024.

d The Ohio State University. What is a veterinary social worker? [vmc.vet.osu.edu](https://vmc.vet.osu.edu/resources/what-veterinary-social-worker). N.d. Available at: <https://vmc.vet.osu.edu/resources/what-veterinary-social-worker>. Accessed November 7, 2024.

developed across the One Health spectrum prior, making reacting to similar situations much easier. As you read through these scenarios, consider how your practice could best prepare by proactively developing a One Health network and protocols.

Scenario A: Tackling Zoonotic Diseases Impacting the Whole Family

Crossover Diagnoses of Rocky Mountain Spotted Fever (RMSF) in Animal and Human Patients

Mark and Michelle Spencer, their 6-year-old child, Morgan, their 3-year-old child, Madison, and their active 4-year-old Labrador retriever, Max, have been seeing their veterinarian, Dr. Findley, since Max was a puppy. The Spencers enjoy outdoor recreation, including frequent hiking and camping near their home in Charlotte, North Carolina.

Presenting Situation

Michelle brought their dog, Max, to Dr. Findley for an urgent appointment because Max didn't eat his breakfast and didn't want to go for his usual walk. The family noticed that he "just seemed off," and earlier that morning, he vomited in the backyard.

The registered veterinary technician (RVT), Alex, took the history and learned the family went camping the previous week. After returning home 3 days ago, they noticed engorged ticks attached to Max. Michelle removed the ticks with tweezers. Alex conveyed the information to Dr. Findley and documented everything in Max's chart.

On physical examination, Dr. Findley found Max had pale mucous membranes and a fever (104°F; 40°C). Max was lethargic with slight tremors and vocalized during orthopedic examination, particularly when his stifles, tarsal joints, and elbows were palpated. No ticks were found. During the examination, Max vomited bile-stained fluid.

An in-house complete blood count and serum biochemistry panel revealed anemia, leukocytosis, thrombocytopenia, and elevated serum liver enzyme activities. Dr. Findley suspected that Max had contracted a tick-borne rickettsial disease and knew that Rocky Mountain spotted fever (RMSF), caused by the bacteria *Rickettsia rickettsii*, occurred in the area.

Dr. Findley explained the blood work and examination findings to Michelle and discussed the incidence of RMSF in North Carolina. Michelle noted that they had skipped Max's monthly dose of flea and tick prevention for the last few months because they ran out and didn't have time to obtain a refill. While waiting for confirmatory testing from the laboratory, Dr. Findley recommended that Max be hospitalized to receive fluid therapy, antiemetics, and antibiotic therapy.

Shared History

While presenting the treatment plan to Michelle, Dr. Findley asked if anyone else in the family was exposed to ticks during their

camping trip. Michelle reported they had found attached ticks on both Morgan and Max during the trip. In fact, Morgan had been feeling unwell since they returned home and was currently being seen by her family health care provider to address a bad headache and vomiting. Dr. Findley informed them that should Max have RMSF, humans in the household might also have been exposed to infected ticks, and suggested they seek medical attention promptly and inform the provider their dog is currently being treated for possible RMSF.

Diagnostics for Infectious Disease: Use of Titers, PCR

Given the suspicion of a tick-borne disease, Dr. Findley commenced treatment with doxycycline and submitted Max's blood for vector-borne disease serology and polymerase chain reaction (PCR) testing. The veterinary team planned to pair the acute serum specimen with a convalescent specimen collected 2 weeks later to confirm the diagnosis using an indirect fluorescent antibody (IFA) assay.

RMSF and Human Exposure Risks

The following day, the results of the vector-borne PCR panel were reported as positive for *Rickettsia rickettsii* DNA. Dr. Findley contacted Michelle with the results and urged Michelle to reach out to her family health care provider to discuss the possibility of a tick-borne infection. Michelle reported that Morgan had developed a rash and fever. Because Michelle felt overwhelmed dealing with a very ill family member as well as a sick pet, she asked Dr. Findley to contact the family's health care provider to let them know about Max's diagnosis.

When Alex shared concerns about possible staff exposure to RMSF and protocols for care in the hospital, Dr. Findley referenced the Centers for Disease Control and Prevention (CDC) guidelines and explained that RMSF is typically only transmitted by tick bites. Despite not seeing visible ticks, Dr. Findley treated Max with tick control medication to address any less visible stages of the tick life cycle.

Reaching Out to the Human Health Care Provider

With Michelle's written permission, Dr. Findley called the family's health care provider and shared that Max was a patient of the veterinary clinic and was being treated for RMSF. Dr. Findley shared the concern that other family members may have also been exposed and referred to the CDC's webpage with guidelines for reportability. The physician thanked Dr. Findley and assured him that they would test and treat as needed.

Reaching Out to Public Health Officials

Dr. Findley found information about human risk factors and symptoms of RMSF on both the CDC website and the state public health department website. Although veterinarians are not required to report RMSF in North Carolina (this requirement varies by state), Dr. Findley decided to contact the local health department to let

them know about the case and possible family exposures. The public health official said they would keep an eye out for laboratory testing from the Spencer family and reach out to the Spencers' providers regarding the suspect case.

Reaching Out to Local Veterinary Medical Associations

Dr. Findley wanted to make sure colleagues in the region knew about the suspected RMSF case and asked the North Carolina Veterinary Medical Association to share the information with their members.

Treatment and Prevention

At close of business, Michelle arrived to pick up Max. His temperature had returned to normal since receiving his first dose of doxycycline, and he was eating in the hospital. A 2-week course of doxycycline was dispensed, along with refills and instructions on how to use Max's flea and tick preventive. Alex provided Michelle with the practice's information sheet on tick prevention and a link to the CDC's recommendations for what to do after a tick bite. Alex also provided Michelle with the CDC RMSF information sheet. Michelle mentioned that she

TABLE 5.1

One Health Approach to Infectious Diseases Common to Humans and Companion Animals

Prepare Your Team	Resources and Strategies
- Learn about common infectious diseases that affect both humans and animals in your area. - Adopt best practices to keep your staff safe. - Reinforce recommendations and document compliance level in medical record at each visit. - Stock appropriate personal protective equipment (PPE) and train staff on when and how to use PPE.	- The following professionals can provide information and guidance on common infectious diseases of public health significance in your area: - Local public health agencies - State public health veterinarians - State veterinarians - Federal public and animal health agencies.
Create Your Community Network	Resources and Strategies
Network with local human health providers and public health agencies.	- Offer a continuing education event to local human health providers on a zoonotic disease in your area and what you see in pets. - Develop meet-and-greet sessions with local provider associations and veterinary associations. - Consider initiating One Health case rounds that can be discussed as an interdisciplinary group on a regular basis. - Start a journal club devoted to common infectious diseases of public health significance in your area.
Contacting Human Health Care Teams During an Incident	Resources and Strategies
Get written permission from clients to speak to their providers when indicated.	- Develop a consent form for clients to sign to allow you to speak with their health care provider. - Make sure to keep copies of the consent form in the patient's medical record. - Some health systems may require clients to sign the health system's release form.
Remember that health care providers cannot share certain information because of HIPAA unless they receive authorization from the client/human patient.	- Share concerns regarding possible exposure to infectious diseases of public health significance. - Share resources such as CDC website links or refer to the local public health department when appropriate.

(Continued on next page)

TABLE 5.1, CONTINUED**One Health Approach to Infectious Diseases Common to Humans and Companion Animals**

Contacting Public & Environmental Health During an Incident	Resources and Strategies
- Ensuring public health awareness is a key aspect of One Health and protecting the public—including you, your staff, and clients. - Zoonoses (e.g., plague, tularemia, influenza, salmonellosis) may present exposure risks to you and your staff.	- Identify public health contacts for infectious diseases and for environmental health. - Contact your state public health veterinarian or refer to the CDC website for reporting procedures. Some states request a call to the state office, others to a county or city office. Know which diseases are reportable by law. - Notifying public health officials about a possible case can be helpful in the following ways: - It offers an educational resource about the disease, prevention, and staff/client safety. - Your data may help outbreak investigations and public awareness/outreach. - If you are unable to reach a client's health care provider, a public health official has broader authority to work with the health care provider and review records associated with possible outbreaks.
Many agencies play a role in Environmental Health beyond Public Health. You may need to contact your local water agency (water contamination concerns), parks and recreation (regarding an environmental toxin or open-waterway contamination), or air resources agency for airborne concerns (such as wildfire smoke).	- For vectors or contamination from water sources or toxins, contact your local Environmental Health Department. - If you see a case from a specific park or public space, contact the organization responsible to let them know about possible exposure risk at the site. - You may also want to reach out to the local Environmental Health Department responsible for vector control, water, and environmental quality.

had picked up medication from the pharmacy and planned to start Morgan's treatment immediately.

Follow-Up Care

In 2 weeks, Max returned for a convalescent blood sample collection for the immunoglobulin G IFA assay to confirm Dr. Findley's diagnosis. Mark Spencer brought Max to the hospital for the follow-up visit. He shared that Max was back to his old self after just 2 days of doxycycline administration, and they completed the course of treatment. Mark reported that Morgan also felt better and expressed the family's gratitude for Dr. Findley's help in ensuring that they received the correct treatment early in the course of the disease.

Discussion and Debrief

After reading this scenario featuring a cross-over diagnosis involving both an animal and a human patient, discuss this case and others the veterinary team may face.

- What did the veterinary and human health care team do correctly?
- Would you have done anything differently?
- How can your team plan for similar situations in the future?
- What relevant resources does your local community offer?
 - Do you have the number for your local public health department and name of the person who works on zoonoses?
 - Do you have environmental health or park district contacts to call to recommend signage about ticks and tick-borne pathogen risks for pets and people?
- How can you increase client awareness about the risks of vector-borne diseases in your area?

Further Reading and Resources

Biggs HM, Behravesh CB, Bradley KK, et al. Diagnosis and management of tickborne rickettsial diseases: Rocky Mountain Spotted Fever and other spotted fever group rickettsioses, ehrlichioses, and anaplasmosis — United States. *MMWR Recomm Rep* 2016;65(2):1–44.

Centers for Disease Control and Prevention. About Rocky Mountain Spotted Fever. <https://www.cdc.gov/rocky-mountain-spotted-fever/about/index.html>.

Companion Animal Parasite Council. Rocky Mountain Spotted Fever. February 20, 2018. <https://capcvet.org/guidelines/rocky-mountain-spotted-fever/>.

Scenario B: Compassionate Care for Older Adult Client with Cognitive Function Issues

Dr. Hart started seeing Mildred Watson and her chihuahua, Mr. Snuffles, several years ago. Mrs. Watson is an older adult, who over the years began showing signs of cognitive impairment and memory issues, with significant progression over the past year. Mr. Snuffles, an aged chihuahua, began his role as a loyal companion to Mrs. Watson more than 10 years ago.

Presenting Problem

Over the past few years, Dr. Hart has closely monitored Mr. Snuffles' heart murmur and stage B1 myxomatous mitral valve disease (MMVD), a condition that commonly affects older, small-breed dogs. During a routine checkup, Dr. Hart diagnosed Mr. Snuffles with mild congestive heart failure, stage C MMVD, a progressive condition requiring medication, lifestyle adjustments, and frequent monitoring. However, during the visit, Dr. Hart noticed that Mrs. Watson seemed more disoriented than usual. She expressed confusion about Mr. Snuffles' diagnosis and was unable to verbalize the treatment plan after it was discussed. Dr. Hart shared these observations with Mrs. Watson, who acknowledged she had been struggling more with her memory lately.

Mrs. Watson's cognitive decline presented a significant challenge in communication and comprehension, particularly regarding complex medical information. Dr. Hart knew it was crucial to ensure that Mr. Snuffles received appropriate care and that Mrs. Watson was able to consent to and carry out the treatment plan. This required a heightened focus on her communication style and strategies.

Simplified Communication: Dr. Hart used clear, simple language when explaining Mr. Snuffles' condition and treatment. She avoided medical jargon and broke down information into small, manageable pieces.

- Instead of saying "mild congestive heart failure," Dr. Hart explained, "Mr. Snuffles' heart isn't pumping as well as it should. This means we need to give him some medicine to help his heart work better."
- She provided short, concise instructions for administering medication: "Give Mr. Snuffles this pill every morning with his food."

Written and Visual Aids: Mrs. Watson shared she was having trouble retaining verbal information, so Dr. Hart provided a written summary of the diagnosis and treatment plan. The take-home information was in patient-centered language and included simple diagrams to illustrate key points.

The handout included steps for medication administration, signs that might indicate a worsening of Mr. Snuffles' condition, and a contact number for the clinic in case of questions.

Involving a Caregiver: Recognizing Mrs. Watson's difficulties, Dr. Hart asked Mrs. Watson if there were aspects of Mr. Snuffles' care where a trusted caregiver or family member might be able to help, or if there was someone who regularly assists her that could be trained to help with Mr. Snuffles.

Mrs. Watson mentioned her neighbor, Laura, often helps her with daily tasks. With Mrs. Watson's permission, Dr. Hart reached out to Laura, explaining Mr. Snuffles' condition and ensuring she understood the treatment plan. They formulated a strategy to help Mrs. Watson remember to give Mr. Snuffles his medications, including suggesting the use of blister packs to keep his medication organized. Mrs. Watson had also shared difficulties connecting with her primary care office about her worsening memory. Dr. Hart offered to call Mrs. Watson's

Recommended Strategies for Communicating with Individuals with Cognitive and Memory Issues^a

Maintain Eye Contact and a Calm Environment.

Provide a quiet, distraction-free setting to help the client focus better. Maintain eye contact and use a calm, reassuring tone.

Repeat and Reinforce Information. Repeat essential points multiple times during the conversation and reinforce them with written notes and visual aids. Ask the client to repeat what they understand to confirm comprehension.

Patience and Empathy. Remain patient and empathetic and understand the client may become frustrated. Provide emotional support and reassurance to build trust and alleviate anxiety.

Positive Language. Frame instructions positively, saying "Do this" instead of "Don't do that" because positive language is easier to process and follow for individuals with cognitive impairments.

^a Wollney EN, Armstrong MJ, Bedenfield N, et al. Barriers and best practices in disclosing a dementia diagnosis: A clinician interview study. *Health Serv Insights* 2022;15:11786329221141829.

TABLE 5.2**One Health Approach to Older Adult Clients**

Prepare Your Team	Resources and Strategies
Learn about strategies for communication with people struggling with memory issues.	• The National Institutes of Health website and other resources online provide strategies for talking with older adult clients. See https://www.nia.nih.gov/health/health-care-professionals-information/talking-your-older-patients. • Do not assume all older adults have dementia or memory issues. • Do not assume all forgetfulness or difficulties following conversations are dementia; other health conditions or life situations may present similarly.
Develop a resource list for social services.	• Have your team develop a resource folder with local agencies and services to support clients such as Meals on Wheels, pet care and dog walking services, and senior centers. • Recognize that caregivers for older adults may also need support.
Get written permission from clients to speak to their providers when indicated.	• Develop a consent form for clients to sign to allow you to speak with their health care provider. • Keep a copy in the patient's medical record. • Recognize that some health care systems may still require clients to sign their own forms. • Be alert for signs that require additional intervention, such as the individual's condition worsens and/or they are unable to care for their animal. Interventions may include reporting to appropriate authorities to check on the animal and/or reaching out to a social worker.
Create Your Community Network	Resources and Strategies
Network with local human health providers.	• Develop meet-and-greet sessions with local provider associations and veterinary associations. • Ask for a local geriatrician to speak at a veterinary association meeting about working with older adult clients with memory issues.
Using Tools & Patient Follow-up	Resources and Strategies
Develop written tools and strategies to ensure home care of the pet can be tracked.	• Involve credentialed veterinary technicians in this process as they can play an important role in following up and monitoring progress with the patient and family.
Create appointments in advance with clear follow-up instructions.	• Work with customer service representatives to develop a reminder system tailored to the situation.
Caregiver Involvement	Resources and Strategies
Identify a person to assist with pet care and needs.	• Developing a backup list for clients may be useful for other emergency situations as well. • Some older adult clients may have a regular home health care person visiting them who may be able to assist with pet care as well.

primary care provider with her observations, but Mrs. Watson declined this offer and did not give her consent to contact her human health care provider. Dr. Hart let her know that the offer remained open for the future, should Mrs. Watson change her mind.

Regular Follow-Ups: To monitor both Mr. Snuffles' health and Mrs. Watson's ability to manage the treatment plan, the clinic's customer service representative (CSR) scheduled regular follow-up appointments and planned regular appointment reminders. These visits provided the opportunity to monitor and adjust treatment as needed and provide ongoing support; however, the team was aware that increasing the frequency of visits could create a financial and logistical burden for Mrs. Watson. With Laura's help, the team was able to offer some telehealth check-ins to decrease this burden. The team was also vigilant for indications of a decline in Mrs. Watson's ability to safely care for Mr. Snuffles or herself and were prepared to connect Mrs. Watson to additional resources such as a social worker if needed.

Transportation/Access to Clinic Visits: Staff watched for any potential changes in Mrs. Watson's ability to get to the clinic and helped her find alternatives if transportation was not available.

Discussion and Debrief

After reading this scenario featuring a client with cognitive impairment, discuss this case and others the veterinary team may face.

- What did the health care team do correctly?
- Would you have done anything differently?
- How can your team plan for similar situations in the future?
- What relevant local resources does your community offer?
- How might ethics and drivers impact how a human health practitioner and a veterinary practitioner would address this situation?
- How can you communicate your openness to helping pets stay in homes and continue to receive veterinary care despite the challenges a client may face?

Further Reading and Resources

National Institute on Aging. Talking with your older patients. <https://www.nia.nih.gov/health/health-care-professionals-information/talking-your-older-patients>.

Wollney EN, Armstrong MJ, Bedenfield N, et al. Barriers and best practices in disclosing a dementia diagnosis: A clinician interview study. *Health Serv Insights* 2022;15:11786329221141829.

Scenario C: Respectful Strategies and Accommodations for ADA-Eligible Clients and Patients

Presenting Problem

Joe scheduled a new client appointment with Dr. Garcia for his dog, Snoopy. The CSR noted in the schedule that Snoopy was an

assistance dog and informed Charlie, the credentialed veterinary technician (CrVT) assigned to Dr. Garcia. Before the appointment, the team members took time to remind themselves that they can ask just two questions about working and assistance dogs recognized by the Americans with Disabilities Act (ADA): (1) Is the dog a service animal required because of a disability? and (2) What work or task has the dog been trained to perform? In addition, the team looked into best practices for working with service pets, including the following:

- Talk directly to the client
- Ask before coming into physical contact with the assistance animal
- Make accommodations as requested by the client
- Do not make assumptions

Making Accommodations During the Appointment

Joe arrived with Snoopy and received paperwork to sign for consent to treat. He explained his low visual acuity and barriers to reading the form. The CSR asked Joe how best to guide them to the examination room. Joe asked the CSR to walk just in front of him on the opposite side of Snoopy, who would follow and guide Joe. After Joe entered the examination room, the CSR described the room, then read the forms aloud for him and offered to email him a copy to keep on file after he signs.

During the examination, Dr. Garcia learned that Snoopy is a 3-year-old golden retriever who joined Joe about a year ago. Joe shared countless ways Snoopy changed his life—he is getting out more, is making new friends, and just loves the dog. He admitted he couldn't imagine not having Snoopy with him. Joe explained that he wants to accompany Snoopy for any procedure because Snoopy is not used to other handlers.

Understanding the Role of an Assistance Animal

Joe made today's appointment because he was worried Snoopy may be injured or in pain. He explained he felt a difference in Snoopy's gait on walks and heard him whimper when he jumped. Dr. Garcia's orthopedic examination was consistent with a ruptured cranial cruciate ligament. He spoke with Joe about the indication for surgery and, in the meantime, recommended rest and pain management. Because an orthopedic injury may impact Snoopy's ability to perform his duties, Dr. Garcia asked Joe questions about how much running, jumping, and walking Snoopy's daily work required.

Accommodations for Home Care

Dr. Garcia collaborated with Joe on a plan to rest Snoopy as much as possible, provide pain management, and limit jumping and running, while knowing Snoopy must walk with Joe to and from his job each day—which involves navigating a short flight of stairs. Dr. Garcia had a frank conversation with Joe about Snoopy's recovery and let

TABLE 5.3**One Health Approach to Disability Accommodations**

Prepare Your Team	
Ensure office spaces are ADA compliant.	- From the parking lot to the examination room, make sure your space is accommodating for people with disabilities. - For more information, see https://www.ada.gov/law-and-regs/design-standards/.
Develop procedures for working with individuals with disabilities.	- Government guidelines can help with crafting accessible social media posts, handouts, and presentations. - See https://www.section508.gov/create/.
Learn about and use appropriate and inclusive language for people with disabilities.	The National Disability Rights Network provides guidance on language and resources.
Learn about disabilities and the role of working and assistance animals.	- Invite a working and assistance animal organization to present at a local veterinary association meeting. - Research local resources to support your clients with working and assistance animals. - Review the <i>AAHA Working, Assistance, and Therapy Dog Guidelines</i> at aaha.org.
Get written permission from clients to speak to their providers when indicated.	- Develop a consent form for clients to sign to allow you to speak with their health care provider. - Make sure to keep copies in the patient's medical record. - Recognize that some health care systems may still require clients to sign their own forms. - Although this case did not require discussion with a medical provider to address the MRSP exposure, other cases might require that communication.
Create Your Community Network	
Create a resource list for services.	Consider including the following resources that clients can be referred to: - Social workers - Mental health professionals - Short-term foster programs in case the client is hospitalized and/or otherwise temporarily cannot care for the animal patient - Transportation programs.
Using Tools & Patient Follow-up	
Be creative in developing solutions.	- Strategies like using rubber bands on bottles to differentiate medications can be essential to client compliance and treatment success. - Involve the client—chances are they have many solutions already and know what will work best for them.
Conduct regular follow-ups.	- Ensure that patient care stays on track. - Assess the impact a client may be experiencing from absent or reduced help from their assistance animal. - Delegate a CrVT to plan and implement a regular schedule.

him know that Snoopy would not be able to work for 6–8 weeks after surgery. He recommended Joe develop a plan for emotional and mobility support during this period. In addition, the veterinary team offered to contact a social worker to assist in finding him additional support services.

While handing the discharge instructions to Joe, Charlie realized Joe wouldn't be able to read the medical labels and instructions provided. They asked Joe what accommodations or modifications were needed to make the medication instructions and dosing accessible to him. Joe asked for emailed instructions so that his voice-assisted computer could read them aloud. Charlie offered to add several rubber bands around the bottle, so Joe can distinguish Snoopy's medication from any others in the home.

In a few days, Charlie reached out to Joe to check on Snoopy and share the number of a veterinary physical therapist who could come to Joe's home for postoperative rehabilitation therapy for Snoopy. They recommended that Joe provide the list of verbal cues Snoopy knows to the surgery facility to make his overnight hospitalization easier.

A veterinary orthopedic surgeon performed a tibial plateau leveling osteotomy (TPLO) 2 weeks later. This allowed Joe to make arrangements for his mobility and access during the postoperative period.

Snoopy's recovery was uneventful, and he returned to Joe after the surgery. During a follow-up call, Joe told Charlie that Snoopy seemed to be struggling with not being able to accompany Joe to work and was barking abnormally and showing other signs of anxiety. Charlie asked Joe to bring Snoopy in to assess the possible need for anxiolytics or sedatives and to discuss options for other low-impact tasks Snoopy could perform to decrease his stress levels.

Recognizing Zoonotic Risks Associated with Working and Assistance Animals

When Snoopy arrived, Dr. Garcia suspected an infection at the incision site and mentioned it to Joe. He asked Joe if there was anyone immunosuppressed in the household. Joe shared that he takes immunosuppressive medication and asked if he could be at risk of acquiring Snoopy's infection. In response, Dr. Garcia recommended culturing the incision before starting any antibiotics to ensure proper treatment and minimize the risk of selecting for resistant bacteria. Culture results received a few days later were positive for a multidrug-resistant methicillin-resistant *Staphylococcus pseudintermedius* (MRSP).

Dr. Garcia immediately called Joe to start Snoopy's treatment and discuss the potential for zoonotic transmission. He recommended that Joe contact his health care provider should he experience any illness. He shared that MRSP can be present on the skin of healthy dogs. Charlie emailed comprehensive recommendations including hand hygiene and wound care guidance along with instructions for decontamination of bedding and other household

items. Charlie checked in with Joe weekly to monitor Snoopy's recovery. They also provided Joe with contact information for a social worker for further support and resources.

Dr. Garcia contacted the veterinary orthopedic surgeon about the MRSP infection to ensure that the surgical team was aware of a potential exposure.

Six months later, Joe brought Snoopy in for his checkup and vaccines. Snoopy had fully recovered from the TPLO surgery and showed no signs of infection.

Discussion and Debrief

After reading this scenario featuring a guide dog patient and a client with no or low vision, discuss this case and others the veterinary team may face.

- What did the health care team do correctly?
- Would you have done anything differently?
- How can your team plan for similar situations in the future?
- What relevant local resources does your community offer?
- What training needs to take place for your team to understand ADA-related issues and accommodations?
- How can you ensure the client doesn't face the same ADA-related issues at every visit?

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Scenario D: Safe Place and Support for Humans and Animals Affected by Intimate Partner Violence

Jenny adopted Buster as a puppy from the shelter right after graduating from college 10 years ago. Since then, the veterinary team at All Friends Animal Hospital got to know both Jenny and Buster over the years as she started her career, bought a house, and met and married her husband, Jack.

From the beginning, Jenny was always cheery and talkative. The veterinary team noticed her kindness and devotion to Buster. Team members found each appointment enjoyable and wished that every client took as good care of their four-legged family member as she did.

Several months ago, Jenny brought Buster in for his routine wellness examination. Her husband accompanied her for the first time. Rather than catching up with the veterinary team as she typically would, she was much quieter than usual. The team also noticed that Jack made the decisions for Buster's care and cut Jenny off if she tried to ask a question. While he seemed to be nice enough, the veterinary

team sensed tension between them. Buster's examination found him in good health, but the veterinarian, Dr. Zayid, observed that Buster avoided getting close to Jack and kept his focus on Jenny.

Recognizing Signs of Suspected Abuse

The next time Jack and Jenny brought Buster in for an appointment, Buster arrived injured. Dr. Zayid also noticed that Buster had fleas and had lost weight. Jenny mentioned that Buster now lived in the yard because Jack hated Buster's hair all over everything. Jack responded, "Jenny worries about everything when she doesn't need to.

TABLE 5.4

One Health Approach to Suspected IPV and Animal Abuse*

Prepare Your Team	Resources and Strategies
Understand mandatory reporting requirements in your area for animal neglect and abuse, child neglect and abuse, and IPV. Laws differ across states in terms of requirements to report these situations.	- If the abuse is currently happening and/or a person or animal is in danger, calling 911 or the police is indicated. - Be aware of state mandatory reporting and immunity laws for veterinarians. For a table of laws by state, see https://www.animallaw.info/topic/table-veterinary-reporting-requirement-and-immunity-laws. - The National Link Coalition also provides resources and numbers for reporting human and animal abuse. See https://nationallinkcoalition.org/how-do-i-report-suspected-abuse.
Learn about harm reduction for mandatory reporters.	- Mandatory reporters may not be able to comply with a client's wishes if they run counter to the law. - It is important to communicate that you may not be able to comply with their wish (especially if their desire is to do nothing or to just get contact information for resources) if you are in a state that has mandated reporting for IPV and/or animal abuse. - For information on harm reduction strategies, which seek to reduce negative impact to survivors of abuse while abiding by the law, see https://ipvhealth.org/wp-content/uploads/2019/09/Compendium-4th-Edition-2019-Final-small-file.pdf.
Learn about the signs and indications for IPV and animal abuse.	- Reach out to a local domestic violence advocacy organization for a training session. This is an important step as they know the local laws and resources. - Make use of online resources to identify IPV, such as these: https://www.hubbardhouse.org/warning-signs-of-abuse/ https://www.harborhousedv.org/images/images/content/resources/community-education/Domestic_Violence_and_the_Workplace.pdf https://futureswithoutviolence.org https://www.thehotline.org/ - Make use of online resources and training to identify animal abuse, such as: https://www.aspcapro.org/resource/veterinary-resources-recognizing-and-reporting-animal-cruelty-and-neglect https://www.avma.org/resources-tools/animal-health-and-welfare/animal-welfare/animal-abuse-resources-veterinarians www.avma.org/sites/default/files/2023-10/awf-animal-maltreatment-report2023.pdf. - Hold educational sessions for staff so everyone knows what signs to look for.

(Continued on next page)

TABLE 5.4, CONTINUED

One Health Approach to Suspected IPV and Animal Abuse*

Prepare Your Team	Resources and Strategies
Provide resources for clients and staff.	• Establish collaborative relationships with domestic violence shelters that accept animals. • Keep contact information and resources on hand to provide as needed. • Identify victim advocates who will respond to the office or meet with the client at a convenient and safe location. • Ask local IPV experts to assist in creating screening questions that can be asked when gathering the history in an examination. • Note that preparedness for screening is complex and the barriers to screening will vary among personnel. • If it is safe, ask individuals how they want to be helped. Do not assume they want the police called.
Develop a plan.	• A workplace safety plan ensures that employees feel safe and know what to do if IPV is suspected. • For an example of one approach, see https://www.lawschool.cornell.edu/academics/experiential-learning/clinical-program/gender-justice-clinic/domestic-violence-and-the-workplace-model-policy-and-toolkit/. • The plan may also contain standard operating procedures for cases of suspected IPV, including how and when to offer resources and/or take action. • Plans could include: • How to interrupt the veterinarian to pull them out of the room, such as a specific believable story using words that will alert the veterinarian to the concern. • Suggestions for how to separate the clients so a brief private conversation can occur with the suspected victim. For example, a staff member may come in saying they have another form that must be filled out or may ask one of them to go with their pet to the back for treatment or diagnostics because their presence will help the pet remain calm.
Provide mental health support for staff.	• Contact a veterinary social worker to counsel staff and provide resources. • Provide resources listed by the American Veterinary Medical Association, https://www.avma.org/resources-tools/wellbeing. • Ensure team members are aware of resources provided by the company's Employee Assistance Plan policy.
Provide resources for clients.	• Post information in the restrooms with the phone numbers for local IPV resources. Many will not take provided cards or dial a number because their partner monitors their phone and activities. • Leave a pen and paper in the restroom with instructions for clients to provide information on how the clinic can help them (e.g., the client provides a number and requests that a resource agency call them during a specific time period when they will be alone, or the client can pass a note to the staff to call police or to schedule a recheck appointment at a specific day/time when the partner is not available). • When alone with a suspected victim, staff can offer them the use of a phone, so they can make a call without it being documented on their cell phone for the partner to find. • If you are comfortable with this and have the resources to do so, you can hospitalize the pet (at their request) so the pet is safe from harm if they were to leave, and/or let them know that your hospital can help care for their pet (even if the pet is healthy) until arrangements can be made. • Provide information for other pet housing options. Some domestic violence shelters now accept pets. Many humane societies can also offer crisis boarding for those fleeing IPV.

*Resources and strategies are suggestions and not intended to be exhaustive.

It's frustrating to hear her go on and on about Buster." Though he said he thought the "dog was fine," Jack agreed to radiographs to further assess Buster's injuries.

Radiographs showed broken ribs in various stages of healing. Dr. Zayid decided to keep Buster in the back in a kennel while she returned to the room to talk to the family. When she asked further questions about Buster's injuries, Jack said Buster kept trying to jump the fence, and he must have fallen and broken his ribs. However, Dr. Zayid recognized that repeated falls could not have caused Buster's injuries. The CrVT assisting Dr. Zayid, Amanda, had also noticed bruising around Jenny's wrists and mentioned this privately to Dr. Zayid when they were back in the treatment area. While in the room, Dr. Zayid said they needed some help keeping Buster calm and asked Jenny to accompany Amanda to the back of the clinic. She then escorted Jack to the front reception area and asked him to wait there.

Dr. Zayid was concerned that Jenny and Buster were victims of intimate partner violence (IPV) and knew that their state is one of the states that considers practicing veterinarians a mandated reporter of suspected animal abuse—requiring a report to local law enforcement within 24 hours. She decided that attempting to separate Jack and Jenny to speak to Jenny alone would be the best approach in this situation.

Having studied One Health perspectives on intimate partner violence, Dr. Zayid knew that violence toward companion animals in the household is also often present. Abusers will assault the family pet or any animal to intimidate and invoke fear in their partner and other members of the family. Violence directed at the family pet often continues alongside abuse of other family members, and the family pet may be the only source of comfort for IPV victims. Out of fear and concern for their pet, it is not uncommon for an individual to stay in their living situation unless they can take their pet with them.

Taking Action

After leaving Jack in the front area, Dr. Zayid returned to the back where Jenny was sitting with Buster and invited Jenny into her office. She told Jenny they were concerned about her and Buster's safety and asked if she wanted help. She reassured Jenny that she was there to support her and that she deserved to feel safe. Dr. Zayid also let Jenny know that she was required by state law to report any suspected animal abuse to the proper authorities. Jenny disclosed that Jack had threatened her earlier that day, and she was afraid to return home but did not want the police involved. She was open to getting the hotline number for domestic violence. Dr. Zayid provided Jenny with a number for a local domestic violence shelter that also accepted pets, and Jenny called them from the clinic phone. An advocate was able to advise Jenny and Dr. Zayid on the next steps to get Jenny and Buster to safety.

Supporting Staff Mental Health Needs

During a debrief the next day, the veterinary team realized that IPV is probably more prevalent than many realize, so Amanda volunteered to gather helpful resources for easy access when needed (see Further Reading). She also reached out to a local advocacy organization and arranged staff training on IPV.

A staff member approached the practice manager at the end of the day to discuss how this was a personal trauma trigger for her and requested mental health leave for the following day. After first making sure the staff member was not in any danger, the practice manager provided her with mental health resources from the company's Employee Assistance Program policy.

Discussion and Debrief

After reading this scenario featuring suspected IPV affecting both the client and the patient, discuss this case and others the veterinary team may face.

- What did the health care team do correctly?
- Would you have done anything differently?
- How can your team plan for similar situations in the future?
- What relevant local resources does your community offer?
- How will you handle things on the next visit or if/when the legal report comes to light with the client and/or the perpetrator?
- What safety plan do you have in place for your staff, clients, and patients?

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Conclusion

The One Health approach recognizes the undeniable interconnections between people, animals, and their shared environments and offers a compelling framework for addressing health care from a comprehensive, integrated perspective. Family-centered veterinary medicine ensures the wellbeing of animals, while also considering the overall health of families and communities. Veterinary professionals fill a vital role as part of a dynamic cross-disciplinary team in a One Health system that addresses client and patient needs possibly overlooked by veterinary services. This includes recognizing and responding to mental or physical health issues and other barriers clients face, which significantly impact the care provided to animal patients.

Achieving this integrated approach faces both short-term and long-term challenges, primarily due to the siloed nature of health care systems. To begin to acknowledge and address some of these challenges, AAHA brought together experts from the human medical professions and veterinary medical professions to hopefully pave the way for greater collaboration and conversation between these professions. By working together with human health care professions to address challenges and develop a cohesive One Health approach, veterinary teams can better support their patients and the humans caring for them, ultimately promoting a healthier and more equitable society. ■

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