Preface: Infection Control in Veterinary Small Animal Practice xi
Jason W. Stull and J. Scott Weese

Hospital-Associated Infections in Small Animal Practice 217
Jason W. Stull and J. Scott Weese

Hospital-associated infections (HAIs) occur in veterinary hospitals of all types and sizes, and their frequency is likely to increase. Urinary tract infections, pneumonia, bloodstream infections, surgical site infections, and infectious diarrhea are the HAIs most frequently identified in veterinary medicine. A hospital infection control program, consisting of an infectious disease control officer, written protocols, and staff training, is critical to reducing HAIs and promoting patient, staff, and client health. Infection control protocols (plans) should include discussion of hand hygiene and use of personal protective equipment, cleaning and disinfection, patient management, with-in hospital surveillance, and antimicrobial stewardship.

Veterinary Hospital Surveillance Systems 235
Brandy A. Burgess and Paul S. Morley

We cannot manage what we do not measure. In order to provide optimal patient care appropriate effort must be given to the prevention of infectious disease transmission through the development and maintenance of an infection control program that is founded on results obtained through organized surveillance efforts. Every facility is unique – thus efforts should be tailored to distinctive physical attributes and organizational limitations of individual practices. There is not only an ethical responsibility to do so, but there is a legal responsibility to meet the minimum standard of practice with respect to veterinary infection prevention and control.

Fighting Surgical Site Infections in Small Animals: Are We Getting Anywhere? 243
Denis Verwilghen and Ameet Singh

A diverse array of pathogen-related, patient-related, and caretaker-related issues influence risk and prevention of surgical site infections (SSIs). The entire surgical team involved in health care settings in which surgical procedures are performed play a pivotal role in the prevention of SSIs. In this article, current knowledge of SSI risk factors and prevention methods is reviewed. Although new avenues that can be explored in the prevention of SSIs in veterinary medicine are described, the main conclusion drawn is that the best method for prevention of SSI is to adhere to what we already know.

Patient Management 277
Lynn Guptill

Hospital-associated infections, including those caused by zoonotic agents, represent an increasing concern in veterinary practice. Veterinarians and hospital staff are obligated and expected to provide education
about and protection from transmission of pathogens among animal patients and between animal patients and human beings (eg, veterinary staff, volunteers, owners) who come into contact with infected animals. Patient management involves assessing risks of pathogen transmission, identification of animals either suspected of or proved to be infected with a transmissible infectious disease agent, and the implementation of measures that minimize the likelihood of transmission of the infectious agent.

**Environmental Cleaning and Disinfection**

Michelle Traverse and Helen Aceto

The guidelines in this article provide veterinarians, veterinary technicians, and veterinary health care workers with an overview of evidence-based recommendations for the best practices associated with environmental cleaning and disinfection of a veterinary clinic that deals with small animals. Hospital-associated infections and the control and prevention programs necessary to alleviate them are addressed from an environmental perspective. Measures of hospital cleaning and disinfection include understanding mechanisms and types of contamination in veterinary settings, recognizing areas of potential concern, addressing appropriate decontamination techniques and selection of disinfectants, the management of potentially contaminated equipment, laundry, and waste management, and environmental surveillance strategies.

**Cleaning and Disinfection of Patient Care Items, in Relation to Small Animals**

J. Scott Weese

Patient care involves several medical and surgical items, including those that come into contact with sterile or other high-risk body sites and items that have been used on other patients. These situations create a risk for infection if items are contaminated, and the implications can range from single infections to large outbreaks. To minimize the risk, proper equipment cleaning, disinfection/sterilization, storage, and monitoring practices are required. Risks posed by different items; the required level of cleaning, disinfection, or sterilization; the methods that are available and appropriate; and how to ensure efficacy, must be considered when designing and implementing an infection control program.

**Contact Precautions and Hand Hygiene in Veterinary Clinics**

Maureen E.C. Anderson

Hand hygiene, contact precautions, and other basic infection control measures are crucial in veterinary clinics, because these facilities can be community mixing pots of animals and people with a wide range of health and disease-carrier states. Veterinary staff must be knowledgeable and well trained regarding when and how to apply situation-appropriate contact precautions and to properly perform hand hygiene. The limited information on the use of contact precautions and hand hygiene practices among veterinary staff suggests that compliance is low. Improving the infection control culture in clinics and in veterinary medicine is critical to achieving better compliance with these practices.
Antimicrobial Stewardship in Small Animal Veterinary Practice: From Theory to Practice

Luca Guardabassi and John F. Prescott

Despite the increasing recognition of the critical role for antimicrobial stewardship in preventing the spread of multidrug-resistant bacteria, examples of effective antimicrobial stewardship programs are rare in small animal veterinary practice. This article highlights the basic requirements for establishing stewardship programs at the clinic level. The authors provide suggestions and approaches to overcome constraints and to move from theoretic concepts toward implementation of effective antimicrobial stewardship programs in small animal clinics.

Zoonotic Disease Risks for Immunocompromised and Other High-risk Clients and Staff: Promoting Safe Pet Ownership and Contact

Jason W. Stull and Kurt B. Stevenson

Pets can be a source of disease (zoonoses) for humans. The disease risks associated with pet contact are highest among young children, the elderly, pregnant women, and immunocompromised hosts. These individuals and household members display limited knowledge of pet-associated disease, rarely recall receipt of pet-associated disease information, and report pet ownership practices that are often at odds with established disease prevention recommendations. Veterinary staff are in a key position to promote safe pet ownership and contact practices. Encouraging and safeguarding client disclosure of immunocompromising health conditions and promoting veterinarian-physician communications are critical for effectively providing this service.

Legal Implications of Zoonotic Disease Transmission for Veterinary Practices

Antoinette E. Marsh and Sarah Babcock

Increased recognition of veterinarians’ capabilities and their role in public health raises concerns as to their legal duty to both clients and the public. With the numerous potential situations and variety of clients, the veterinarians’ role in public health issues associated with zoonotic agents seems vague. However, analysis of the legal duty provides a more precise road map to the responsibilities and actions needed in companion animal medicine. The authors discuss mitigation measures to apply to potential situations regarding the ethical and legal requirements of zoonotic diseases and the legal repercussions of failing to act.

Workplace Safety and Health for the Veterinary Health Care Team

John D. Gibbins and Kathleen MacMahon

Veterinary clinic employers have a legal and ethical responsibility to provide a safe and healthy workplace. Clinic members are responsible for consistently using safe practices and procedures set up by their employer. Development and implementation of a customized comprehensive workplace safety and health program is emphasized, including an infection control plan. Occupational safety and health regulations are reviewed.
The hazards of sharps, animal bites and scratches, and drugs are discussed. Strategies to prevent or minimize adverse health effects and resources for training and education are provided.