

MODULE 1

7 STEPS TO GOOD INFECTION PREVENTION

START

7 STEPS TO GOOD INFECTION PREVENTION

You do not need to be an award-winning chemist or microbiologist to be good at infection prevention in an animal care setting. Yes, the chemical and its proper use is critical, but think about infection prevention with the big picture in mind. It's a team effort based on several unique considerations for each environment.

7 STEPS TO GOOD INFECTION PREVENTION

Click on the round buttons throughout the module to learn more!

1. Clarify ROLES and RESPONSIBILITIES

STEP 1 Clarify roles and responsibilities within your animal care team.

ROLES

Everyone needs to understand the protocols and processes involved as well as which team members will complete which parts of the infection prevention work.

- Create a functional group responsible for cleaning and disinfecting the animal care environments and equipment.
- Determine together who is responsible for cleaning and disinfecting each surface and piece of equipment in all patient rooms, treatment areas, surgical suites, and public

areas, including the lobby and restrooms.

- Develop a schedule for cleaning and disinfection frequency.

RESPONSIBILITIES

How you divide up infection prevention tasks depends on the size of your facility and staff.

- Large practices often include staff members whose only job is cleaning and disinfection.
- Smaller practices must assign these tasks across various job descriptions.

STEP 1 Clarify roles and responsibilities within your animal care team.

Example of roles and responsibilities in a medium-sized practice.

Click each white button below to see the responsibility of each team member.

Job Title – Cleaning/Disinfection Responsibilities – Sample Veterinary Office Floor Plan

Receptionist or Front office staff: Lobby and other public areas

Veterinary assistant or Kennel assistant: Hospitalization and boarding areas

Veterinary technician: Exam rooms, treatment area, surgical suite, diagnostic equipment

Office practice manager: Offices and administrative areas

Groomer: Grooming and bathing areas

Veterinarians: Personal equipment, such as stethoscope

Click the button to see all on map

STEP 1 Clarify roles and responsibilities within your animal care team.

SUMMARY

WHO, WHAT, WHERE, WHEN?

- Create a functional group responsible for cleaning and disinfection.
- Determine who is responsible for each surface and piece of equipment in all patient rooms.
- Develop a schedule for cleaning and disinfection frequency.

! If this division of responsibilities does not occur, surfaces or devices will be overlooked.

7 STEPS TO GOOD INFECTION PREVENTION

1. Clarify ROLES and RESPONSIBILITIES

2. Identify levels of BIOSECURITY RISK

2. Identify and designate levels of biosecurity risk based on the different areas of your facility.

IDENTIFY BIOSECURITY RISK

Different areas of a facility pose different levels of biosecurity risk. You could use numbering system or color codes to designate these areas of risk.

Biosecurity Risk Level 1 - Green

Biosecurity Risk Level 2 - Yellow

Biosecurity Risk Level 3 - Red

Limit the movement of equipment and people between areas.

Consider the movement of equipment and personnel between different biosecurity level areas. You would not want items from a red area regularly being taken into green areas.

FLEXIBILITY and COMMUNICATION

Communication about each patient's status needs to be flexible. As a pet's condition changes, so might the infection prevention strategies required to maintain biosecurity in the facility.

STEP 2 Identify and designate levels of biosecurity risk based on the different areas of your facility.

DESIGNATE BIOSECURITY RISK

Consider each room listed and select the biosecurity level that you think works best in a small animal hospital.

You may pick more than one level per room, by clicking on each white box. Check your answer against the example when you are done.

Small Animal Hospital – Biosecurity Level

Outpatient exam room – Level 1

Emergency admission rooms – Level 2

Sick patient's exam room – Level 2 or 3

Surgery suites – Level 1 or 2

Dental procedures – Level 1

Patient's ward – Level 1 or 2

Isolation ward – Level 3

Intensive care unit – Level 2 or 3

Oncology area – Level 2 or 3

STEP 2 Identify and designate levels of biosecurity risk based on the different areas of your facility.

SUMMARY

NAME THE RISK.

- Identify and name the biosecurity risk of each area of your facility.
- Limit the movement of equipment and personnel across biosecurity levels.
- Communicate about changes in biosecurity risks in real time.

! Recognizing and naming the biosecurity risk is essential to eliminate cross contamination.

7 STEPS TO GOOD INFECTION PREVENTION

1. Clarify ROLES and RESPONSIBILITIES

2. Identify levels of BIOSECURITY RISK

3. Consider MODE OF TRANSMISSION for pathogens

STEP 3 Take into account mode of transmission for possible pathogens and initiate steps to break the cycle of infection.

BREAK THE INFECTION CYCLE

Once an infectious pathogen enters a facility, it's up to the team to break the infectious cycle through cleaning and disinfection. Next steps include the following:

- Removing fecal matter and other body fluids or biofilms
- Cleaning all surfaces before disinfecting
- Disinfecting surfaces with properly concentrated disinfectant

SOURCES OF CONTAMINATION

The major sources of environmental contamination are the patient's endogenous flora and the hands of healthcare workers.^{1,2}

Endogenous flora on dog
Healthcare workers' hands

1. Rutala, William, and David J. Weber. 2014. "Selection of the ideal disinfectant." *Infection Control and Hospital Epidemiology* 35: 855-865.
2. Stull, Jason et al. 2016. "Risk reduction and management strategies to prevent transmission of infectious disease among dogs at dog shows, sporting events, and other canine group setting." *Journal of the American Veterinary Medical Association* 249: 612-627.

STEP 3 Take into account mode of transmission for possible pathogens and initiate steps to break the cycle of infection.

TRANSMISSION PRECAUTIONS for dogs and cats¹

Mode of Transmission

Airborne

Pathogen

- *Mycobacterium tuberculosis*
- *Yersinia pestis*
- *Francisella tularensis*

Transmission Precautions

- Isolation, ideally negative pressure room
- Wear N95 respirator mask
- Barrier nursing

Mode of Transmission

Droplet

Pathogen

- Canine infectious respiratory disease complex
- Infectious feline upper respiratory tract disease

Transmission Precautions

- Isolation
- Space animals four feet apart or more
- Barrier nursing

Mode of Transmission

Contact

Pathogen

- Multi-drug resistant bacteria
- Dermatophytes
- *Leptospira spp*
- *Salmonella spp*
- Parvovirus

Transmission Precautions

- Warning signage on the cage
- Barrier nursing
- Dedicated equipment
- Isolation for certain pathogens
- Limit movement of affected animals
- Hand hygiene precautions
- Proper cleaning, disinfection and disposal

1. Sykes, Jane, and J. Scott Weese. 2014. "Infection control programs for dogs and cats." In *Canine and Feline Infectious Diseases*, edited by Janes Sykes, 105-118. St. Louis, MO: Elsevier.

STEP 3 Take into account mode of transmission for possible pathogens and initiate steps to break the cycle of infection.

SUMMARY

UNDERSTAND TRANSMISSION and THE INFECTION CYCLE

Break the infection cycle

- Remove fecal matter and body fluids
- Clean all surfaces
- Disinfect with properly concentrated disinfectant

Environmental contamination

- Pathogens brought in by patients
- Healthcare workers hands

Mode of transmission makes a difference - know infection prevention precautions depending on airborne, droplet or contact transmission.

! It is up to every employee to understand transmission possibilities and break the infection cycle.

7 STEPS TO GOOD INFECTION PREVENTION

- 1. Clarify ROLES and RESPONSIBILITIES**
- 2. Identify levels of BIOSECURITY RISK**
- 3. Consider MODE OF TRANSMISSION for pathogens**
- 4. Choose THE RIGHT DISINFECTANT**

STEP 4 Choose the right disinfectant for your facilities needs.

Will you use one product for cleaning and another for disinfecting?

Not all disinfectants are cleaners. With some disinfectants, the use of a separate detergent may be required. However, some products are one-step cleaners-disinfectants, accomplishing both in a single step.

Will you use one product for all of your disinfecting?

If you prefer to use a single product, ensure that it is an effective disinfectant against all pathogens that are of concern to your facility.

What format of disinfectant product would you want to use?

Some disinfectants come in dilutable concentrates, ready-to-use liquids or pre-moistened wipes. Think about what formats would be most convenient for the layout of your facility.

STEP 4 Choose the right disinfectant for your facilities needs.

SUMMARY**PICK YOUR PRODUCT.**

- Disinfectant only or one-step cleaner-disinfectant.
- Ensure the disinfectant is effective against the pathogens of importance.
- Does the product come in your desired format: dilutable concentrate, ready-to-use liquid or wipes.

! Not all products are the same! Consider all of the above in your choice.

7 STEPS TO GOOD INFECTION PREVENTION

1. Clarify ROLES and RESPONSIBILITIES
2. Identify levels of BIOSECURITY RISK
3. Consider MODE OF TRANSMISSION for pathogens
4. Choose THE RIGHT DISINFECTANT
5. TRAIN YOUR STAFF on how to use the product

STEP 5 Train your entire staff on proper use of the specific disinfectant you choose.

Finding help

You can get everything you need to know, from the disinfectant manufacturer or sales reps. Get comprehensive information and build your own protocols at: LearnAboutRescue.com.

Read the Safety Data Sheet

Make sure everyone reads the OSHA-mandate Safety Data Sheets (SDS). Typically, you'll find the information you need about a product's safety profile, hazards, and toxicology data in Section 2 and Section 11 of the SDS.

STEP 5 Train your entire staff on proper use of the specific disinfectant you choose.

Dilution and Contact Time

Pay attention to dilution calculations and required contact times so that whatever disinfectant you use works to the best of its ability.

Examples using Rescue™ Concentrate

DAILY USE

Dilution

1:64 or 2 oz/gallon

Contact Time

5 minutes

BACTERICIDAL FUNGICIDAL (PARVO)

Dilution

1:16 or 8 oz/gallon

Contact Time

5 minutes

VIRUCIDAL

Dilution

1:64 or 2 oz/gallon

Contact Time

5 minutes

NON-FOOD CONTACT SURFACE SANITIZER

Dilution

1:128 or 1 oz/gallon

Contact Time

3 minutes

Surface should be visibly wet for contact time.

STEP 5 Train your entire staff on proper use of the specific disinfectant you choose.

SUMMARY

TRAIN YOUR STAFF.

- Use available resources.
- Every employee reads the Safety Data Sheet.
- Focus on dilution calculations and contact time.

! A well-trained team is more confident in their work and in their workplace.

7 STEPS TO GOOD INFECTION PREVENTION

- 1. Clarify ROLES and RESPONSIBILITIES**
- 2. Identify levels of BIOSECURITY RISK**
- 3. Consider MODE OF TRANSMISSION for pathogens**
- 4. Choose THE RIGHT DISINFECTANT**
- 5. TRAIN YOUR STAFF on how to use the product**
- 6. Make the disinfectant and TOOLS READILY ACCESSIBLE**

STEP 6 Make the disinfectant you choose readily accessible along with any other required tools.

Achieve compliance

A key to achieving compliance with your cleaning and disinfection protocol is making the process as easy and convenient as possible.

Set up several stations throughout your facility with all the required supplies for disinfecting. This includes measuring devices, bottles, buckets, clean cloths and anything else that is used in cleaning and disinfecting that area.

Less movement around your facility during cleaning and disinfection also means less opportunity for cross contaminating other areas.

STEP 6 Make the disinfectant you choose readily accessible along with any other required tools.

SUMMARY

MAKE IT EASY!

- Set up cleaning and disinfection stations.
- Include products and tools to be used in defined areas of your facility.
- Avoid cross contamination by creating multiple stations in strategic locations.

! Making it easy means your protocol is more likely to be followed by all of your staff.

7 STEPS TO GOOD INFECTION PREVENTION

- 1. Clarify ROLES and RESPONSIBILITIES**
- 2. Identify levels of BIOSECURITY RISK**
- 3. Consider MODE OF TRANSMISSION for pathogens**
- 4. Choose THE RIGHT DISINFECTANT**
- 5. TRAIN YOUR STAFF on how to use the product**
- 6. Make the disinfectant and TOOLS READILY ACCESSIBLE**
- 7. QUALITY-CONTROL and COMPLIANCE MONTIORING**

STEP 7 Set up routine quality-control measures and compliance monitoring.

Measure and Monitor

Having a system in place for auditing your infection prevention program can go a long way in maintaining accountability.

Ensure that disinfectant solutions are marked with expiration dates to ensure the product used remains effective.

Cleaning and disinfection logs can be a useful tool to keep track of which surfaces or areas throughout your facility have been cleaned and disinfected and by whom.

STEP 7 Set up routine quality-control measures and compliance monitoring.

SUMMARY

WRITE IT DOWN!

- Clearly mark expiration dates on product containers.
- Remember your schedule from step 1? Make a log to record when tasks are completed. It is important to log the person, time and task to make sure your disinfection/cleaning schedule is working.

! Monitoring your disinfection/cleaning protocol lets every staff member know it is a top priority at your facility.

7 STEPS TO GOOD INFECTION PREVENTION

REGISTER or SIGN-IN to take the quiz and complete this module.

When you have completed all three modules and quizzes, you will be able to print your Veterinary Infection Preventionist certificate!