

## MODULE 2

# EFFICACY CLAIMS, PATHOGEN SUSCEPTIBILITY & HOW TO CHOOSE THE IDEAL DISINFECTANT

START

## EFFICACY CLAIMS and PATHOGEN SUSCEPTIBILITY

### The “CLAIMS GAME”

Disinfectant product labels can vary significantly between manufacturers, making it difficult for users to understand a disinfectant's efficacy and compare different products.

#### WHAT DO I NEED TO KNOW?

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

## EFFICACY CLAIMS and PATHOGEN SUSCEPTIBILITY

### The “CLAIMS GAME”

To assess if a disinfectant is effective for use in an animal health setting, there are two key areas we need to understand.

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

#### 1. PATHOGEN HIERARCHY of SUSCEPTIBILITY

Does this disinfectant work on the hard-to-kill pathogens that might be found in my facility?

#### 2. CLAIMS RELEVANCY

Is this disinfectant effective against the common pathogens in my facility?

## EFFICACY CLAIMS and PATHOGEN SUSCEPTIBILITY

# BACK TO BASICS

Before we delve into understanding disinfectant claims, let's take a step back and review **what disinfection is, and what it is not.**

Number of pathogens remaining

### CLEANING

The removal of visible soil, organic and inorganic contamination, and some pathogens from a device or surface.

### DISINFECTION

The destruction of pathogenic and other kinds of micro-organisms by physical or chemical means; **destroys most recognized pathogenic microorganisms but not necessarily all microbial forms.**

### STERILIZATION

The use of a physical or chemical procedure to **destroy all forms of microbiological life**, including high numbers of resistant bacterial spores.

## EFFICACY CLAIMS and PATHOGEN SUSCEPTIBILITY

# Die-easy, or die-hard?

Susceptibility to disinfectants = ?

how easy it is to kill a particular class of pathogens (ie. Disease-causing bacteria/viruses)

(Click on the blue buttons throughout the module to learn more!)

### EASIEST TO KILL

High susceptibility to disinfectants

### HARD TO KILL

Low susceptibility to disinfectants

## EFFICACY CLAIMS and PATHOGEN SUSCEPTIBILITY

# Easy vs. Hard-to-kill

Hierarchy of Susceptibility to disinfectants = ? A relative ranking of how easy or hard it is to kill a particular class of pathogens

### EASIEST TO KILL

High susceptibility to disinfectants

#### Enveloped Viruses

- Coronavirus
- Influenza
- Parainfluenza
- Distemper
- Herpes

#### Vegetative Bacteria

- *Salmonella enterica*
- *Staphylococcus aureus*
- *Pseudomonas aeruginosa*

#### Fungi

- *Candida* species
- *Trichophyton* species

### HARD TO KILL

Low susceptibility to disinfectants

#### Mycobacteria

#### Non-enveloped viruses

- Calicivirus
- Parvovirus
- Rotavirus

#### Bacterial Spores

- *Bacillus* species
- *Clostridium* species

## EFFICACY CLAIMS and PATHOGEN SUSCEPTIBILITY

# Does your disinfectant have the POWER?

If you want to know if your disinfectant product is effective against a particular pathogen that's not listed on the label, a general rule of thumb is to refer to the **HIERACHY of SUSCEPTIBILITY**.

## HOW DOES IT WORK?

### EASIEST TO KILL

High susceptibility to disinfectants

#### **Distemper**

Enveloped Viruses

### HARD TO KILL

Low susceptibility to disinfectants

#### **Parvovirus**

Non-enveloped Viruses

If a disinfectant is effective against a typically hard-to-kill pathogen, it is likely effective against one that is easier to kill.

## EFFICACY CLAIMS and PATHOGEN SUSCEPTIBILITY

# Don't get fooled by manufacturer “CLAIM GAMES”

Keep these simple rules in mind when assessing whether or not a disinfectant is a good option for your facility:

### **RULE 1**

Click on each button to learn more!

Choose a disinfectant that is **effective against pathogen classes that are MORE DIFFICULT to kill**.

## **RULE 2**

Make sure that the pathogens in the efficacy claims are RELEVANT to your facility.

## **RULE 3**

Focus on the type of pathogens in the claims, NOT the total number of claims.

### **Don't forget**

Don't forget about contact times! Contact times are important to consider. Longer times might be harder to achieve in a clinic setting.

## **HOW TO CHOOSE THE IDEAL DISINFECTANT**

# **Choose wisely...**

Put some thought into selecting a disinfectant for your facility!

?

There's a lot to consider, including how your disinfectant impacts people, the environment, and—most importantly—the animals you serve!

## **HOW TO CHOOSE THE IDEAL DISINFECTANT**

# **How to Choose the Ideal Disinfectant**

Click on each button to learn more!

### **FASTER**

Ranging from 30 seconds to 10 minutes, contact time is how long the surface needs to stay wet with disinfectant solution for full efficacy. If you wet a surface (e.g., with a disinfectant from a spray bottle) and immediately wipe the surface dry, it won't be effectively disinfected. If the surface dries before contact time is met the disinfectant must be reapplied.

### **CLEANER**

Some disinfectants are poor cleaners, which means that surfaces need to be pre-cleaned with a separate detergent before disinfecting. There are some disinfectants that clean and disinfect at the same time. Choosing a disinfectant with detergency properties will help you clean and disinfect in one simple step.

### **SUSTAINABLE**

Disinfectants should be tough on dangerous pathogens, but gentle on the planet. This means that the ideal disinfectant will be biodegradable and not leave any harmful residues that will accumulate in the environment.

### **COMPATIBLE**

Disinfectants should not cause wear and tear on your surfaces or equipment. Choosing a disinfectant that is compatible with a wide range of commonly used materials will help protect your investments in the long run.

### **RESPONSIBLE**

Disinfectants should be tough on germs, but gentle on the user and animal. The ideal disinfectant is non-toxic, non-irritating, and should not have a harsh chemical smell.

## **HOW TO CHOOSE THE IDEAL DISINFECTANT**

# **Get to know Prevail™**

### **FASTER**

Prevail™ has: 3-5 minute contact time

### **CLEANER**

Prevail™ has: Good activity in moderate organic debris

### **SUSTAINABLE**

Prevail™ is: Biodegradable

### **COMPATIBLE**

Prevail™: Does not appear to be corrosive, unlike other oxidizing agents

### **RESPONSIBLE**

Prevail™ is: Non-toxic

**MODULE 2**

**EFFICACY CLAIMS, PATHOGEN  
SUSCEPTIBILITY & HOW TO CHOOSE THE  
IDEAL DISINFECTANT**

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!