ACVPM Infectious Diseases Practice Exam (Sample)

Study Guide

Everything you need from our exam experts!

Table of Contents

Introduction

Preparing for a certification exam can feel overwhelming, but with the right tools, it becomes an opportunity to build confidence, sharpen your skills, and move one step closer to your goals. At Examzify, we believe that effective exam preparation isn't just about memorization, it's about understanding the material, identifying knowledge gaps, and building the test-taking strategies that lead to success.

This guide was designed to help you do exactly that.

Whether you're preparing for a licensing exam, professional certification, or entry-level qualification, this book offers structured practice to reinforce key concepts. You'll find a wide range of multiple-choice questions, each followed by clear explanations to help you understand not just the right answer, but why it's correct.

The content in this guide is based on real-world exam objectives and aligned with the types of questions and topics commonly found on official tests. It's ideal for learners who want to:

- **Practice answering questions under realistic conditions,**
- **Improve accuracy and speed,**
- **Review explanations to strengthen weak areas, and**
- **Approach the exam with greater confidence.**

We recommend using this book not as a stand-alone study tool, but alongside other resources like flashcards, textbooks, or hands-on training. For best results, we recommend working through each question, reflecting on the explanation provided, and revisiting the topics that challenge you most.

Remember: successful test preparation isn't about getting every question right the first time, it's about learning from your mistakes and improving over time. Stay focused, trust the process, and know that every page you turn brings you closer to success.

Let's begin.

How to Use This Guide

This guide is designed to help you study more effectively and approach your exam with confidence. Whether you're reviewing for the first time or doing a final refresh, here’s how to get the most out of your Examzify study guide:

1. Start with a Diagnostic Review

Skim through the questions to get a sense of what you know and what you need to focus on. Your goal is to identify knowledge gaps early.

2. Study in Short, Focused Sessions

Break your study time into manageable blocks (e.g. 30 – 45 minutes). Review a handful of questions, reflect on the explanations.

3. Learn from the Explanations

After answering a question, always read the explanation, even if you got it right. It reinforces key points, corrects misunderstandings, and teaches subtle distinctions between similar answers.

4. Track Your Progress

Use bookmarks or notes (if reading digitally) to mark difficult questions. Revisit these regularly and track improvements over time.

5. Simulate the Real Exam

Once you're comfortable, try taking a full set of questions without pausing. Set a timer and simulate test-day conditions to build confidence and time management skills.

6. Repeat and Review

Don’t just study once, repetition builds retention. Re-attempt questions after a few days and revisit explanations to reinforce learning. Pair this guide with other Examzify tools like flashcards, and digital practice tests to strengthen your preparation across formats.

There’s no single right way to study, but consistent, thoughtful effort always wins. Use this guide flexibly, adapt the tips above to fit your pace and learning style. You've got this!

Questions

1. What is the most common means of spread once infection enters a premises?

A. Direct contact only

B. Waterborne spread

C. Insect vectors

D. Aerosol

2. Has EMV been reported to infect humans?

A. Not reported

B. Yes

C. No

D. Only in animals

3. What did the 2007 dairy study reveal about the prevalence of Coxiella burnetii in U.S. dairy herds?

A. Prevalence increased with herd size, with 69.8% of small operations testing positive and 98.8% of large operations testing positive by PCR.

B. Prevalence decreased with herd size; 69.8% of small operations and 98.8% of large operations tested positive by PCR.

C. Prevalence increased with herd size, but only large operations tested positive by PCR.

D. Only large operations tested positive, small operations did not.

4. Hog Cholera (Classical Swine Fever) affects which animal species?

A. Birds

B. Sheep

C. Pigs

D. Cattle

5. What is the infectious agent for progressive inflammatory neuropathy?

A. Bovine spongiform encephalopathy agent

B. Unknown; thought to be an autoimmune response to antigens associated with porcine brain matter

C. Streptococcus pneumoniae

D. Clostridium botulinum

6. How should samples from a suspected Vesicular Stomatitis positive horse be sent?

A. From the field to any laboratory

B. Under unsecured conditions to any laboratory

C. Under secured conditions to an authorized laboratory

D. By mail without special packaging

7. In nasal glanders, which clinical sign is characteristic?

A. Ulcerated regions along turbinates

B. Tubercle formation in lung parenchyma

C. Farcy lesions along lymph vessels

D. Chronic draining abscesses along skin

8. Which exotoxins are produced by anthrax?

A. Protective antigen and edema factor

B. Lethal factor and protective antigen

C. Edema factor and lethal factor

D. Protective antigen and capsule

9. What is the characteristic pathology described for EMV in affected tissue?

A. Lung lesions - congested, firm, lymphatic dilatation, foamy hemorrhagic exudate, and giant multinucleated syncytial cells.

B. Hepatic necrosis.

C. Renal failure.

D. Meningeal purulent inflammation.

10. Which occupational group is at increased risk for coccidioides infection?

A. Office workers

B. Military or border guards with workplace exposure

C. Teachers

D. Retail workers

Answers

1. D
2. B
3. A
4. C
5. B
6. C
7. A
8. C
9. A
10. B

Explanations

1. What is the most common means of spread once infection enters a premises?

A. Direct contact only

B. Waterborne spread

C. Insect vectors

D. Aerosol

The key idea is that in a closed space, tiny respiratory particles that are released when an infected person breathes, talks, or coughs can linger in the air and be inhaled by others. These aerosols can stay suspended for minutes to hours and travel with room air currents and ventilation, making transmission to multiple people who share the space highly likely. This makes aerosol spread the most common way an infection moves around once it's inside a premises. Direct contact needs close physical interaction, waterborne spread requires contaminated water, and insect vectors depend on the presence and activity of a vector—none of which account for as widespread transmission in a single enclosed environment as aerosols do.

2. Has EMV been reported to infect humans?

A. Not reported

B. Yes

C. No

D. Only in animals

Cross-species transmission is the idea here: some viruses that mainly infect animals can still infect humans under certain conditions. EMV has been reported to infect humans, which means there are documented cases where people acquired EMV infection. This shows the virus is not strictly limited to animals and can cross into the human population, often through exposure to infected animals or contaminated sources and confirmed by lab testing. Because of that evidence, the statement that EMV has been reported to infect humans is the accurate one.

3. What did the 2007 dairy study reveal about the prevalence of Coxiella burnetii in U.S. dairy herds?

A. Prevalence increased with herd size, with 69.8% of small operations testing positive and 98.8% of large operations testing positive by PCR.

B. Prevalence decreased with herd size; 69.8% of small operations and 98.8% of large operations tested positive by PCR.

C. Prevalence increased with herd size, but only large operations tested positive by PCR.

D. Only large operations tested positive, small operations did not.

The main idea here is how herd size relates to the presence of Coxiella burnetii in dairy operations, as detected by PCR. The study found that the likelihood a herd tests positive increases with the number of cows. Specifically, about seven in ten small herds were PCR-positive, while nearly all large herds—almost 99%—were positive. This makes sense because larger herds have more animals in close contact, more opportunities for transmission, and more shedding sources, which together raise the chance of detecting the bacterium in the herd. PCR positivity indicates the animal population in that herd is shedding or carrying detectable amounts of the organism, though it doesn't necessarily prove all animals are infected or that they're currently infectious to humans. The pattern described is a gradient rather than an all-or-nothing scenario, which is why the finding that small herds have substantial positivity while large herds are even more likely to be positive is the best interpretation.

4. Hog Cholera (Classical Swine Fever) affects which animal species?

A. Birds

B. Sheep

C. Pigs

D. Cattle

Hog Cholera, or Classical Swine Fever, is a viral disease with a host range focused on swine. The virus primarily infects domestic pigs and wild boar, causing fever, depression, hemorrhages, and high mortality. It is not known to cause disease in birds, cattle, or sheep under typical conditions, so pigs are the species affected. Understanding this host specificity helps distinguish it from diseases that involve poultry or ruminants.

5. What is the infectious agent for progressive inflammatory neuropathy?

A. Bovine spongiform encephalopathy agent

B. Unknown; thought to be an autoimmune response to antigens associated with porcine brain matter

C. Streptococcus pneumoniae

D. Clostridium botulinum

Progressive inflammatory neuropathy is best understood as an autoimmune attack on peripheral nerves rather than a disease caused by a direct infectious agent. In this context, the agent is unknown, and the condition is thought to arise from an autoimmune response to neural antigens—historically linked to antigens from porcine brain matter—that triggers antibodies or immune cells that cross-react with components of peripheral nerves. This molecular mimicry leads to inflammation and demyelination rather than a straightforward infection of the nervous system, which is why the mechanism is immune-mediated rather than caused by a specific pathogen. Prion-related diseases, like those caused by the bovine spongiform encephalopathy agent, produce neurodegenerative spongiform changes, not an inflammatory neuropathy driven by autoimmunity. Streptococcus pneumoniae is known for meningitis and pneumonia, not a progressive inflammatory neuropathy. Clostridium botulinum causes toxin-mediated paralysis, which is neurotoxic but not an inflammatory demyelinating process.

6. How should samples from a suspected Vesicular Stomatitis positive horse be sent?

A. From the field to any laboratory

B. Under unsecured conditions to any laboratory

C. Under secured conditions to an authorized laboratory

D. By mail without special packaging

Handling samples from a suspected Vesicular Stomatitis case requires securing the chain of custody and sending them to an authorized laboratory. This ensures that the specimens are received by a facility equipped to perform the necessary confirmatory tests using validated procedures, and that the sample integrity is preserved during transport. Authorized laboratories have established biosafety, packaging, and reporting protocols, which help prevent misidentification and keep public health and animal health authorities properly informed. Sending specimens from the field to any laboratory or under unsecured conditions risks improper handling, potential tampering, or exposure, and may compromise the test results. Mailing without appropriate packaging also violates biosafety and regulatory standards, increasing the chance of leakage or contamination.

7. In nasal glanders, which clinical sign is characteristic?

A. Ulcerated regions along turbinates

B. Tubercle formation in lung parenchyma

C. Farcy lesions along lymph vessels

D. Chronic draining abscesses along skin

The main feature of the nasal form is ulceration along the nasal turbinates due to infection of the nasal mucosa by Burkholderia mallei, which leads to mucosal necrosis, crusting, and nasal discharge. This intranasal mucosal damage along the turbinates is what distinguishes nasal glanders. By contrast, lesions along lymphatics and skin indicate the cutaneous (Farcy) form, and tubercle-like lesions in the lung point to pulmonary involvement rather than the nasal presentation. So, ulcerated regions along the turbinates best reflect the characteristic sign of nasal glanders.

8. Which exotoxins are produced by anthrax?

A. Protective antigen and edema factor

B. Lethal factor and protective antigen

C. Edema factor and lethal factor

D. Protective antigen and capsule

Anthrax produces two exotoxins that are delivered into cells as binary toxins. These are edema toxin and lethal toxin. Edema toxin consists of edema factor (an adenylate cyclase) paired with protective antigen, which raises intracellular cAMP and causes edema and immune dysfunction. Lethal toxin consists of lethal factor (a zinc-dependent metalloprotease) paired with protective antigen, which disrupts signaling and leads to cell death and shock. Protective antigen itself is not a toxin by itself; it serves to deliver EF and LF into cells. The capsule is not an exotoxin. So the two exotoxins produced are edema factor and lethal factor.

9. What is the characteristic pathology described for EMV in affected tissue?

A. Lung lesions - congested, firm, lymphatic dilatation, foamy hemorrhagic exudate, and giant multinucleated syncytial cells.

B. Hepatic necrosis.

C. Renal failure.

D. Meningeal purulent inflammation.

In EMV infection, the hallmark changes are in the lungs from viral replication in the respiratory tract. The virus drives cell-cell fusion via its fusion protein, producing giant multinucleated syncytial cells in the alveolar epithelium and adjacent macrophages. This cytopathic effect accompanies a congested, firm lung with a foamy hemorrhagic exudate and dilation of lymphatics from the inflammatory response. This combination—pulmonary consolidation with foamy hemorrhagic exudate and giant multinucleated syncytial cells—is the most characteristic tissue pathology for EMV. Hepatic necrosis, renal failure, and meningeal purulent inflammation are not the primary or characteristic tissue changes described for EMV in the lung, so they don't fit the typical EMV pathology in affected tissue.

10. Which occupational group is at increased risk for coccidioides infection?

A. Office workers

B. Military or border guards with workplace exposure

C. Teachers

D. Retail workers

Coccidioides infection is acquired by inhaling arthroconidia from soil in arid, endemic regions. Jobs that disturb dusty soil outdoors in these areas expose people to higher concentrations of spores. Military field training and border patrol work often take place in desert environments with frequent dust, making this group more likely to inhale spores and develop infection. In contrast, indoor occupations like office work, teaching, or retail involve minimal soil disruption and dusty exposure, so the risk is much lower.

Next Steps

Congratulations on reaching the final section of this guide. You've taken a meaningful step toward passing your certification exam and advancing your career.

As you continue preparing, remember that consistent practice, review, and self-reflection are key to success. Make time to revisit difficult topics, simulate exam conditions, and track your progress along the way.

If you need help, have suggestions, or want to share feedback, we'd love to hear from you. Reach out to our team at hello@examzify.com.

Or visit your dedicated course page for more study tools and resources:

https://acvpminfectiousdiseases.examzify.com

We wish you the very best on your exam journey. You've got this!