

Diabetes Mellitus

Diabetes Mellitus



Persistent hyperglycemia due to insulin deficiency (common in dogs) or insulin resistance/relative deficiency (common in cats); causes PU/PD, weight loss, cataracts in dogs.

Feline Hyperthyroidism

Feline Hyperthyroidism



Excess T4 production, usually from adenomatous hyperplasia; weight loss despite polyphagia, tachycardia, hypertension.

Canine Hypothyroidism

Canine Hypothyroidism



Decreased thyroid hormone, often immune-mediated; weight gain, lethargy, alopecia, hyperlipidemia.

Hyperadrenocorticism (Cushing's disease)

Hyperadrenocorticism



Excess cortisol (pituitary-dependent most common, then adrenal tumor); PU/PD, pot-bellied appearance, thin skin, $\uparrow$ ALP.

Pancreatitis

Pancreatitis



Inflammation of pancreas; vomiting and abdominal pain; diagnosed with cPLI/fPLI.

Hypoadrenocorticism (Addison's disease)

Hypoadrenocorticism



Deficiency of cortisol $\pm$ aldosterone; vomiting, weakness, bradycardia, hyperkalemia, hyponatremia (low Na:K ratio).

Canine Parvovirus

Canine Parvovirus



Infected rapidly dividing cells;
hemorrhagic diarrhea, leukopenia,
sepsis risk.

Feline Leukemia Virus (FeLV)

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Retrovirus causing immunosuppression,
anemia, lymphoma.

Heartworm Disease

Heartworm Disease (*Dirofilaria immitis*)



Mosquito-transmitted parasite; pulmonary hypertension and right-sided heart failure in dogs.

Chronic Kidney Disease (CKD)

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Progressive nephron loss; staged via IRIS
(creatinine, SDMA, proteinuria,
blood pressure).

Left Displaced Abomasum (LDA)

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Gas-filled abomasum shifts left in dairy cows; "ping" on auscultation.

Bovine Ketosis

Bovine Ketosis



Negative energy balance postpartum;
elevated ketones, decreased milk production.

Milk Fever **(Periparturient** **Hypocalcemia)**

Milk Fever (Periparturient Hypocalcemia)



Low calcium around calving;
weakness, recumbency.

Johnne's Disease

Johne's Disease



Johne's Disease is a progressive intestinal disease in livestock that prevents animals from properly absorbing nutrients, leading to weight loss, diarrhea, and eventually death.

Bovine Respiratory Disease Complex



Multifactorial pneumonia involving stress, viruses (IBR, BRSV), and bacteria (Mannheimia).

Equine Colic

Equine Colic



Abdominal pain; may result from impaction, gas, displacement, torsion.

Strangles

Strangles



Streptococcus equi infection in horses;
lymph node abscessation.

Laminitis

Laminitis



Inflammation of hoof laminae; can cause rotation of distal phalanx.

Pregnancy Toxemia (ewes/does)

Pregnancy toxemia (ewes/does)



Late-gestation negative energy balance;
ketosis and neurologic signs.

Rabies



Fatal viral encephalitis transmitted via saliva; zoonotic and legally reportable.

Leptospirosis

Leptospirosis



Spirochete infection affecting kidneys/
liver; zoonotic, spread in urine.

Salmonellosis

Salmonellosis



Bacterial enteritis; diarrhea and zoonotic risk.

Brucellosis

Brucellosis



Bacterial reproductive disease causing abortion; zoonotic and reportable.

Toxoplasmosis

Toxoplasmosis



Protozoal infection; cats are definitive hosts shedding oocysts.

Lyme Disease

Lyme Disease



Borrelia burgdorferi transmitted by Ixodes ticks; shifting-leg lameness, possible nephropathy.

Ehrlichiosis

Ehrlichiosis



Tick-borne rickettsial disease;
thrombocytopenia common.

Anaplasmosis

Anaplasmosis



Tick-borne infection affecting platelets (dogs) or RBCs (cattle).

Alpha-2 Agonists

Alpha-2 Agonists



Sedatives (xylazine, dexmedetomidine);
cause sedation, analgesia, bradycardia,
vasoconstriction.

NSAIDs



COX inhibitors reducing prostaglandins;
risk of GI ulceration and renal injury.

Opioids

Opioids



Mu and kappa receptor agonists; analgesia with possible respiratory depression.

Local Anesthetics

Local Anesthetics



Sodium channel blockers (lidocaine, bupivacaine) preventing nerve conduction.

Minimum Alveolar Concentration (MAC)

Minimum alveolar concentration (MAC)



% inhalant anesthetic preventing movement in 50% of patients.

Beta-lactam Antibiotics

Beta-lactam Antibiotics



Inhibit bacterial cell wall synthesis; include penicillins and cephalosporins.

Regenerative Anemia

Regenerative Anemia



Anemia with reticulocytosis indicating marrow response.

Non-regenerative Anemia

Non-regenerative Anemia



Inadequate bone marrow response; seen with chronic disease or renal failure.

Urine Specific Gravity (USG)

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Measure of urine concentration; helps assess renal function.

Metabolic Acidosis

Metabolic acidosis



Decreased blood pH due to bicarbonate loss or acid gain (e.g., diarrhea, DKA).

Intrinsic vs Extrinsic Coagulation Pathways

Intrinsic vs extrinsic coagulation pathways



Intrinsic assessed by aPTT; extrinsic assessed by PT.

ALT vs ALP

ALT vs ALP



ALT indicates hepatocellular injury; ALP associated with cholestasis or steroid induction.

GDV (Gastric Dilatation- Volvulus)

GDV (gastric dilatation-volvulus)



Gastric distention and rotation; surgical emergency in large-breed dogs.

Pyometra



Progesterone-associated uterine infection in intact females; often requires OHE.

Dystocia

Dystocia



Difficult birth; may require oxytocin or C-section.

Hypovolemic Shock

Hypovolemic Shock



Decreased circulating volume causing poor tissue perfusion; tachycardia, pale MM.

Septic Shock

Septic shock



Distributive shock from systemic infection; vasodilation and hypotension.

Recover CPR Guidelines

Recover CPR Guidelines



Evidence-based veterinary CPR: chest compressions 100–120/min, early epinephrine.

Non-regenerative Anemia

Non-regenerative Anemia



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Wound Healing Phases

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Inflammation, proliferation (granulation), remodeling.

Core Vaccines (dogs)

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Rabies, DA2PP (Distemper, Adenovirus-2, Parvovirus, Parainfluenza).

Core Vaccines (cats)

Core Vaccines (cats)



Rabies and FVRCP (Feline viral rhinotracheitis/herpesvirus-1, Calicivirus, Panleukopenia).

Non-core Vaccines (dogs)

Non-core Vaccines (dogs)



Bordetella bronchiseptica, Leptospirosis,
Lyme (Borrelia), Canine influenza.

USDA Reportable Diseases

USDA Reportable Diseases



Diseases legally required to be reported (e.g., rabies, brucellosis, avian influenza, bovine tuberculosis) due to public health or economic impact.