











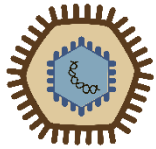


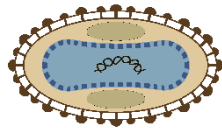

Animal Virus Families and Diseases Summary Chart

This table summarizes animal virus families (by size) and their associated diseases (alphabetical).




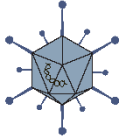

ENVELOPED VIRUSES (BY SIZE)

Hepadnaviridae	Flaviviridae	Arteriviridae	Togaviridae
			
40-48 nm DNA-partial DS circular	40-50 nm RNA-SS linear	50-70 nm RNA SS linear	60-70 nm RNA SS linear
<ul style="list-style-type: none"> • Hepatitis B virus 	<ul style="list-style-type: none"> • Border disease virus • Bovine viral diarrhea (BVD) viruses 1, 2 • Classical swine fever virus • Dengue virus • Japanese encephalitis virus • Louping ill virus • Murray valley encephalitis virus • St. Louis encephalitis virus • Tick-borne encephalitis viruses • Yellow fever virus • Wesselsbron virus • West Nile Virus (WNV) 	<ul style="list-style-type: none"> • Equine arteritis virus (equine viral arteritis) • Porcine respiratory and reproductive syndrome virus (PRRS) • Simian hemorrhagic fever virus 	<ul style="list-style-type: none"> • Eastern equine encephalitis virus (EEE) • Venezuelan equine encephalitis virus (VEE) • Western equine encephalitis virus (WEE)
Coronaviridae	Retroviridae	Bunyaviridae	Orthomyxoviridae
			
80-160 nm RNA SS linear	80-120 nm RNA-2 copies ss linear	90-120 nm RNA-ss linear segments	90-120 nm RNA-ss linear segments
<ul style="list-style-type: none"> • Avian infectious bronchitis virus • Bovine coronavirus • Canine coronavirus • Feline enteric coronaviruses • Feline infectious peritonitis virus • Middle East respiratory syndrome coronavirus (MERS-CoV) • Porcine epidemic diarrhea virus (PEDV) • Porcine hemagglutinating encephalomyelitis virus • Severe acute respiratory syndrome (SARS) virus • SARS-Coronavirus-2 (SARS CoV-2, COVID-19) • Transmissible gastroenteritis (TGE) virus • Turkey coronavirus (bluecomb disease) 	<ul style="list-style-type: none"> • Avian leukosis virus • Bovine immunodeficiency virus • Bovine leukemia virus (BLV) • Caprine arthritis-encephalitis virus • Equine infectious anemia virus (EIA) • Feline immunodeficiency virus (FIV) • Feline leukemia virus (FeLV) • Maedi-visna virus (ovine progressive pneumonia) • Ovine pulmonary adenocarcinoma virus • Simian immunodeficiency virus • Simian leukemia viruses 1-3 	<ul style="list-style-type: none"> • Akabane virus • Cache Valley virus • California encephalitis virus • Crimean-Congo hemorrhagic fever virus • Hantaviruses • Jamestown Canyon virus • La Crosse encephalitis virus • Nairobi sheep disease virus • Rift Valley fever virus • Schmallenberg virus 	<ul style="list-style-type: none"> • Infectious salmon anemia • Influenza virus A: <ul style="list-style-type: none"> • Avian influenza • Canine influenza • Equine influenza • Swine influenza • Human influenza • Influenza virus C: (human influenza)






ENVELOPED VIRUSES (BY SIZE), CONTINUED

Arenaviridae	Paramyxoviridae	Herpesviridae	
			
110-300 nm RNA-ss linear segments	150-300 nm RNA-ss linear	150-200 nm DNA-ds linear	
<ul style="list-style-type: none"> • Lassa virus • Lymphocytic choriomeningitis virus • Machupo virus (Bolivian hemorrhagic fever) 	<ul style="list-style-type: none"> • Avian paramyxovirus type 1 (Newcastle disease) • Avian paramyxoviruses 2-9 • Bovine respiratory syncytial virus (BRSV) • Bovine parainfluenza 3 virus (bPI₃) • Canine distemper virus • Canine parainfluenza virus • Hendra virus • Measles virus • Nipah virus • Peste de petitis ruminants virus • Respiratory syncytial virus • Rinderpest virus 	<ul style="list-style-type: none"> • Alcelaphine herpesvirus-1 (malignant catarrhal fever) • Bovine herpesvirus 1 (infectious bovine rhinotracheitis) • Bovine herpesvirus 2 (pseudo-lumpy skin disease, bovine mammillitis) • Bovine herpesvirus 3/ bovine cytomegalovirus • Canine herpesvirus 1, 2 (hemorrhagic disease of pups) • Caprine herpesviruses 1, 2 • Equine herpesvirus 1 (equine viral rhinopneumonitis/abortion) • Equine herpesvirus 2 • Equine herpesvirus 3 (equine coital exanthema) • Equine herpesvirus 4 (equine viral rhinopneumonitis) • Feline viral rhinotracheitis virus • Human herpes simplex virus 1 • Ictalurid herpesvirus 1 (channel catfish virus disease) • Infectious laryngotracheitis (gallid alphaherpesvirus 1) • Koi herpesvirus disease • Marek's disease virus • <i>Oncorhynchus masou</i> virus disease (salmonid herpesvirus type 2) • Ovine herpesvirus-1 • Ovine herpesvirus-2 (malignant catarrhal fever) • Porcine herpesvirus 2/ porcine cytomegalovirus • Pseudorabies virus (Aujeszky's disease) 	
Asfarviridae	Rhabdoviridae	Poxviridae	Filoviridae
			
175-215 nm DNA-ds linear	180 x 75 nm RNA-ss linear	250 x 200 x 200 nm DNA-ds linear	790-970 x 80 nm RNA-ss linear
<ul style="list-style-type: none"> • African swine fever 	<ul style="list-style-type: none"> • Bovine ephemeral fever virus • Infectious hematopoietic necrosis (IHN) • Rabies • Spring viremia of carp • Vesicular stomatitis virus (Indiana 1 and New Jersey subtypes) • Vesicular stomatitis virus (Indiana 2 and 3 subtypes) • Viral hemorrhagic septicemia (Egtved disease) 	<ul style="list-style-type: none"> • Bovine papular stomatitis virus • Contagious ecthyma (orf, contagious pustular dermatitis) • Cowpox virus • Feline pox virus • Fowlpox virus • Lumpy skin disease virus • Monkeypox virus • Pseudocowpox virus • Sheep and goat pox viruses • Swinepox virus • Vaccinia virus 	<ul style="list-style-type: none"> • Ebola virus • Marburg virus

LARGE, NON-ENVELOPED VIRUSES (BY SIZE)

Papillomaviridae	Birnaviridae	Reoviridae	Adenoviridae	Iridoviridae
				
45-55 nm DNA-ds circular	60 nm RNA-ds linear segments	60-80 nm RNA-ds linear segments	80-100 nm DNA-ds linear	125-300 nm DNA-ds linear
<ul style="list-style-type: none"> • Bovine papillomavirus • Equine papillomavirus 	<ul style="list-style-type: none"> • Infectious bursal disease virus • Infectious pancreatic necrosis (IPN) (hemorrhagic kidney syndrome) 	<ul style="list-style-type: none"> • African horse sickness viruses 1-10 • Avian orthoreoviruses • Bluetongue viruses 1-24 • Epizootic hemorrhagic disease viruses • Rotaviruses, group A to F (rotaviral gastroenteritis) 	<ul style="list-style-type: none"> • Bovine adenoviruses A, B, C • Canine adenovirus (infectious canine hepatitis) • Caprine adenovirus • Equine adenoviruses A, B • Fowl adenoviruses A – E • Ovine adenoviruses A, B, C • Porcine adenoviruses A, B, C 	<ul style="list-style-type: none"> • Epizootic haematopoietic necrosis (EHN) • Largemouth bass disease

SMALL, NON-ENVELOPED VIRUSES (BY SIZE)

Circoviridae	Parvoviridae	Picornaviridae	Astroviridae	Caliciviridae
				
17-22 nm DNA-ss circular	18-26 nm DNA- linear	28-30 nm RNA-ss linear	28-30 nm RNA-ss linear	30-38 nm RNA-ss linear
<ul style="list-style-type: none"> • Chicken anemia virus • Porcine circovirus • Psittacine beak and feather disease virus 	<ul style="list-style-type: none"> • Canine minute virus/canine parvovirus 1 • Canine parvovirus 2 • Feline panleukopenia virus • Porcine parvovirus 	<ul style="list-style-type: none"> • Avian enteroviruses • Bovine enteroviruses • Bovine rhinoviruses • Encephalomyelocarditis virus • Equine rhinoviruses 1, 2 • Foot and mouth disease virus (FMD) • Porcine enteroviruses • Teschen-Talfan disease) • Swine vesicular disease virus (SVD) 	<ul style="list-style-type: none"> • Avian nephritis viruses 1, 2 • Bovine astrovirus • Feline astrovirus (gastroenteritis) • Ovine astrovirus (gastroenteritis) • Porcine astrovirus (porcine acute gastroenteritis) • Turkey astrovirus (poultry enteritis and mortality syndrome) 	<ul style="list-style-type: none"> • Avian calicivirus • Bovine enteric calicivirus • Canine calicivirus • Feline caliciviruses • Porcine enteric calicivirus • Rabbit hemorrhagic disease virus • Vesicular exanthema of swine virus (San Miguel sea lion virus)

References: [EPA. Disinfectants for Emerging Viral Pathogens: List Q](#)
 Virus illustrations adapted from licensed Adobe Stock images.

For more information on disinfection in animal settings, visit the [CFSPH Disinfection Website](#).