

Classification of Organisms:

Pathogenicity classification of RNA and DNA viruses

Status May 2017 (CGM/170522-03)

Pathogenicity classification of RNA and DNA viruses

COGEM advice CGM/170522-03

Dutch Regulations Genetically Modified Organisms

In the Decree on Genetically Modified Organisms (GMO Decree) and its accompanying more detailed Regulations (GMO Regulations) genetically modified micro-organisms are grouped in four pathogenicity classes, ranging from the lowest pathogenicity Class 1 to the highest Class 4.¹ The pathogenicity classifications are used to determine the containment level for working in laboratories with GMOs.

A micro-organism of Class 1 should at least comply with one of the following conditions:

- a) the micro-organism does not belong to a species of which representatives are known to be pathogenic for humans, animals or plants,
- b) the micro-organism has a long history of safe use under conditions without specific containment measures,
- c) the micro-organism belongs to a species that includes representatives of class 2, 3 or 4, but the particular strain does not contain genetic material that is responsible for the virulence,
- d) the micro-organism has been shown to be non-virulent through adequate tests.

A micro-organism is grouped in Class 2 when it can cause a disease in humans or animals whereby it is unlikely to spread within the population while an effective prophylaxis, treatment or control strategy exists, as well as an organism that can cause a disease in plants.

A micro-organism is grouped in Class 3 when it can cause a serious disease in humans or animals whereby it is likely to spread within the population while an effective prophylaxis, treatment or control strategy exists.

A micro-organism is grouped in Class 4 when it can cause a very serious disease in humans or animals whereby it is likely to spread within the population while no effective prophylaxis, treatment or control strategy exists.

Pathogenicity classification of RNA and DNA viruses

The Netherlands Commission on Genetic Modification (COGEM) advises the Dutch government (amongst others) on the classification in risk groups (classes) of organisms according to the risk they pose to human health and the environment. These classifications are written in Dutch and are therefore only published on the Dutch part of the COGEM website.

1. Ministerie van Infrastructuur en Milieu (2015). Regeling genetisch gemodificeerde organismen milieubeheer 2013.

<http://wetten.overheid.nl/BWBR0035072/2017-01-01> [In Dutch]

In order to inform other countries and/or organisations about the classification of organisms by COGEM, the most recent classification list of viruses has been translated.

In table 1 and 3 the classifications of all DNA viruses until 22nd of May 2017 are listed. In table 2 and 3 the classifications of all RNA viruses until 22nd of May 2017 are listed. The viruses are sorted taxonomically (tables 1 and 2) and alphabetically (tables 3 and 4). The taxonomy is according to International Committee on Taxonomy of Viruses (ICTV) 2016 release.²

2. International Committee on Taxonomy of Viruses (ICTV) <https://talk.ictvonline.org/taxonomy/>

Table 1. Pathogenicity classification of DNA viruses, sorted taxonomically

Family*	Genus*	Species*	Subgroup/subspecies/strain/type	Class	Alternative names/ names used in old permit
Adenoviridae	<i>Atadenovirus</i>	<i>Bovine atadenovirus D</i>	type Bovine atadenovirus 4	2 ^A	
	<i>Aviadenovirus</i>	<i>Fowl aviadenovirus A</i>		2 ^A	Fowl adenovirus A
	<i>Mastadenovirus</i>	<i>Bovine mastadenovirus B</i>		2 ^A	Bovine adenovirus B
		<i>Canine mastadenovirus A</i>		2 ^A	Canine adenovirus A
		<i>Human mastadenovirus A</i>	viruses isolated from humans	2	
		<i>Human mastadenovirus B</i>	viruses isolated from humans	2	
		<i>Human mastadenovirus B</i>	viruses isolated from apes	2	
		<i>Human mastadenovirus C</i>	viruses isolated from humans	2	
		<i>Human mastadenovirus C</i>	viruses isolated from apes	2	
		<i>Human mastadenovirus D</i>	viruses isolated from humans	2	
		<i>Human mastadenovirus E</i>	viruses isolated from humans	2	
		<i>Human mastadenovirus E</i>	viruses isolated from apes	2	
		<i>Human mastadenovirus F</i>	viruses isolated from humans	2	
		<i>Human mastadenovirus G</i>	viruses isolated from humans	2	
	Unclassified	Unclassified	type Chimpanzee adenovirus 3	2	Pan troglodytes adenovirus 3
		Unclassified	type Chimpanzee adenovirus Y25	2	
		Unclassified	type Human adenovirus 56	2	
		Unclassified	type Murine adenovirus 2	2 ^A	
		Unclassified	type Rhesus adenovirus 51	2	
		Unclassified	type Rhesus adenovirus 52	2	
		Unclassified	type Rhesus adenovirus 53	2	
		Unclassified	type Simian adenovirus 13	2	
		Unclassified	type Simian adenovirus 17	2	
		Unclassified	type Simian adenovirus 19	2	
		Unclassified	type Snake adenovirus 2	2 ^A	
Alloherpesviridae	<i>Cyprinivirus</i>	<i>Cyprinid herpesvirus 3</i>		2 ^A	

Family*	Genus*	Species*	Subgroup/subspecies/strain/type	Class	Alternative names/ names used in old permit
Anelloviridae	Alphatorquevirus	Torque teno virus 1-29		2	
	Betatorquevirus	Torque teno mini virus 1-12		2	
	Gyrovirus	Chicken anemia virus		2 ^A	
Asfarviridae	Asfivirus	African swine fever virus		4 ^A	Afrikaanse varkenspestvirus
Baculoviridae	Alphabaculovirus	Autographa californica multiple nucleopolyhedrovirus		2 ^A	
		Bombyx mori nucleopolyhedrovirus		2 ^A	Bombyx mori nucleopolyhedrosis virus
		Trichoplusia ni single nucleopolyhedrovirus		2 ^A	
Circoviridae	Circovirus	Porcine circovirus 1		1 ^A	Porcine circovirus-1
		Porcine circovirus 2		2 ^A	Porcine circovirus-2
Hepadnaviridae	Orthohepadnavirus	Hepatitis B virus		2	
		Woodchuck hepatitis virus		2 ^A	
Herpesviridae	Cytomegalovirus	Cercopithecine betaherpesvirus 5		2	Cercopithecine herpesvirus 5
		Human betaherpesvirus 5		2	Human cytomegalovirus, Human herpesvirus 5
		Macacine betaherpesvirus 3		2	Macacine herpesvirus 3
		Panine betaherpesvirus 2		2	Panine herpesvirus 2
	Iltovirus	Gallid alphaherpesvirus 1		2 ^A	Infectious laryngotracheitis virus, Gallid herpesvirus 1
		Psittacid alphaherpesvirus 1		2 ^A	Psittacid herpesvirus 1
	Lymphocryptovirus	Human gammaherpesvirus 4		2	Epstein-Barr virus, Human herpesvirus 4
	Mardivirus	Gallid alphaherpesvirus 2		2 ^A	Marek's disease virus, Gallid herpesvirus 2, Marek's disease virustype 1
		Gallid alphaherpesvirus 3		2 ^A	Gallid herpesvirus 3, Marek's disease virus type 2

Family*	Genus*	Species*	Subgroup/subspecies/strain/type	Class	Alternative names/ names used in old permit
<i>Herpesviridae</i>	<i>Mardivirus</i>	<i>Meleagrid alphaherpesvirus 1</i>	vaccin strain 'FC-126'	1 ^A	Herpesvirus of turkeys, Marek's disease virus type 3
	<i>Muromegalovirus</i>	<i>Murid betaherpesvirus 1</i>		2 ^A	Murid herpesvirus 1
	<i>Proboscivirus</i>	<i>Elephantid betaherpesvirus 1</i>		2 ^A	Elephantid herpesvirus
	<i>Rhadinovirus</i>	<i>Bovine gammaherpesvirus 4</i>		2 ^A	Bovine herpesvirus 4
		<i>Human gammaherpesvirus 8</i>		2	Kaposi's sarcoma-associated herpesvirus, Human herpesvirus 8
		<i>Saimiriine gammaherpesvirus 2</i>		2	Herpesvirus saimiri, Saimiriine herpesvirus 2
	<i>Roseolovirus</i>	<i>Human betaherpesvirus 6A</i>		2	
		<i>Human betaherpesvirus 6B</i>		2	
		<i>Human betaherpesvirus 7</i>		2	Human herpesvirus 7
	<i>Simplexvirus</i>	<i>Human alphaherpesvirus 1</i>		2	Herpes simplex virus 1, Human herpesvirus 1
		<i>Human alphaherpesvirus 2</i>		2	Herpes simplex virus 2, Human herpesvirus 2
		<i>Macacine alphaherpesvirus 1</i>		3	Herpes virus B, Herpesvirus simiae, Cercopithecine herpesvirus 1, Macacine herpesvirus 1
<i>Iridoviridae</i>	<i>Varicellovirus</i>	<i>Bovine alphaherpesvirus 1</i>		2 ^A	Bovine herpesvirus 1
		<i>Equid alphaherpesvirus 1</i>		2 ^A	Equid herpesvirus 1
		<i>Equid alphaherpesvirus 4</i>		2 ^A	Equid herpesvirus 4
		<i>Felid alphaherpesvirus 1</i>		2 ^A	Feline herpesvirus 1, Felid herpesvirus 1
		<i>Human alphaherpesvirus 3</i>		2	Varicella-zoster virus, Human herpesvirus 3
		<i>Suid alphaherpesvirus 1</i>		3 ^A	Pseudorabiesvirus, Aujeszky's disease virus, Suid herpesvirus 1
	<i>Iridovirus</i>	<i>Invertebrate iridescent virus 6</i>		2 ^A	
<i>Papillomaviridae</i>	<i>Alphapapillomavirus</i>	Unclassified	Red sea bream iridovirus	2 ^A	
		Unclassified	Scale drop disease virus	2 ^A	
		<i>Alphapapillomavirus 1</i>		2	Human papillomavirus 32
		<i>Alphapapillomavirus 2</i>		2	Human papillomavirus 10

Family*	Genus*	Species*	Subgroup/subspecies/strain/type	Class	Alternative names/ names used in old permit
<i>Papillomaviridae</i>	<i>Alphapapillomavirus</i>	<i>Alphapapillomavirus 3</i>		2	Human papillomavirus 61
		<i>Alphapapillomavirus 4</i>		2	Human papillomavirus 2
		<i>Alphapapillomavirus 5</i>		2	Human papillomavirus 26
		<i>Alphapapillomavirus 6</i>		2	Human papillomavirus 53
		<i>Alphapapillomavirus 7</i>		2	Human papillomavirus 18
		<i>Alphapapillomavirus 8</i>		2	Human papillomavirus 7
		<i>Alphapapillomavirus 9</i>		2	Human papillomavirus 16
		<i>Alphapapillomavirus 10</i>		2	Human papillomavirus 6
		<i>Alphapapillomavirus 11</i>		2	Human papillomavirus 34
		<i>Alphapapillomavirus 13</i>		2	Human papillomavirus 54
		<i>Alphapapillomavirus 14</i>		2	Human papillomavirus cand90
	<i>Betapapillomavirus</i>	<i>Betapapillomavirus 1</i>		2	Human papillomavirus 5
		<i>Betapapillomavirus 2</i>		2	Human papillomavirus 9
		<i>Betapapillomavirus 3</i>		2	Human papillomavirus 49
		<i>Betapapillomavirus 4</i>		2	Human papillomavirus cand92
		<i>Betapapillomavirus 5</i>		2	Human papillomavirus cand96
	<i>Gammapapillomavirus</i>	<i>Gammapapillomavirus 1</i>		2	Human papillomavirus 4
		<i>Gammapapillomavirus 2</i>		2	Human papillomavirus 48
		<i>Gammapapillomavirus 3</i>		2	Human papillomavirus 50
		<i>Gammapapillomavirus 4</i>		2	Human papillomavirus 60
		<i>Gammapapillomavirus 5</i>		2	Human papillomavirus 88
		<i>Gammapapillomavirus 6</i>		2	Human papillomavirus 101
		<i>Gammapapillomavirus 7</i>		2	Human papillomavirus 109
		<i>Gammapapillomavirus 8</i>		2	Human papillomavirus 112
		<i>Gammapapillomavirus 9</i>		2	Human papillomavirus 116
		<i>Gammapapillomavirus 10</i>		2	Human papillomavirus 121
		<i>Gammapapillomavirus 11</i>		2	Human papillomavirus 126
		<i>Gammapapillomavirus 12</i>		2	Human papillomavirus 127

Family*	Genus*	Species*	Subgroup/subspecies/strain/type	Class	Alternative names/ names used in old permit
<i>Papillomaviridae</i>	<i>Gammapapillomavirus</i>	<i>Gammapapillomavirus 13</i>		2	Human papillomavirus 128
		<i>Gammapapillomavirus 14</i>		2	Human papillomavirus 131
		<i>Gammapapillomavirus 15</i>		2	Human papillomavirus 135
		<i>Gammapapillomavirus 16</i>		2	Human papillomavirus 137
		<i>Gammapapillomavirus 17</i>		2	Human papillomavirus 144
		<i>Gammapapillomavirus 18</i>		2	Human papillomavirus 156
		<i>Gammapapillomavirus 19</i>		2	Human papillomavirus 161
		<i>Gammapapillomavirus 20</i>		2	Human papillomavirus 163
	<i>Mupapillomavirus</i>	<i>Mupapillomavirus 1</i>		2	Human papillomavirus 1
		<i>Mupapillomavirus 2</i>		2	Human papillomavirus 63
	<i>Nupapillomavirus</i>	<i>Nupapillomavirus 1</i>		2	Human papillomavirus 41
<i>Parvoviridae</i>	<i>Dependoparvovirus</i>	<i>Adeno-associated</i>	ssp AAV-1	2	
		<i>dependoparvovirus A</i>			
		<i>Adeno-associated</i>	sssp AAV-2 (part of ssp AAV-2)	2	
		<i>dependoparvovirus A</i>			
		<i>Adeno-associated</i>	ssp AAV-3	2	
		<i>dependoparvovirus A</i>			
		<i>Adeno-associated</i>	sssp AAV-4 and AAV-7 till 9 (part of ssp AAV-4)	2	
		<i>dependoparvovirus A</i>			
		<i>Adeno-associated</i>	ssp AAV-5	2	
		<i>dependoparvovirus B</i>			
	<i>Erythroparvovirus</i>	<i>Primate erythroparvovirus 1</i>		2	Human parvovirus B19
	<i>Protoparvovirus</i>	<i>Carnivore protoparvovirus 1</i>		2 ^A	Feline panleukopenia virus, Canine parvovirus
		<i>Rodent protoparvovirus 1</i>	ssp H-1 parvovirus	2 ^A	Rodent parvovirus H-1
		<i>Rodent protoparvovirus 1</i>	ssp Minute virus of mice	2 ^A	
<i>Polyomaviridae</i>	<i>Alphapolyomavirus</i>	<i>Human polyomavirus 5</i>		2	Merkel cell polyomavirus
		<i>Human polyomavirus 8</i>		2	Trichodysplasia spinulosa-associated polyomavirus

Family*	Genus*	Species*	Subgroup/subspecies/strain/type	Class	Alternative names/ names used in old permit
Polyomaviridae	Alphapolyomavirus	<i>Mus musculus polyomavirus 1</i>		2 ^A	Murine polyomavirus
		<i>Pan troglodytes polyomavirus 1</i>		2	Chimpanzee polyomavirus
		<i>Pongo abelii polyomavirus 1</i>		2	Sumatran orangutan polyomavirus
		<i>Pongo pygmaeus polyomavirus 1</i>		2	Bornean orangutan polyomavirus
	Betapolyomavirus	<i>Human polyomavirus 1</i>		2	BK polyomavirus
		<i>Human polyomavirus 2</i>		2	JC polyomavirus
		<i>Human polyomavirus 3</i>		2	KI polyomavirus
		<i>Human polyomavirus 4</i>		2	WU polyomavirus
		<i>Macaca mulatta polyomavirus 1</i>		2	SV40, Simian virus 40
		<i>Saimiri boliviensis polyomavirus 1</i>		2	Squirrel monkey polyomavirus
	Deltapolyomavirus	<i>Human polyomavirus 6</i>		2	
		<i>Human polyomavirus 7</i>		2	
	Gammapolyomavirus	<i>Aves polyomavirus 1</i>		2 ^A	Avian polyomavirus, Budgerigar fledgling disease virus
	Unclassified	Unclassified	African green monkey polyomavirus	2	
		Unclassified	Baboon polyomavirus 2	2	
		Unclassified	Cynomolgus polyomavirus	2	
		Unclassified	Simian virus 12	2	
		Unclassified	subgroup primate polyomaviruses	2	
Poxviridae	Avipoxvirus	<i>Canarypox virus</i>		2 ^A	
		<i>Canarypox virus</i>	vaccin strain 'ALVAC'	1 ^A	
		<i>Fowlpox virus</i>		2 ^A	
		<i>Fowlpox virus</i>	vaccin strain 'TROVAC'	1 ^A	
	Capripoxvirus	<i>Goatpox virus</i>		3 ^A	Geitenpokkenvirus, Capripoxvirus
		<i>Lumpy skin disease virus</i>		3 ^A	
		<i>Sheeppox virus</i>		3 ^A	Schapepokkenvirus, Capripoxvirus
	Leporipoxvirus	<i>Myxoma virus</i>		2 ^A	
	Orthopoxvirus	<i>Cowpox virus</i>		2	

Family*	Genus*	Species*	Subgroup/subspecies/strain/type	Class	Alternative names/ names used in old permit
<i>Poxviridae</i>	<i>Orthopoxvirus</i>	<i>Vaccinia virus</i>		2	
		<i>Vaccinia virus</i>	vaccin strain 'MVA'	1	
		<i>Vaccinia virus</i>	vaccin strain 'NYVAC'	1	
		<i>Vaccinia virus</i>	vaccin strain 'WR'	2	
	<i>Suipoxvirus</i>	<i>Swinepox virus</i>		2 ^A	
	<i>Yatapoxvirus</i>	<i>Yaba monkey tumor virus</i>		2	Yaba-like disease virus

* According to International Committee on Taxonomy of Viruses (ICTV) 2016 release in *italics* A - strict animal pathogen ssp - subspecies sssp - subspecies

Table 2. Pathogenicity classification of RNA viruses, sorted taxonomically

Family*	Genus*	Species*	Subgroup/subspecies/strain/type	Class	Alternative names/ names used in old permit
Arenaviridae	Mammarenavirus	<i>Junín mammarenavirus</i>		4	Junín virus
		<i>Lassa mammarenavirus</i>		4	Lassa virus
		<i>Lymphocytic choriomeningitis mammarenavirus</i>		3	Lymphocytic choriomeningitis virus
		<i>Lymphocytic choriomeningitis mammarenavirus</i>	strain 'Armstrong'	2	
		<i>Lymphocytic choriomeningitis mammarenavirus</i>	strain 'Docile'	3	
		<i>Lymphocytic choriomeningitis mammarenavirus</i>	strain 'WE'	3	
		<i>Machupo mammarenavirus</i>		4	Machupo virus
		<i>Tacaribe mammarenavirus</i>		2 ^A	Tacaribe virus
Arteriviridae	<i>Dipartevirus</i>	<i>Wobbly possum disease virus</i>		2 ^A	
	<i>Equartevirus</i>	<i>Equine arteritis virus</i>		2 ^A	
	<i>Nesartevirus</i>	<i>African pouched rat arterivirus</i>		2 ^A	African pouched rat arterivirus 1, Forest pouched giant rat arterivirus
	<i>Porartevirus</i>	<i>Lactate dehydrogenase-elevating virus</i>		2 ^A	
		<i>Porcine reproductive and respiratory syndrome virus 1</i>		2 ^A	Lelystadvirus, Porcine reproductive and respiratory syndrome virus
		<i>Porcine reproductive and respiratory syndrome virus 2</i>		2 ^A	
	<i>Simartevirus</i>	<i>DeBrazza's monkey arterivirus</i>		2 ^A	
		<i>Kibale red colobus virus 1</i>		2 ^A	
		<i>Kibale red colobus virus 2</i>		2 ^A	
		<i>Kibale red-tailed guenon virus 1</i>		2 ^A	Kibale red-tailed guenon virus

Family*	Genus*	Species*	Subgroup/subspecies/strain/type	Class	Alternative names/ names used in old permit
Arteriviridae	Simartevirus	Mikumi yellow baboon virus 1		2 ^A	
		Pebjah virus		2 ^A	
		Simian hemorrhagic encephalitis virus		2 ^A	
		Simian hemorrhagic fever virus		2 ^A	
Birnaviridae	Avibirnavirus	Infectious bursal disease virus		2 ^A	ziekte van Gumborovirus
Caliciviridae	Lagovirus	Rabbit hemorrhagic disease virus		2 ^A	Viraal hemorrhagisch syndroom van konijnen virus
	Norovirus	Norwalk virus		2	
	Sapovirus	Sapporo virus		2	
	Vesivirus	Feline calicivirus		2 ^A	
		Vesicular exanthema of swine virus		2 ^A	
Coronaviridae	Alphacoronavirus	Alphacoronavirus 1	provisional ssp Ferret coronavirus (type Ferret enteric coronavirus)	2 ^A	
		Alphacoronavirus 1	provisional ssp Ferret coronavirus (type Ferret systemic coronavirus)	2 ^A	
		Alphacoronavirus 1	ssp Canine coronavirus (type I and II)	2 ^A	
		Alphacoronavirus 1	ssp Feline coronavirus (type I and II)	2 ^A	Feline infectious peritonitis virus
		Alphacoronavirus 1	ssp Porcine respiratory coronavirus	2 ^A	
	Alphacoronavirus 1	Alphacoronavirus 1	ssp Transmissible gastroenteritis virus	2 ^A	
		Human coronavirus 229E		2	
		Human coronavirus NL63		2	
		Porcine epidemic diarrhea virus		2 ^A	
	Betacoronavirus	Betacoronavirus 1	ssp Bovine coronavirus	2 ^A	
		Betacoronavirus 1	ssp Equine coronavirus	2 ^A	
		Betacoronavirus 1	ssp Human coronavirus OC43	2	

<i>Family*</i>	<i>Genus*</i>	<i>Species*</i>	<i>Subgroup/subspecies/strain/type</i>	<i>Class</i>	<i>Alternative names/ names used in old permit</i>
Coronaviridae	Betacoronavirus	Betacoronavirus 1	ssp Porcine hemagglutinating encephalomyelitis virus	2 ^A	
		Betacoronavirus 1	ssp Rabbit coronavirus HKU14	2 ^A	
		Human coronavirus HKU1		2	
		Middle East respiratory syndrome-related coronavirus		3	HCoV EMC, MERS-coronavirus, Middle East Respiratory Coronavirus
		Murine coronavirus		2 ^A	Mouse hepatitis virus
		Severe acute respiratory syndrome-related coronavirus		3	
	Gammacoronavirus	Avian coronavirus		2 ^A	Infectious bronchitis virus
	Torovirus	Bovine torovirus		2 ^A	
		Equine torovirus		2 ^A	Berne virus
		Porcine torovirus		2 ^A	
Filoviridae	Ebolavirus	Reston ebolavirus		4	
		Sudan ebolavirus		4	
		Tai Forest ebolavirus		4	
		Zaire ebolavirus		4	
	Marburgvirus	Marburg marburgvirus		4	Lake Victoria marburgvirus, Marburgvirus
Flaviviridae	Flavivirus	Dengue virus		3	
		Japanese encephalitis virus		3	
		Modoc virus		2	
		Tick-borne encephalitis virus	European subtype	3	
		Tick-borne encephalitis virus	Far Eastern subtype	3	
		Tick-borne encephalitis virus	Siberian subtype	3	
		West Nile virus		3	
		Yellow fever virus		3	
		Yellow fever virus	vaccin strain 'YF-17D'	2	

Family*	Genus*	Species*	Subgroup/subspecies/strain/type	Class	Alternative names/ names used in old permit
Flaviviridae	Flavivirus	Yokose virus		3 ^A	
		Zika virus		3	
	Hepacivirus	Hepacivirus C		2	Hepatitis C virus
	Pestivirus	Border disease virus		2 ^A	
		Bovine viral diarrhea virus 1		2 ^A	
		Bovine viral diarrhea virus 2		2 ^A	
		Classical swine fever virus		4 ^A	Klassieke varkenspestvirus, Hog cholera virus
	Unclassified	Unclassified	Atypical porcine pestivirus	2 ^A	
		Unclassified	Bungowannah virus	3 ^A	
		Unclassified	Cell fusing agent virus	2 ^A	
Hepeviridae	Orthohepevirus	Orthohepevirus A	ssp Hepatitis E virus-1, -2, -3 and -4	2	
Nairoviridae	Orthonairovirus	Crimean-Congo hemorrhagic fever orthonairovirus	ssp Crimean-Congo hemorrhagic fever virus	4	Crimean-Congo hemorrhagic fever nairovirus (species)
Nodaviridae	Betanodavirus	Barfin flounder nervous necrosis virus		2 ^A	
		Redspotted grouper nervous necrosis virus		2 ^A	
		Striped jack nervous necrosis virus		2 ^A	
		Tiger puffer nervous necrosis virus		2 ^A	
		Unclassified	Turbot betanodavirus	2 ^A	
	Unclassified	Unclassified			
Orthomyxoviridae	Influenzavirus A	Influenza A virus		3	
		Influenza A virus	strain 'HongKong/1/68'	3	
		Influenza A virus	strain 'Udorn/307/72'	3	
		Influenza A virus	strain 'WSN/33'	2	

Family*	Genus*	Species*	Subgroup/subspecies/strain/type	Class	Alternative names/ names used in old permit
<i>Orthomyxoviridae</i>	<i>Influenzavirus A</i>	<i>Influenza A virus</i>	vaccin strain 'Port Chalmers/1/73'	2	
		<i>Influenza A virus</i>	vaccin strain 'Puerto Rico/8/34'	2	
	<i>Influenzavirus B</i>	<i>Influenza B virus</i>		2	
	<i>Influenzavirus C</i>	<i>Influenza C virus</i>		2	
	<i>Isavirus</i>	<i>Infectious salmon anemia virus</i>		2 ^A	
	Unclassified	Unclassified	Tilapia lake virus	2 ^A	
<i>Paramyxoviridae</i>	<i>Avulavirus</i>	<i>Avian avulavirus 1</i>		3 ^A	Pseudovogelpest virus, Newcastle disease virus
		<i>Avian avulavirus 2</i>		2 ^A	Avian paramyxovirus 2
		<i>Avian avulavirus 3</i>		2 ^A	Avian paramyxovirus 3
		<i>Avian avulavirus 4</i>		2 ^A	Avian paramyxovirus 4
		<i>Avian avulavirus 5</i>		2 ^A	Avian paramyxovirus 5
		<i>Avian avulavirus 6</i>		2 ^A	Avian paramyxovirus 6
		<i>Avian avulavirus 7</i>		2 ^A	Avian paramyxovirus 7
		<i>Avian avulavirus 8</i>		2 ^A	Avian paramyxovirus 8
		<i>Avian avulavirus 9</i>		2 ^A	Avian paramyxovirus 9
	<i>Henipavirus</i>	<i>Hendra henipavirus</i>		4	Hendra virus
		<i>Nipah henipavirus</i>		4	Nipah virus
	<i>Morbillivirus</i>	<i>Canine morbillivirus</i>		2 ^A	Canine distemper virus
		<i>Measles morbillivirus</i>		2	Mazelen, Measles virus
		<i>Phocine morbillivirus</i>		2 ^A	Phocine distemper virus
		<i>Rinderpest morbillivirus</i>		4 ^A	Rinderpestvirus, Runderpestvirus
		<i>Small ruminant morbillivirus</i>		3 ^A	Peste-des-petits-ruminants virus
	<i>Respirovirus</i>	<i>Bovine respirovirus 3</i>		2 ^A	Bovine parainfluenza virus 3
		<i>Human respirovirus 1</i>		2	Human parainfluenza virus 1
		<i>Human respirovirus 3</i>		2	Human parainfluenza virus 3
		<i>Murine respirovirus</i>		2 ^A	Sendai virus

Family*	Genus*	Species*	Subgroup/subspecies/strain/type	Class	Alternative names/ names used in old permit
<i>Paramyxoviridae</i>	<i>Rubulavirus</i>	<i>Human rubulavirus 2</i>		2	Human parainfluenza virus 2
		<i>Human rubulavirus 4</i>		2	Human parainfluenza virus 4
		<i>Mammalian rubulavirus 5</i>		2 ^A	Parainfluenza virus 5
		<i>Mumps rubulavirus</i>		2	Bof, Mumps virus
<i>Peribunyaviridae</i>	<i>Orthobunyavirus</i>	<i>Akabane orthobunyavirus</i>	ssp Akabane virus	3 ^A	
		<i>Bunyamwera orthobunyavirus</i>	ssp Bunyamwera virus	2	
		<i>Sathuperi orthobunyavirus</i>	ssp Schmallenberg virus	2 ^A	
		<i>Shamonda orthobunyavirus</i>	ssp Shamonda virus	2 ^A	
		<i>Shuni orthobunyavirus</i>	ssp Shuni virus	2 ^A	
<i>Permutotetraviridae</i>	<i>Alphapermutotetravirus</i>	<i>Thosea asigna virus</i>		2 ^A	
<i>Phenuiviridae</i>	<i>Phlebovirus</i>	<i>Rift Valley fever phlebovirus</i>	ssp Rift Valley fever virus	3	
		<i>SFTS phlebovirus</i>	ssp Severe fever with thrombocytopenia virus	4	Huaiyangshan virus
		<i>Uukuniemi phlebovirus</i>	ssp Uukuniemi virus	2 ^A	
<i>Picornaviridae</i>	<i>Aphthovirus</i>	<i>Equine rhinitis A virus</i>		2 ^A	
		<i>Foot-and-mouth disease virus</i>		4 ^A	Mond- en klauwzeervirus
	<i>Cardiovirus</i>	<i>Cardiovirus A</i>		2	Encephalomyocarditis virus
		<i>Cardiovirus B</i>	type Saffold virus 1-11	2	Theilovirus
		<i>Cardiovirus B</i>	type Theiler's murine encephalomyelitis virus	2 ^A	Theilovirus
		<i>Cardiovirus B</i>	type Thera virus	2 ^A	Theilovirus
		<i>Cardiovirus B</i>	type Vilyuisk human encephalomyelitis virus	2	Theilovirus
		<i>Cardiovirus B</i>			
	<i>Enterovirus</i>	<i>Enterovirus A</i>	Coxsackievirus types A2 - A8, A10, A12, A14, A16	2	
		<i>Enterovirus A</i>	Enterovirus A71	2	
		<i>Enterovirus B</i>	Coxsackievirus A9, B1 - B6	2	

<i>Family*</i>	<i>Genus*</i>	<i>Species*</i>	<i>Subgroup/subspecies/strain/type</i>	<i>Class</i>	<i>Alternative names/ names used in old permit</i>
<i>Picornaviridae</i>	<i>Enterovirus</i>	<i>Enterovirus B</i>	Echovirus 1 - 7, 9, 11 - 15, 17, 18, 20, 21, 24 - 27, 29 - 33	2	
		<i>Enterovirus B</i>	Enterovirus B69	2	
		<i>Enterovirus B</i>	variant Swine vesicular disease virus	3 ^A	Vesiculaire varkensziektevirus
		<i>Enterovirus C</i>	Coxsackievirus A1, A11, A19, A21, A22	2	
		<i>Enterovirus C</i>	Coxsackievirus A13, A17, A20, A24	2	
		<i>Enterovirus C</i>	Poliovirus type 1 and 3	2	
		<i>Enterovirus C</i>	Poliovirus type 2	3	
		<i>Enterovirus D</i>	Enterovirus D68, D70	2	
		<i>Rhinovirus A</i>		2	
		<i>Rhinovirus B</i>		2	
		<i>Rhinovirus C</i>		2	
	<i>Hepatovirus</i>	<i>Hepatovirus A</i>		2	Hepatitis A virus
	<i>Kobuvirus</i>	<i>Aichivirus A</i>		2	Aichi virus
	<i>Parechovirus</i>	<i>Parechovirus A</i>	ssp Human parechovirus 1 - 5	2	
		<i>Parechovirus B</i>		2	Ljungan virus
	<i>Senecavirus</i>	<i>Senecavirus A</i>		3 ^A	Seneca Valley virus
	<i>Teschovirus</i>	<i>Teschovirus A</i>		2 ^A	
<i>Pneumoviridae</i>	<i>Metapneumovirus</i>	<i>Avian metapneumovirus</i>		2 ^A	Avian pneumovirus
		<i>Human metapneumovirus</i>		2	
	<i>Orthopneumovirus</i>	<i>Bovine orthopneumovirus</i>		2 ^A	Bovine respiratory syncytial virus
		<i>Human orthopneumovirus</i>		2	Respiratory syncytial virus, Human respiratory syncytial virus
		<i>Murine orthopneumovirus</i>		2 ^A	Pneumonia virus of mice
<i>Reoviridae</i>	<i>Orbivirus</i>	<i>African horse sickness virus</i>		3 ^A	Afrikaanse paardenpestvirus
		<i>Bluetongue virus</i>		3 ^A	

<i>Family*</i>	<i>Genus*</i>	<i>Species*</i>	<i>Subgroup/subspecies/strain/type</i>	<i>Class</i>	<i>Alternative names/ names used in old permit</i>
Reoviridae	Orbivirus	Epizootic hemorrhagic disease virus		3 ^A	
		Equine encephalosis virus		3 ^A	
	Orthoreovirus	Mammalian orthoreovirus		2	
		Piscine orthoreovirus		2 ^A	
	Rotavirus	Rotavirus A		2	
		Rotavirus B		2	
		Rotavirus C		2	
		Rotavirus D		2 ^A	
		Rotavirus E		2 ^A	
Retroviridae	Alpharetrovirus	Avian leukosis virus		2 ^A	
		Rous sarcoma virus		2 ^A	
	Betaretrovirus	Mouse mammary tumor virus		2 ^A	
	Deltaretrovirus	Primate T-lymphotropic virus 1		3	
		Primate T-lymphotropic virus 2		3	
		Primate T-lymphotropic virus 3		3	
	Gammaretrovirus	Gibbon ape leukemia virus		2 ^A	
		Moloney murine sarcoma virus		2 ^A	
		Murine leukemia virus		2 ^A	
	Lentivirus	Bovine immunodeficiency virus		2 ^A	
		Caprine arthritis encephalitis virus		2 ^A	
		Equine infectious anemia virus		2 ^A	
		Feline immunodeficiency virus		2 ^A	
		Human immunodeficiency virus 1		3	
		Human immunodeficiency virus 2		3	
		Simian immunodeficiency virus		3	

Family*	Genus*	Species*	Subgroup/subspecies/strain/type	Class	Alternative names/ names used in old permit
Retroviridae	Lentivirus	<i>Visna/maedi virus</i>		2 ^A	
		<i>African green monkey simian foamy virus</i>		2	Primate foamy virus
		<i>Feline foamy virus</i>		2 ^A	
		<i>Macaque simian foamy virus</i>		2	Primate foamy virus
		<i>Simian foamy virus</i>		2	Primate foamy virus
	Unclassified	Unclassified	Feline endogenous virus RD-114	2 ^A	
Rhabdoviridae	Lyssavirus	<i>Duvenhage lyssavirus</i>		3	Duvenhage virus
		<i>Mokola lyssavirus</i>		3	Mokola virus
		<i>Rabies lyssavirus</i>		3	Rabies virus
		<i>Rabies lyssavirus</i>	vaccin strain 'ORA-DPC'	2	Rabies virus
		<i>Rabies lyssavirus</i>	vaccin strain 'SAD B19'	2	Rabies virus
	<i>Sprivirus</i>	<i>Carp sprivirus</i>		2 ^A	Spring viraemia of carp virus, Rhabdovirus carpio
	Vesiculovirus	<i>Alagoas vesiculovirus</i>		3	Vesicular stomatitis Alagoas virus
		<i>Indiana vesiculovirus</i>		3	Vesicular stomatitis Indiana virus
		<i>New Jersey vesiculovirus</i>		3	Vesicular stomatitis New Jersey virus
Togaviridae	Alphavirus	<i>Chikungunya virus</i>		3	
		<i>Eastern equine encephalitis virus</i>		3	
		<i>Middelburg virus</i>		2 ^A	
		<i>O'nyong-nyong virus</i>		2	
		<i>Ross River virus</i>		2	
		<i>Salmon pancreas disease virus</i>		2 ^A	
		<i>Semliki Forest virus</i>		2	
		<i>Sindbis virus</i>		2	
		<i>Venezuelan equine encephalitis virus</i>		3	

Family*	Genus*	Species*	Subgroup/subspecies/strain/type	Class	Alternative names/ names used in old permit
Togaviridae	Alphavirus	Venezuelan equine encephalitis virus	vaccin strain 'TC-83'	2	
		Western equine encephalitis virus		3	
	Rubivirus	Rubella virus		2	
Unassigned	Deltavirus	Hepatitis delta virus		2	Hepatitis D virus

* According to International Committee on Taxonomy of Viruses (ICTV) 2016 release in *italics* A - strict animal pathogen ssp - subspecies sssp - subspecies

Table 3. Pathogenicity classification of DNA viruses, sorted alphabetically

Species*	Subgroup/subspecies/strain/type	Class	Alternative names/ names used in old permit
<i>Adeno-associated dependoparvovirus A</i>	ssp AAV-1	2	
<i>Adeno-associated dependoparvovirus A</i>	sssp AAV-2 (part of ssp AAV-2)	2	
<i>Adeno-associated dependoparvovirus A</i>	ssp AAV-3	2	
<i>Adeno-associated dependoparvovirus A</i>	sssp AAV-4 and AAV-7 till 9 (part of ssp AAV-4)	2	
<i>Adeno-associated dependoparvovirus B</i>	ssp AAV-5	2	
<i>African swine fever virus</i>		4 ^A	Afrikaanse varkenspestvirus
<i>Alphapapillomavirus 1</i>		2	Human papillomavirus 32
<i>Alphapapillomavirus 2</i>		2	Human papillomavirus 10
<i>Alphapapillomavirus 3</i>		2	Human papillomavirus 61
<i>Alphapapillomavirus 4</i>		2	Human papillomavirus 2
<i>Alphapapillomavirus 5</i>		2	Human papillomavirus 26
<i>Alphapapillomavirus 6</i>		2	Human papillomavirus 53
<i>Alphapapillomavirus 7</i>		2	Human papillomavirus 18
<i>Alphapapillomavirus 8</i>		2	Human papillomavirus 7
<i>Alphapapillomavirus 9</i>		2	Human papillomavirus 16
<i>Alphapapillomavirus 10</i>		2	Human papillomavirus 6
<i>Alphapapillomavirus 11</i>		2	Human papillomavirus 34
<i>Alphapapillomavirus 13</i>		2	Human papillomavirus 54
<i>Alphapapillomavirus 14</i>		2	Human papillomavirus cand90
<i>Autographa californica multiple nucleopolyhedrovirus</i>		2 ^A	
<i>Aves polyomavirus 1</i>		2 ^A	Avian polyomavirus, Budgerigar fledgling disease virus
<i>Betapapillomavirus 1</i>		2	Human papillomavirus 5
<i>Betapapillomavirus 2</i>		2	Human papillomavirus 9
<i>Betapapillomavirus 3</i>		2	Human papillomavirus 49
<i>Betapapillomavirus 4</i>		2	Human papillomavirus cand92
<i>Betapapillomavirus 5</i>		2	Human papillomavirus cand96
<i>Bombyx mori nucleopolyhedrovirus</i>		2 ^A	Bombyx mori nucleopolyhedrosis virus
<i>Bovine alphaherpesvirus 1</i>		2 ^A	Bovine herpesvirus 1
<i>Bovine atadenovirus D</i>	type Bovine atadenovirus 4	2 ^A	
<i>Bovine gammaherpesvirus 4</i>		2 ^A	Bovine herpesvirus 4
<i>Bovine mastadenovirus B</i>		2 ^A	Bovine adenovirus B
<i>Canarypox virus</i>		2 ^A	
<i>Canarypox virus</i>	vaccin strain 'ALVAC'	1 ^A	
<i>Canine mastadenovirus A</i>		2 ^A	Canine adenovirus A
<i>Carnivore protoparvovirus 1</i>		2 ^A	Feline panleukopenia virus, Canine parvovirus
<i>Cercopithecine betaherpesvirus 5</i>		2	Cercopithecine herpesvirus 5
<i>Chicken anemia virus</i>		2 ^A	
<i>Cowpox virus</i>		2	
<i>Cyprinid herpesvirus 3</i>		2 ^A	

Species*	Subgroup/subspecies/strain/type	Class	Alternative names/ names used in old permit
<i>Elephantid betaherpesvirus 1</i>		2 ^A	Elephantid herpesvirus
<i>Equid alphaherpesvirus 1</i>		2 ^A	Equid herpesvirus 1
<i>Equid alphaherpesvirus 4</i>		2 ^A	Equid herpesvirus 4
<i>Felid alphaherpesvirus 1</i>		2 ^A	Feline herpesvirus 1, Felid herpesvirus 1
<i>Fowl aviadenovirus A</i>		2 ^A	Fowl adenovirus A
<i>Fowlpox virus</i>		2 ^A	
<i>Fowlpox virus</i>	vaccin strain 'TROVAC'	1 ^A	
<i>Gallid alphaherpesvirus 1</i>		2 ^A	Infectious laryngotracheitis virus, Gallid herpesvirus 1
<i>Gallid alphaherpesvirus 2</i>		2 ^A	Marek's disease virus, Gallid herpesvirus 2, Marek's disease virustype 1
<i>Gallid alphaherpesvirus 3</i>		2 ^A	Gallid herpesvirus 3, Marek's disease virus type 2
<i>Gammapapillomavirus 1</i>		2	Human papillomavirus 4
<i>Gammapapillomavirus 2</i>		2	Human papillomavirus 48
<i>Gammapapillomavirus 3</i>		2	Human papillomavirus 50
<i>Gammapapillomavirus 4</i>		2	Human papillomavirus 60
<i>Gammapapillomavirus 5</i>		2	Human papillomavirus 88
<i>Gammapapillomavirus 6</i>		2	Human papillomavirus 101
<i>Gammapapillomavirus 7</i>		2	Human papillomavirus 109
<i>Gammapapillomavirus 8</i>		2	Human papillomavirus 112
<i>Gammapapillomavirus 9</i>		2	Human papillomavirus 116
<i>Gammapapillomavirus 10</i>		2	Human papillomavirus 121
<i>Gammapapillomavirus 11</i>		2	Human papillomavirus 126
<i>Gammapapillomavirus 12</i>		2	Human papillomavirus 127
<i>Gammapapillomavirus 13</i>		2	Human papillomavirus 128
<i>Gammapapillomavirus 14</i>		2	Human papillomavirus 131
<i>Gammapapillomavirus 15</i>		2	Human papillomavirus 135
<i>Gammapapillomavirus 16</i>		2	Human papillomavirus 137
<i>Gammapapillomavirus 17</i>		2	Human papillomavirus 144
<i>Gammapapillomavirus 18</i>		2	Human papillomavirus 156
<i>Gammapapillomavirus 19</i>		2	Human papillomavirus 161
<i>Gammapapillomavirus 20</i>		2	Human papillomavirus 163
<i>Goatpox virus</i>		3 ^A	Geitenpokkenvirus, Capripoxvirus
<i>Hepatitis B virus</i>		2	
<i>Human alphaherpesvirus 1</i>		2	Herpes simplex virus 1, Human herpesvirus 1
<i>Human alphaherpesvirus 2</i>		2	Herpes simplex virus 2, Human herpesvirus 2
<i>Human alphaherpesvirus 3</i>		2	Varicella-zoster virus, Human herpesvirus 3
<i>Human betaherpesvirus 5</i>		2	Human cytomegalovirus, Human herpesvirus 5
<i>Human betaherpesvirus 6A</i>		2	
<i>Human betaherpesvirus 6B</i>		2	
<i>Human betaherpesvirus 7</i>		2	Human herpesvirus 7
<i>Human gammaherpesvirus 4</i>		2	Epstein-Barr virus, Human herpesvirus 4

Species*	Subgroup/subspecies/strain/type	Class	Alternative names/ names used in old permit
<i>Human gammaherpesvirus 8</i>		2	Kaposi's sarcoma-associated herpesvirus, Human herpesvirus 8
<i>Human mastadenovirus A</i>	viruses isolated from humans	2	
<i>Human mastadenovirus B</i>	viruses isolated from humans	2	
<i>Human mastadenovirus B</i>	viruses isolated from apes	2	
<i>Human mastadenovirus C</i>	viruses isolated from humans	2	
<i>Human mastadenovirus C</i>	viruses isolated from apes	2	
<i>Human mastadenovirus D</i>	viruses isolated from humans	2	
<i>Human mastadenovirus E</i>	viruses isolated from humans	2	
<i>Human mastadenovirus E</i>	viruses isolated from apes	2	
<i>Human mastadenovirus F</i>	viruses isolated from humans	2	
<i>Human mastadenovirus G</i>	viruses isolated from humans	2	
<i>Human polyomavirus 1</i>		2	BK polyomavirus
<i>Human polyomavirus 2</i>		2	JC polyomavirus
<i>Human polyomavirus 3</i>		2	KI polyomavirus
<i>Human polyomavirus 4</i>		2	WU polyomavirus
<i>Human polyomavirus 5</i>		2	Merkel cell polyomavirus
<i>Human polyomavirus 6</i>		2	
<i>Human polyomavirus 7</i>		2	
<i>Human polyomavirus 8</i>		2	Trichodysplasia spinulosa-associated polyomavirus
<i>Invertebrate iridescent virus 6</i>		2 ^A	
<i>Lumpy skin disease virus</i>		3 ^A	
<i>Macaca mulatta polyomavirus 1</i>		2	SV40, Simian virus 40
<i>Macacine alphaherpesvirus 1</i>		3	Herpes virus B, Herpesvirus simiae, Cercopithecine herpesvirus 1, Macacine herpesvirus 1
<i>Macacine betaherpesvirus 3</i>		2	Macacine herpesvirus 3
<i>Meleagrid alphaherpesvirus 1</i>	vaccin strain 'FC-126'	1 ^A	Herpesvirus of turkeys, Marek's disease virus type 3
<i>Mupapillomavirus 1</i>		2	Human papillomavirus 1
<i>Mupapillomavirus 2</i>		2	Human papillomavirus 63
<i>Murid betaherpesvirus 1</i>		2 ^A	Murid herpesvirus 1
<i>Mus musculus polyomavirus 1</i>		2 ^A	Murine polyomavirus
<i>Myxoma virus</i>		2 ^A	
<i>Nupapillomavirus 1</i>		2	Human papillomavirus 41
<i>Pan troglodytes polyomavirus 1</i>		2	Chimpanzee polyomavirus
<i>Panine betaherpesvirus 2</i>		2	Panine herpesvirus 2
<i>Pongo abelii polyomavirus 1</i>		2	Sumatran orangutan polyomavirus
<i>Pongo pygmaeus polyomavirus 1</i>		2	Bornean orangutan polyomavirus
<i>Porcine circovirus 1</i>		1 ^A	Porcine circovirus-1
<i>Porcine circovirus 2</i>		2 ^A	Porcine circovirus-2
<i>Primate erythroparvovirus 1</i>		2	Human parvovirus B19
<i>Psittacid alphaherpesvirus 1</i>		2 ^A	Psittacid herpesvirus 1
<i>Rodent protoparvovirus 1</i>	ssp H-1 parvovirus	2 ^A	Rodent parvovirus H-1
<i>Rodent protoparvovirus 1</i>	ssp Minute virus of mice	2 ^A	
<i>Saimiri boliviensis polyomavirus 1</i>		2	Squirrel monkey polyomavirus

Species*	Subgroup/subspecies/strain/type	Class	Alternative names/ names used in old permit
<i>Saimiriine gammaherpesvirus 2</i>		2	Herpesvirus saimiri, Saimiriine herpesvirus 2
<i>Sheeppox virus</i>		3 ^A	Schapepokkenvirus, Capripoxvirus
<i>Suid alphaherpesvirus 1</i>		3 ^A	Pseudorabiesvirus, Aujeszky's disease virus, Suid herpesvirus 1
<i>Swinepox virus</i>		2 ^A	
<i>Torque teno mini virus 1-12</i>		2	
<i>Torque teno virus 1-29</i>		2	
<i>Trichoplusia ni single nucleopolyhedrovirus</i>		2 ^A	
Unclassified	African green monkey polyomavirus	2	
Unclassified	Baboon polyomavirus 2	2	
Unclassified	Cynomolgus polyomavirus	2	
Unclassified	Red sea bream iridovirus	2 ^A	
Unclassified	Scale drop disease virus	2 ^A	
Unclassified	Simian virus 12	2	
Unclassified	subgroup primate polyomaviruses	2	
Unclassified	type Chimpanzee adenovirus 3	2	Pan troglodytes adenovirus 3
Unclassified	type Chimpanzee adenovirus Y25	2	
Unclassified	type Human adenovirus 56	2	
Unclassified	type Murine adenovirus 2	2 ^A	
Unclassified	type Rhesus adenovirus 51	2	
Unclassified	type Rhesus adenovirus 52	2	
Unclassified	type Rhesus adenovirus 53	2	
Unclassified	type Simian adenovirus 13	2	
Unclassified	type Simian adenovirus 17	2	
Unclassified	type Simian adenovirus 19	2	
Unclassified	type Snake adenovirus 2	2 ^A	
<i>Vaccinia virus</i>		2	
<i>Vaccinia virus</i>	vaccin strain 'MVA'	1	
<i>Vaccinia virus</i>	vaccin strain 'NYVAC'	1	
<i>Vaccinia virus</i>	vaccin strain 'WR'	2	
<i>Woodchuck hepatitis virus</i>		2 ^A	
<i>Yaba monkey tumor virus</i>		2	Yaba-like disease virus

* According to International Committee on Taxonomy of Viruses (ICTV) 2016 release in *italics* A - strict animal pathogen
ssp - subspecies sssp - subspecies

Table 4. Pathogenicity classification RNA viruses, sorted alphabetically

Species*	Subgroup/subspecies/strain/type	Class	Alternative names/ names used in old decree
<i>African green monkey simian foamy virus</i>		2	Primate foamy virus
<i>African horse sickness virus</i>		3 ^A	Afrikaanse paardenpestvirus
<i>African pouched rat arterivirus</i>		2 ^A	African pouched rat arterivirus 1, Forest pouched giant rat arterivirus
<i>Aichivirus A</i>		2	Aichi virus
<i>Akabane orthobunyavirus</i>	ssp Akabane virus	3 ^A	
<i>Alagoas vesiculovirus</i>		3	Vesicular stomatitis Alagoas virus
<i>Alphacoronavirus 1</i>	provisional ssp Ferret coronavirus (type Ferret enteric coronavirus)	2 ^A	
<i>Alphacoronavirus 1</i>	provisional ssp Ferret coronavirus (type Ferret systemic coronavirus)	2 ^A	
<i>Alphacoronavirus 1</i>	ssp Canine coronavirus (type I and II)	2 ^A	
<i>Alphacoronavirus 1</i>	ssp Feline coronavirus (type I and II)	2 ^A	Feline infectious peritonitis virus
<i>Alphacoronavirus 1</i>	ssp Porcine respiratory coronavirus	2 ^A	
<i>Alphacoronavirus 1</i>	ssp Transmissible gastroenteritis virus	2 ^A	
<i>Avian avulavirus 1</i>		3 ^A	Pseudovogelpest virus, Newcastle disease virus
<i>Avian avulavirus 2</i>		2 ^A	Avian paramyxovirus 2
<i>Avian avulavirus 3</i>		2 ^A	Avian paramyxovirus 3
<i>Avian avulavirus 4</i>		2 ^A	Avian paramyxovirus 4
<i>Avian avulavirus 5</i>		2 ^A	Avian paramyxovirus 5
<i>Avian avulavirus 6</i>		2 ^A	Avian paramyxovirus 6
<i>Avian avulavirus 7</i>		2 ^A	Avian paramyxovirus 7
<i>Avian avulavirus 8</i>		2 ^A	Avian paramyxovirus 8
<i>Avian avulavirus 9</i>		2 ^A	Avian paramyxovirus 9
<i>Avian coronavirus</i>		2 ^A	Infectious bronchitis virus
<i>Avian leukosis virus</i>		2 ^A	
<i>Avian metapneumovirus</i>		2 ^A	Avian pneumovirus
<i>Barfin flounder nervous necrosis virus</i>		2 ^A	
<i>Betacoronavirus 1</i>	ssp Bovine coronavirus	2 ^A	
<i>Betacoronavirus 1</i>	ssp Equine coronavirus	2 ^A	
<i>Betacoronavirus 1</i>	ssp Human coronavirus OC43	2	
<i>Betacoronavirus 1</i>	ssp Porcine hemagglutinating encephalomyelitis virus	2 ^A	
<i>Betacoronavirus 1</i>	ssp Rabbit coronavirus HKU14	2 ^A	
<i>Bluetongue virus</i>		3 ^A	
<i>Border disease virus</i>		2 ^A	
<i>Bovine immunodeficiency virus</i>		2 ^A	
<i>Bovine orthopneumovirus</i>		2 ^A	Bovine respiratory syncytial virus
<i>Bovine respirovirus 3</i>		2 ^A	Bovine parainfluenza virus 3
<i>Bovine torovirus</i>		2 ^A	
<i>Bovine viral diarrhea virus 1</i>		2 ^A	
<i>Bovine viral diarrhea virus 2</i>		2 ^A	
<i>Bunyamwera orthobunyavirus</i>	ssp Bunyamwera virus	2	
<i>Canine morbillivirus</i>		2 ^A	Canine distemper virus

Species*	Subgroup/subspecies/strain/type	Class	Alternative names/ names used in old decree
<i>Caprine arthritis encephalitis virus</i>		2 ^A	
<i>Cardiovirus A</i>		2	Encephalomyocarditis virus
<i>Cardiovirus B</i>	type Saffold virus 1-11	2	Theilovirus
<i>Cardiovirus B</i>	type Theiler's murine encephalomyelitis virus	2 ^A	Theilovirus
<i>Cardiovirus B</i>	type Thera virus	2 ^A	Theilovirus
<i>Cardiovirus B</i>	type Vilyuisk human encephalomyelitis virus	2	Theilovirus
<i>Carp sprivivirus</i>		2 ^A	Spring viraemia of carpvirus, Rhabdovirus carpio
<i>Chikungunya virus</i>		3	
<i>Classical swine fever virus</i>		4 ^A	Klassieke varkenspestvirus, Hog cholera virus
<i>Crimean-Congo hemorrhagic fever orthonairovirus</i>	ssp Crimean-Congo hemorrhagic fever virus	4	Crimean-Congo hemorrhagic fever nairovirus (species)
<i>DeBrazza's monkey arterivirus</i>		2 ^A	
<i>Dengue virus</i>		3	
<i>Duvenhage lyssavirus</i>		3	Duvenhage virus
<i>Eastern equine encephalitis virus</i>		3	
<i>Enterovirus A</i>	Coxsackievirus types A2 - A8, A10, A12, A14, A16	2	
<i>Enterovirus A</i>	Enterovirus A71	2	
<i>Enterovirus B</i>	Coxsackievirus A9, B1 - B6	2	
<i>Enterovirus B</i>	Echovirus 1 - 7, 9, 11 - 15, 17, 18, 20, 21, 24 - 27, 29 - 33	2	
<i>Enterovirus B</i>	Enterovirus B69	2	
<i>Enterovirus B</i>	variant Swine vesicular disease virus	3 ^A	Vesiculaire varkensziektevirus
<i>Enterovirus C</i>	Coxsackievirus A1, A11, A19, A21, A22	2	
<i>Enterovirus C</i>	Coxsackievirus A13, A17, A20, A24	2	
<i>Enterovirus C</i>	Poliovirus type 1 and 3	2	
<i>Enterovirus C</i>	Poliovirus type 2	3	
<i>Enterovirus D</i>	Enterovirus D68, D70	2	
<i>Epizootic hemorrhagic disease virus</i>		3 ^A	
<i>Equine arteritis virus</i>		2 ^A	
<i>Equine encephalosis virus</i>		3	
<i>Equine infectious anemia virus</i>		2 ^A	
<i>Equine rhinitis A virus</i>		2 ^A	
<i>Equine torovirus</i>		2 ^A	Berne virus
<i>Feline calicivirus</i>		2 ^A	
<i>Feline foamy virus</i>		2 ^A	
<i>Feline immunodeficiency virus</i>		2 ^A	
<i>Foot-and-mouth disease virus</i>		4 ^A	Mond- en klauwzeervirus
<i>Gibbon ape leukemia virus</i>		2 ^A	
<i>Hendra henipavirus</i>		4	Hendra virus
<i>Hepacivirus C</i>		2	Hepatitis C virus
<i>Hepatitis delta virus</i>		2	Hepatitis D virus
<i>Hepatovirus A</i>		2	Hepatitis A virus
<i>Human coronavirus 229E</i>		2	

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<i>Human coronavirus HKU1</i>		2	
<i>Human coronavirus NL63</i>		2	
<i>Human immunodeficiency virus 1</i>		3	
<i>Human immunodeficiency virus 2</i>		3	
<i>Human metapneumovirus</i>		2	
<i>Human orthopneumovirus</i>		2	Respiratory syncytial virus, Human respiratory syncytial virus
<i>Human respirovirus 1</i>		2	Human parainfluenza virus 1
<i>Human respirovirus 3</i>		2	Human parainfluenza virus 3
<i>Human rubulavirus 2</i>		2	Human parainfluenza virus 2
<i>Human rubulavirus 4</i>		2	Human parainfluenza virus 4
<i>Indiana vesiculovirus</i>		3	Vesicular stomatitis Indiana virus
<i>Infectious bursal disease virus</i>		2 ^A	ziekte van Gumborovirus
<i>Infectious salmon anemia virus</i>		2 ^A	
<i>Influenza A virus</i>		3	
<i>Influenza A virus</i>	strain 'HongKong/1/68'	3	
<i>Influenza A virus</i>	strain 'Udorn/307/72'	3	
<i>Influenza A virus</i>	strain 'WSN/33'	2	
<i>Influenza A virus</i>	vaccin strain 'Port Chalmers/1/73'	2	
<i>Influenza A virus</i>	vaccin strain 'Puerto Rico/8/34'	2	
<i>Influenza B virus</i>		2	
<i>Influenza C virus</i>		2	
<i>Japanese encephalitis virus</i>		3	
<i>Junín mammarenavirus</i>		4	Junín virus
<i>Kibale red colobus virus 1</i>		2 ^A	
<i>Kibale red colobus virus 2</i>		2 ^A	
<i>Kibale red-tailed guenon virus 1</i>		2 ^A	Kibale red-tailed guenon virus
<i>Lactate dehydrogenase-elevating virus</i>		2 ^A	
<i>Lassa mammarenavirus</i>		4	Lassa virus
<i>Lymphocytic choriomeningitis mammarenavirus</i>		3	Lymphocytic choriomeningitis virus
<i>Lymphocytic choriomeningitis mammarenavirus</i>	strain 'Armstrong'	2	
<i>Lymphocytic choriomeningitis mammarenavirus</i>	strain 'Docile'	3	
<i>Lymphocytic choriomeningitis mammarenavirus</i>	strain 'WE'	3	
<i>Macaque simian foamy virus</i>		2	Primate foamy virus
<i>Machupo mammarenavirus</i>		4	Machupo virus
<i>Mammalian orthoreovirus</i>		2	
<i>Mammalian rubulavirus 5</i>		2 ^A	Parainfluenza virus 5
<i>Marburg marburgvirus</i>		4	Lake Victoria marburgvirus, Marburgvirus
<i>Measles morbillivirus</i>		2	Mazelen, Measles virus
<i>Middelburg virus</i>		2 ^A	
<i>Middle East respiratory syndrome-related coronavirus</i>		3	HCoV EMC, MERS-coronavirus, Middle East Respiratory Coronavirus
<i>Mikumi yellow baboon virus 1</i>		2 ^A	

Species*	Subgroup/subspecies/strain/type	Class	Alternative names/ names used in old decree
<i>Modoc virus</i>		2	
<i>Mokola lyssavirus</i>		3	Mokola virus
<i>Moloney murine sarcoma virus</i>		2 ^A	
<i>Mouse mammary tumor virus</i>		2 ^A	
<i>Mumps rubulavirus</i>		2	Bof, Mumps virus
<i>Murine coronavirus</i>		2 ^A	Mouse hepatitis virus
<i>Murine leukemia virus</i>		2 ^A	
<i>Murine orthopneumovirus</i>		2 ^A	Pneumonia virus of mice, Murine pneumonia virus
<i>Murine respirovirus</i>		2 ^A	Sendai virus
<i>New Jersey vesiculovirus</i>		3	Vesicular stomatitis New Jersey virus
<i>Nipah henipavirus</i>		4	Nipah virus
<i>Norwalk virus</i>		2	
<i>O'nyong-nyong virus</i>		2	
<i>Orthohepevirus A</i>	ssp Hepatitis E virus-1, -2, -3 and -4	2	
<i>Parechovirus A</i>	ssp Human parechovirus 1 - 5	2	
<i>Parechovirus B</i>		2	Ljungan virus
<i>Pebjah virus</i>		2 ^A	
<i>Phocine morbillivirus</i>		2 ^A	Phocine distemper virus
<i>Piscine orthoreovirus</i>		2 ^A	
<i>Porcine epidemic diarrhea virus</i>		2 ^A	
<i>Porcine reproductive and respiratory syndrome virus 1</i>		2 ^A	Lelystadvirus, Porcine reproductive and respiratory syndrome virus
<i>Porcine reproductive and respiratory syndrome virus 2</i>		2 ^A	
<i>Porcine torovirus</i>		2 ^A	
<i>Primate T-lymphotropic virus 1</i>		3	
<i>Primate T-lymphotropic virus 2</i>		3	
<i>Primate T-lymphotropic virus 3</i>		3	
<i>Rabbit hemorrhagic disease virus</i>		2 ^A	Viraal hemorrhagisch syndroom van konijnen virus
<i>Rabies lyssavirus</i>		3	Rabies virus
<i>Rabies lyssavirus</i>	vaccin strain 'ORA-DPC'	2	Rabies virus
<i>Rabies lyssavirus</i>	vaccin strain 'SAD B19'	2	Rabies virus
<i>Redspotted grouper nervous necrosis virus</i>		2 ^A	
<i>Reston ebolavirus</i>		4	
<i>Rhinovirus A</i>		2	
<i>Rhinovirus B</i>		2	
<i>Rhinovirus C</i>		2	
<i>Rift Valley fever phlebovirus</i>	ssp Rift Valley fever virus	3	
<i>Rinderpest morbillivirus</i>		4 ^A	Rinderpestvirus, Runderpestvirus
<i>Ross River virus</i>		2	
<i>Rotavirus A</i>		2	
<i>Rotavirus B</i>		2	
<i>Rotavirus C</i>		2	
<i>Rotavirus D</i>		2 ^A	

Species*	Subgroup/subspecies/strain/type	Class	Alternative names/ names used in old decree
<i>Rotavirus E</i>		2 ^A	
<i>Rous sarcoma virus</i>		2 ^A	
<i>Rubella virus</i>		2	
<i>Salmon pancreas disease virus</i>		2 ^A	
<i>Sapporo virus</i>		2	
<i>Sathuperi orthobunyavirus</i>	ssp Schmallenberg virus	2 ^A	
<i>Semliki Forest virus</i>		2	
<i>Senecavirus A</i>		3 ^A	Seneca Valley virus
<i>Severe acute respiratory syndrome-related coronavirus</i>		3	
<i>SFTS phlebovirus</i>	ssp Severe fever with thrombocytopenia virus	4	Huaiyangshan virus
<i>Shamonda orthobunyavirus</i>	ssp Shamonda virus	2 ^A	
<i>Shuni orthobunyavirus</i>	ssp Shuni virus	2 ^A	
<i>Simian foamy virus</i>		2	Primate foamy virus
<i>Simian hemorrhagic encephalitis virus</i>		2 ^A	
<i>Simian hemorrhagic fever virus</i>		2 ^A	
<i>Simian immunodeficiency virus</i>		3	
<i>Sindbis virus</i>		2	
<i>Small ruminant morbillivirus</i>		3 ^A	Peste-des-petits-ruminants virus
<i>Striped jack nervous necrosis virus</i>		2 ^A	
<i>Sudan ebolavirus</i>		4	
<i>Tacaribe mammarenavirus</i>		2 ^A	Tacaribe virus
<i>Tai Forest ebolavirus</i>		4	
<i>Teschovirus A</i>		2 ^A	
<i>Thosea asigna virus</i>		2 ^A	
<i>Tick-borne encephalitis virus</i>	European subtype	3	
<i>Tick-borne encephalitis virus</i>	Far Eastern subtype	3	
<i>Tick-borne encephalitis virus</i>	Siberian subtype	3	
<i>Tiger puffer nervous necrosis virus</i>		2 ^A	
<i>Unclassified</i>	Atypical porcine pestivirus	2 ^A	
<i>Unclassified</i>	Tilapia lake virus	2 ^A	
<i>Unclassified</i>	Turbot betanodavirus	2 ^A	
<i>Unclassified</i>	Bungowannah virus	3 ^A	
<i>Unclassified</i>	Cell fusing agent virus	2 ^A	
<i>Unclassified</i>	Feline endogenous virus RD-114	2 ^A	
<i>Uukuniemi phlebovirus</i>	ssp Uukuniemi virus	2 ^A	
<i>Venezuelan equine encephalitis virus</i>		3	
<i>Venezuelan equine encephalitis virus</i>	vaccin strain 'TC-83'	2	
<i>Vesicular exanthema of swine virus</i>		2 ^A	
<i>Visna/maedi virus</i>		2 ^A	
<i>West Nile virus</i>		3	
<i>Western equine encephalitis virus</i>		3	
<i>Wobbly possum disease virus</i>		2 ^A	

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<i>Yellow fever virus</i>		3	
<i>Yellow fever virus</i>	vaccin strain 'YF-17D'	2	
<i>Yokose virus</i>		3 ^A	
<i>Zaire ebolavirus</i>		4	
<i>Zika virus</i>		3	

* According to International Committee on Taxonomy of Viruses (ICTV) 2016 release in *italics* A - strict animal pathogen
ssp - subspecies sssp - subspecies