

SUPPLEMENTARY TABLE S1. The top five widely distributed viruses and hosts.

Virus species	Distributed countries/regions
Influenza A virus	Afghanistan; Albania; Algeria; Angola; Antarctica; Argentina; Australia; Austria; Azerbaijan; Bahrain; Bangladesh; Belarus; Belgium; Benin; Bhutan; Bolivia; Bosnia and Herzegovina; Brazil; Bulgaria; Burkina Faso; Cambodia; Cameroon; Canada; Central African Republic; Chad; Chile; China; Colombia; Cook Islands; Costa Rica; Cote d'Ivoire; Croatia; Cuba; Cyprus; Czech Republic; Czechoslovakia; Democratic Republic of the Congo; Denmark; Djibouti; Dominican Republic; Ecuador; Egypt; El Salvador; Estonia; Ethiopia; Fiji; Finland; France; French Guiana; French Polynesia; Georgia; Germany; Ghana; Gibraltar; Greece; Greenland; Guatemala; Haiti; Honduras; Hong Kong, China; Hungary; Iceland; India; Indonesia; Iran; Iraq; Ireland; Israel; Italy; Jamaica; Japan; Jordan; Kazakhstan; Kenya; Kosovo; Kuwait; Kyrgyzstan; Laos; Latvia; Lebanon; Libya; Lithuania; Luxembourg; Macao, China; Madagascar; Malaysia; Mali; Mauritius; Mexico; Moldova; Mongolia; Montenegro; Montserrat; Morocco; Myanmar; Namibia; Nepal; Netherlands; New Caledonia; New Zealand; Nicaragua; Niger; Nigeria; Democratic People's Republic of Korea; Norway; Oman; Pakistan; Palestine; Panama; Papua New Guinea; Paraguay; Peru; Philippines; Poland; Portugal; Qatar; Republic of Serbia; Reunion; Romania; Russia; Saudi Arabia; Senegal; Singapore; Slovakia; Slovenia; Solomon Islands; South Africa; Republic of Korea; Spain; Sri Lanka; Sudan; Suriname; Sweden; Switzerland; Taiwan, China; Tajikistan; Thailand; Togo; Tonga; Tunisia; Turkey; Turkmenistan; Uganda; Ukraine; United Arab Emirates; United Kingdom; United Republic of Tanzania; United States of America; Uruguay; Uzbekistan; Venezuela; Vietnam; West Bank; Zambia; Zimbabwe (155)
Human immunodeficiency virus 1	Afghanistan; Algeria; Angola; Argentina; Armenia; Australia; Austria; Azerbaijan; Bangladesh; Barbados; Belarus; Belgium; Belize; Benin; Bolivia; Bosnia and Herzegovina; Botswana; Brazil; Bulgaria; Burkina Faso; Burundi; Cambodia; Cameroon; Canada; Cape Verde; Central African Republic; Chad; Chile; China; Colombia; Costa Rica; Cote d'Ivoire; Croatia; Cuba; Cyprus; Czech Republic; Democratic Republic of the Congo; Denmark; Djibouti; Dominican Republic; Ecuador; Egypt; El Salvador; Equatorial Guinea; Eritrea; Estonia; Ethiopia; Fiji; Finland; France; French Guiana; Gabon; Gambia; Georgia; Germany; Ghana; Greece; Greenland; Guadeloupe; Guatemala; Guinea; Guinea-Bissau; Haiti; Honduras; Hong Kong, China; Hungary; Iceland; India; Indonesia; Iran; Iraq; Ireland; Israel; Italy; Jamaica; Japan; Kazakhstan; Kenya; Kuwait; Kyrgyzstan; Laos; Latvia; Liberia; Libya; Lithuania; Luxembourg; Macao, China; Madagascar; Malawi; Malaysia; Mali; Martinique; Mauritania; Mauritius; Mexico; Mongolia; Morocco; Mozambique; Myanmar; Nepal; Netherlands; Niger; Nigeria; Norway; Pakistan; Panama; Papua New Guinea; Paraguay; Peru; Philippines; Poland; Portugal; Republic of Serbia; Romania; Russia; Rwanda; Saudi Arabia; Senegal; Seychelles; Sierra Leone; Singapore; Slovakia; Slovenia; Somalia; South Africa; Republic of Korea; Spain; Sri Lanka; Sudan; Suriname; Swaziland; Sweden; Switzerland; Taiwan, China; Tajikistan; Thailand; Togo; Trinidad and Tobago; Tunisia; Turkey; Uganda; Ukraine; United Kingdom; United Republic of Tanzania; United States of America; Uruguay; Uzbekistan; Venezuela; Vietnam; Zambia; Zimbabwe (151)
Hepatitis B virus	Afghanistan; Albania; Algeria; Angola; Argentina; Armenia; Australia; Azerbaijan; Bangladesh; Belarus; Belgium; Bhutan; Bolivia; Bosnia and Herzegovina; Botswana; Brazil; Bulgaria; Burkina Faso; Burundi; Cambodia; Cameroon; Canada; Cape Verde; Central African Republic; Chad; Chile; China; Colombia; Comoros; Cote d'Ivoire; Croatia; Cuba; Czech Republic; Democratic Republic of the Congo; Dominican Republic; Ecuador; Egypt; Eritrea; Estonia; Ethiopia; Fiji; Finland; France; French Guiana; French Polynesia; Gabon; Gambia; Germany; Ghana; Greece; Greenland; Guadeloupe; Guinea; Guinea-Bissau; Guyana; Haiti; Hong Kong, China; Hungary; India; Indonesia; Iran; Iraq; Ireland; Israel; Italy; Japan; Jordan; Kenya; Kiribati; Kuwait; Kyrgyzstan; Laos; Latvia; Lebanon; Liberia; Libya; Lithuania; Macedonia; Madagascar; Malaysia; Maldives; Mali; Mauritania; Mauritius; Mayotte; Mexico; Moldova; Mongolia; Morocco; Mozambique; Myanmar; Nepal; Netherlands; New Caledonia; New Zealand; Niger; Nigeria; Norway; Pakistan; Palestine; Panama; Papua New Guinea; Paraguay; Peru; Philippines; Poland; Portugal; Republic of Serbia; Reunion; Romania; Russia; Rwanda; Samoa; Saudi Arabia; Senegal; Sierra Leone; Singapore; Slovakia; Slovenia; Somalia; South Africa; Republic of Korea; Spain; Sri Lanka; Sudan; Suriname; Sweden; Switzerland; Syria; Taiwan, China; Thailand; Tonga; Tunisia; Turkey; Uganda; Ukraine; United Kingdom; United Republic of Tanzania; United States of America; Uruguay; Uzbekistan; Vanuatu; Venezuela; Vietnam; Zimbabwe (145)
Rabies lyssavirus	Afghanistan; Algeria; Argentina; Austria; Azerbaijan; Bangladesh; Belgium; Benin; Bhutan; Bosnia and Herzegovina; Botswana; Brazil; Bulgaria; Burkina Faso; Burundi; Cambodia; Cameroon; Canada; Central African Republic; Chad; Chile; China; Colombia; Costa Rica; Cote d'Ivoire; Croatia; Cuba; Czech Republic; Democratic Republic of the Congo; Dominican Republic; Ecuador; Egypt; El Salvador; Equatorial Guinea; Estonia; Ethiopia; Finland; France; French Guiana; Gabon; Gambia; Georgia; Germany; Ghana; Greece; Greenland; Grenada; Guatemala; Guinea; Guyana; Haiti; Honduras; Hungary; India; Indonesia; Iran; Iraq; Israel; Italy; Japan; Jersey; Jordan; Kazakhstan; Kenya; Laos; Latvia; Lebanon; Lesotho; Liberia; Lithuania; Macedonia; Madagascar; Malaysia; Mali; Mauritania; Mexico; Mongolia; Montenegro; Morocco; Mozambique; Myanmar; Namibia; Nepal; Netherlands; Niger; Nigeria; Norway; Oman; Pakistan; Paraguay; Peru; Philippines; Poland; Qatar; Republic of Serbia; Romania; Russia; Rwanda; Saudi Arabia; Senegal; Sierra Leone; Slovenia; Somalia; South Africa; Republic of Korea; Spain; Sri Lanka; Sudan; Svalbard; Swaziland; Switzerland; Syria; Taiwan, China; Tajikistan; Thailand; Tunisia; Turkey; Uganda; Ukraine; United Arab Emirates; United Kingdom; United Republic of Tanzania; United States of America; Uruguay; Vietnam; Zaire; Zambia; Zimbabwe (128)

TABLE S1. (Continued)

<b>Virus species</b>	<b>Distributed countries/regions</b>
Dengue virus	Angola; Anguilla; Antigua and Barbuda; Arctic Ocean; Argentina; Aruba; Australia; Bangladesh; Barbados; Belize; Benin; Bhutan; Bolivia; Borneo; Brazil; British Virgin Islands; Brunei; Burkina Faso; Cambodia; Cameroon; Cape Verde; Chile; China; Colombia; Comoros; Cook Islands; Costa Rica; Cote d'Ivoire; Cuba; Democratic Republic of the Congo; Djibouti; Dominica; Dominican Republic; East Timor; Ecuador; El Salvador; Eritrea; Federated States of Micronesia; Fiji; France; French Guiana; French Polynesia; Gabon; Germany; Ghana; Grenada; Guadeloupe; Guatemala; Guinea; Guyana; Haiti; Honduras; India; Indonesia; Iran; Ireland; Italy; Jamaica; Japan; Kenya; Kiribati; Laos; Madagascar; Malaysia; Maldives; Mali; Marshall Islands; Martinique; Mauritania; Mexico; Mozambique; Myanmar; Nauru; Nepal; New Caledonia; Nicaragua; Nigeria; Niue; Pacific Ocean; Pakistan; Palau; Panama; Papua New Guinea; Paraguay; Peru; Philippines; Portugal; Reunion; Russia; Saint Barthelemy; Saint Kitts and Nevis; Saint Lucia; Saint Vincent and the Grenadines; Samoa; Saudi Arabia; Senegal; Seychelles; Singapore; Solomon Islands; Somalia; Republic of Korea; Spain; Sri Lanka; Sudan; Suriname; Sweden; Taiwan, China; Thailand; The Bahamas; Timor-Leste; Togo; Tonga; Trinidad and Tobago; Tuvalu; United Republic of Tanzania; United States of America; Uruguay; Vanuatu; Venezuela; Vietnam; Wallis and Futuna; Yemen (122)
Measles morbillivirus	Afghanistan; Algeria; Angola; Argentina; Australia; Austria; Bahrain; Bangladesh; Belarus; Belgium; Benin; Bhutan; Bosnia and Herzegovina; Botswana; Brazil; Brunei; Bulgaria; Cameroon; Canada; Central African Republic; Chile; China; Colombia; Cote d'Ivoire; Croatia; Cuba; Cyprus; Czech Republic; Democratic Republic of the Congo; Ecuador; Estonia; Ethiopia; Fiji; Finland; France; Gabon; Germany; Ghana; Gibraltar; Greece; Guatemala; Hong Kong, China; Hungary; Iceland; India; Indonesia; Iran; Iraq; Ireland; Israel; Italy; Japan; Kazakhstan; Kenya; Kyrgyzstan; Latvia; Lebanon; Lesotho; Liberia; Lithuania; Luxembourg; Macedonia; Malawi; Malaysia; Mali; Mauritania; Mexico; Moldova; Mongolia; Montenegro; Morocco; Mozambique; Myanmar; Namibia; Nepal; Netherlands; New Caledonia; New Zealand; Niger; Nigeria; Norway; Oman; Pakistan; Panama; Papua New Guinea; Philippines; Poland; Portugal; Qatar; Republic of Serbia; Romania; Russia; Rwanda; Senegal; Sierra Leone; Slovakia; Slovenia; Solomon Islands; Somalia; South Africa; Republic of Korea; Spain; Sri Lanka; Sudan; Swaziland; Sweden; Switzerland; Taiwan, China; Thailand; Togo; Tunisia; Turkey; Uganda; Ukraine; United Arab Emirates; United Kingdom; United States of America; Uzbekistan; Venezuela; Vietnam; Zambia; Zimbabwe (122)
<b>Host</b>	<b>Distributed countries</b>
<i>Homo sapiens</i>	Afghanistan; Albania; Algeria; Andorra; Angola; Anguilla; Antigua and Barbuda; Arctic Ocean; Argentina; Armenia; Aruba; Australia; Austria; Azerbaijan; Bahrain; Bangladesh; Barbados; Belarus; Belgium; Belize; Benin; Bermuda; Bhutan; Bolivia; Borneo; Bosnia and Herzegovina; Botswana; Brazil; British Virgin Islands; Brunei; Bulgaria; Burkina Faso; Burundi; Cambodia; Cameroon; Canada; Cape Verde; Cayman Islands; Central African Republic; Chad; Chile; China; Colombia; Comoros; Cook Islands; Costa Rica; Cote d'Ivoire; Croatia; Cuba; Cyprus; Czech Republic; Democratic Republic of the Congo; Denmark; Djibouti; Dominica; Dominican Republic; East Timor; Ecuador; Egypt; El Salvador; Equatorial Guinea; Eritrea; Estonia; Ethiopia; Faroe Islands; Federated States of Micronesia; Fiji; Finland; France; French Guiana; French Polynesia; Gabon; Gambia; Georgia; Germany; Ghana; Gibraltar; Greece; Greenland; Grenada; Guadeloupe; Guatemala; Guinea; Guinea-Bissau; Guyana; Haiti; Honduras; Hong Kong, China; Hungary; Iceland; India; Indonesia; Iran; Iraq; Ireland; Israel; Italy; Jamaica; Japan; Jordan; Kazakhstan; Kenya; Kiribati; Kosovo; Kuwait; Kyrgyzstan; Laos; Latvia; Lebanon; Lesotho; Liberia; Libya; Liechtenstein; Lithuania; Luxembourg; Macao, China; Macedonia; Madagascar; Malawi; Malaysia; Maldives; Mali; Malta; Marshall Islands; Martinique; Mauritania; Mauritius; Mayotte; Mexico; Moldova; Mongolia; Montenegro; Montserrat; Morocco; Mozambique; Myanmar; Namibia; Nauru; Nepal; Netherlands; New Caledonia; New Zealand; Nicaragua; Nigeria; Niue; Norway; Oman; Pacific Ocean; Pakistan; Palau; Palestine; Panama; Papua New Guinea; Paraguay; Peru; Philippines; Poland; Portugal; Qatar; Republic of Serbia; Reunion; Romania; Russia; Rwanda; Saint Barthelemy; Saint Kitts and Nevis; Saint Lucia; Saint Martin; Saint Vincent and the Grenadines; Samoa; Sao Tome and Principe; Saudi Arabia; Senegal; Seychelles; Sierra Leone; Singapore; Slovakia; Slovenia; Solomon Islands; Somalia; South Africa; Republic of Korea; South Sudan; Spain; Sri Lanka; Sudan; Suriname; Swaziland; Sweden; Switzerland; Syria; Taiwan, China; Tajikistan; Thailand; The Bahamas; Timor-Leste; Togo; Tokelau; Tonga; Trinidad and Tobago; Tunisia; Turkey; Turkmenistan; Turks and Caicos Islands; Tuvalu; Uganda; Ukraine; United Arab Emirates; United Kingdom; United Republic of Tanzania; United States of America; Uruguay; Uzbekistan; Vanuatu; Venezuela; Vietnam; Wallis and Futuna; West Bank; Western Sahara; Yemen; Yugoslavia; Zaire; Zambia; Zimbabwe (225)
<i>Bos taurus</i>	Afghanistan; Albania; Algeria; Angola; Argentina; Armenia; Australia; Austria; Azerbaijan; Bahrain; Bangladesh; Belarus; Belgium; Benin; Bhutan; Bolivia; Bosnia and Herzegovina; Botswana; Brazil; Bulgaria; Burkina Faso; Cambodia; Cameroon; Canada; Chad; Chile; China; Colombia; Costa Rica; Cote d'Ivoire; Croatia; Cuba; Cyprus; Denmark; Ecuador; Egypt; El Salvador; Eritrea; Estonia; Ethiopia; France; French Guiana; Gaza Strip; Georgia; Germany; Ghana; Greece; Guatemala; Guinea; Honduras; Hong Kong, China; Hungary; India; Indonesia; Iran; Iraq; Ireland; Israel; Italy; Japan; Jordan; Kazakhstan; Kenya; Kosovo; Kuwait; Kyrgyzstan; Laos; Latvia; Lebanon; Lesotho; Libya; Liechtenstein; Lithuania; Luxembourg; Madagascar; Malawi; Malaysia; Mali; Martinique; Mauritania; Mauritius; Mayotte; Mexico; Moldova; Mongolia; Montenegro; Morocco; Mozambique; Myanmar; Namibia; Nepal; Netherlands; New Zealand; Niger; Nigeria; Democratic People's Republic of Korea; Norway; Oman; Pakistan; Palestine; Panama; Papua New Guinea; Paraguay; Peru; Poland; Portugal; Republic of Serbia; Romania; Russia; Rwanda; San Marino; Saudi Arabia; Senegal; Slovakia; Slovenia; Somalia; South Africa; Republic of Korea; Spain; Sri Lanka; Sudan; Sweden; Switzerland; Syria; Taiwan, China; Tajikistan; Thailand; Togo; Trinidad and Tobago; Tunisia; Turkey; Uganda; Ukraine; United Arab Emirates; United Kingdom; United Republic of Tanzania; United States of America; Uruguay; Venezuela; Vietnam; Yemen; Zambia; Zimbabwe (143)

TABLE S1. (Continued)

Virus species	Distributed countries/regions
<i>Canis lupus familiaris</i>	Afghanistan; Albania; Algeria; Argentina; Australia; Austria; Azerbaijan; Bangladesh; Belgium; Benin; Bhutan; Bosnia and Herzegovina; Botswana; Brazil; Bulgaria; Burkina Faso; Cambodia; Cameroon; Canada; Central African Republic; Chad; Chile; China; Colombia; Costa Rica; Cote d'Ivoire; Croatia; Cuba; Czech Republic; Democratic Republic of the Congo; Dominican Republic; Ecuador; Egypt; Estonia; Ethiopia; Finland; France; French Guiana; Gabon; Gambia; Georgia; Germany; Ghana; Greece; Greenland; Grenada; Guatemala; Guinea; Guyana; Haiti; Honduras; Hong Kong, China; Hungary; India; Indonesia; Iran; Iraq; Ireland; Israel; Italy; Japan; Kazakhstan; Kenya; Laos; Latvia; Lesotho; Liberia; Lithuania; Luxembourg; Madagascar; Malaysia; Mali; Mauritania; Mexico; Mongolia; Morocco; Mozambique; Myanmar; Namibia; Nepal; Netherlands; New Zealand; Nicaragua; Niger; Nigeria; Oman; Pakistan; Paraguay; Peru; Philippines; Poland; Portugal; Republic of Serbia; Romania; Russia; Rwanda; Saint Kitts and Nevis; Senegal; Slovenia; Somalia; South Africa; Republic of Korea; Spain; Sri Lanka; Sudan; Swaziland; Switzerland; Taiwan, China; Tajikistan; Thailand; Tunisia; Turkey; Uganda; Ukraine; United Arab Emirates; United Kingdom; United Republic of Tanzania; United States of America; Uruguay; Vietnam; Zaire; Zambia; Zimbabwe (123)
<i>Gallus gallus</i>	Afghanistan; Algeria; Argentina; Australia; Austria; Azerbaijan; Bangladesh; Belgium; Belize; Benin; Bhutan; Botswana; Brazil; Bulgaria; Burkina Faso; Burundi; Cambodia; Cameroon; Canada; Chile; China; Colombia; Costa Rica; Cote d'Ivoire; Croatia; Czech Republic; Democratic Republic of the Congo; Denmark; Dominican Republic; Ecuador; Egypt; El Salvador; Ethiopia; Fiji; Finland; France; Georgia; Germany; Ghana; Greece; Grenada; Guatemala; Honduras; Hong Kong, China; Hungary; India; Indonesia; Iran; Iraq; Ireland; Israel; Italy; Japan; Jordan; Kazakhstan; Kenya; Kuwait; Kyrgyzstan; Laos; Latvia; Lebanon; Libya; Luxembourg; Macedonia; Madagascar; Malaysia; Mali; Mexico; Morocco; Mozambique; Myanmar; Namibia; Nepal; Netherlands; New Zealand; Nicaragua; Niger; Nigeria; Democratic People's Republic of Korea; Oman; Pakistan; Peru; Philippines; Poland; Portugal; Republic of Serbia; Romania; Russia; Saudi Arabia; Senegal; Singapore; Slovakia; Slovenia; South Africa; Republic of Korea; Spain; Sri Lanka; Sudan; Sweden; Switzerland; Syria; Taiwan, China; Tajikistan; Thailand; Timor-Leste; Togo; Trinidad and Tobago; Tunisia; Turkey; Uganda; Ukraine; United Arab Emirates; United Kingdom; United Republic of Tanzania; United States of America; Uruguay; Venezuela; Vietnam; West Bank; Yemen; Zambia; Zimbabwe (122)
<i>Sus scrofa</i>	Afghanistan; Albania; Angola; Argentina; Armenia; Australia; Austria; Bangladesh; Belarus; Belgium; Benin; Bhutan; Bolivia; Brazil; Bulgaria; Burkina Faso; Burundi; Cambodia; Cameroon; Canada; Chile; China; Colombia; Costa Rica; Cote d'Ivoire; Croatia; Cuba; Czech Republic; Democratic Republic of the Congo; Denmark; Dominican Republic; Egypt; Estonia; Ethiopia; Finland; France; Gambia; Germany; Ghana; Greece; Guatemala; Haiti; Hong Kong, China; Hungary; India; Indonesia; Ireland; Israel; Italy; Japan; Kazakhstan; Kenya; Laos; Latvia; Lithuania; Luxembourg; Madagascar; Malawi; Malaysia; Mali; Malta; Mauritius; Mexico; Mongolia; Mozambique; Myanmar; Namibia; Nepal; Netherlands; New Caledonia; New Zealand; Nicaragua; Nigeria; Democratic People's Republic of Korea; Norway; Paraguay; Peru; Philippines; Poland; Portugal; Republic of Serbia; Romania; Russia; Saint Kitts and Nevis; Sao Tome and Principe; Senegal; Singapore; Slovakia; Slovenia; South Africa; Republic of Korea; Spain; Sri Lanka; Sweden; Switzerland; Taiwan, China; Thailand; Togo; Turkey; Uganda; Ukraine; United Kingdom; United Republic of Tanzania; United States of America; Uruguay; Venezuela; Vietnam; Zaire; Zambia; Zimbabwe (110)

SUPPLEMENTARY TABLE S2. Characteristics of first reported viruses.

Virus species	Type	Why report	First reported time	First reported location	First reported host
Avipoxvirus	Animal virus	First animal virus reported in database	1865	Peru	Leptotila rufaxilla
Cotton leaf curl Multan virus	Plant virus	First plant virus reported in database	1918	China	Hibiscus rosa-sinensis
Saccharomyces paradoxus virus	Microbe virus	First microbe virus reported in database	1931	Russia	Saccharomyces paradoxus
Influenza A virus	Animal virus	The most widely distributed virus in database	1902	Italy	Gallus gallus and unspecified Aves
SARSr-Cov	Animal virus	The most submitted virus in database	2003	China	Homo sapiens
Aeromonas phage PZL-Ah8	Microbe virus	Latest new virus reported in database	2021	China	Aeromonas hydrophila
Vaccinia virus	Animal virus	The earliest reported human-animal co-virus	1866	the United States	Homo sapiens

SUPPLEMENTARY TABLE S3. New viruses reported times in each country or region.

Country/region	No. of report times
United States of America	6628
China	4518
Brazil	1032
Australia	994
Italy	730
Germany	590
Spain	552
India	529
United Kingdom	424
Japan	379
France	304
Canada	300
Republic of Korea	297
New Zealand	291
Denmark	264
Mexico	248
South Africa	230
Hungary	220
Russia	212
Bangladesh	207
Kenya	198
Sweden	195
Thailand	167
Zambia	162
Cameroon	158
Antarctica	157
Netherlands	151
Finland	143
Ghana	137
Taiwan, China	133
Argentina	122
Iran	119
Pakistan	119
Portugal	108
Czech Republic	107
Nigeria	97
Austria	91
Switzerland	86
Colombia	85
Vietnam	83
Turkey	79
Uganda	77

Continued

Country/region	No. of report times
Poland	75
Cote d'Ivoire	74
Belgium	73
Tunisia	71
Malaysia	70
Indonesia	69
Hong Kong, China	65
Philippines	63
Gabon	62
Bulgaria	57
Bermuda	56
Democratic Republic of the Congo	55
Ireland	54
Madagascar	54
Peru	53
Tonga	51
Norway	49
United Republic of Tanzania	49
Israel	48
Panama	47
Egypt	45
Venezuela	41
Chile	39
Greece	37
Costa Rica	36
Central African Republic	34
Cuba	34
Slovenia	34
French Guiana	29
Senegal	29
Ecuador	27
Kuwait	27
Liberia	27
Rwanda	27
Nepal	25
South Georgia and the Islands	25
Trinidad and Tobago	25
United Arab Emirates	24
Croatia	22
Malawi	22
Saudi Arabia	22
Republic of Serbia	21
Georgia	20

Continued

Country/region	No. of report times
Papua New Guinea	20
Bolivia	19
Cambodia	19
Guadeloupe	19
Burkina Faso	18
Lithuania	18
Reunion	18
Myanmar	17
Ethiopia	16
Mauritius	16
Sudan	16
Pacific Ocean	14
Uruguay	14
Mozambique	12
Singapore	12
Ukraine	12
Azerbaijan	11
Iraq	11
Morocco	11
Vanuatu	11
Guatemala	10
Saint Kitts and Nevis	10
Gambia	9
Iceland	9
Oman	9
Sri Lanka	9
Benin	8
Guinea	8
Slovakia	8
Laos	7
Namibia	7
Saint Vincent and the Grenadines	7
Afghanistan	6
Algeria	6
Arctic Ocean	6
Dominican Republic	6
Nicaragua	6
The Bahamas	6
Belarus	5
Honduras	5
Jamaica	5
Jordan	5

Continued

Country/region	No. of report times
Mongolia	5
Romania	5
Yemen	5
Albania	4
Estonia	4
Kazakhstan	4
Kyrgyzstan	4
Mali	4
Mayotte	4
Solomon Islands	4
Cayman Islands	3
Latvia	3
Paraguay	3
Samoa	3
South Sudan	3
Syria	3
Togo	3
Turkmenistan	3
Zimbabwe	3
Angola	2
Armenia	2
Bhutan	2
Bosnia and Herzegovina	2
Christmas Island	2
Comoros	2
Cyprus	2
Czechoslovakia	2
Indian Ocean Territories	2
Lebanon	2
Libya	2
Moldova	2
Niger	2
Saint Barthelemy	2
Seychelles	2
Sierra Leone	2
Barbados	1
Belize	1
Botswana	1
Chad	1
East Timor	1
Faroe Islands	1
Fiji	1
Grenada	1

Continued

Country/region	No. of report times
Haiti	1
Kiribati	1
Mediterranean Sea	1
Midway Islands	1
Montenegro	1
New Caledonia	1
Somalia	1
Suriname	1
Uzbekistan	1
Yugoslavia	1

SUPPLEMENTARY TABLE S4. Co-existed viruses host family and tags.

Host family	Tag
Aleyrodidae	H2
Alstroemeriaceae	H3
Amaranthaceae	H4
Amaryllidaceae	H5
Anatidae	H6
Animalia	H7
Aphididae	H8
Apiaceae	H9
Apidae	H10
Apocynaceae	H11
Araceae	H12
Araneae	H13
Arecaceae	H14
Asparagaceae	H15
Asteraceae	H16
Bacteria	H17
Balsaminaceae	H18
Begoniaceae	H19
Bifidobacteriaceae	H20
Botryosphaeriaceae	H21
Brassicaceae	H22
Bovidae	H23
Cactaceae	H24
Calceolariaceae	H25
Campanulaceae	H26
Cannaceae	H27
Caprifoliaceae	H28
Caryophyllaceae	H29
Celastraceae	H30
Ceratobasidiaceae	H31

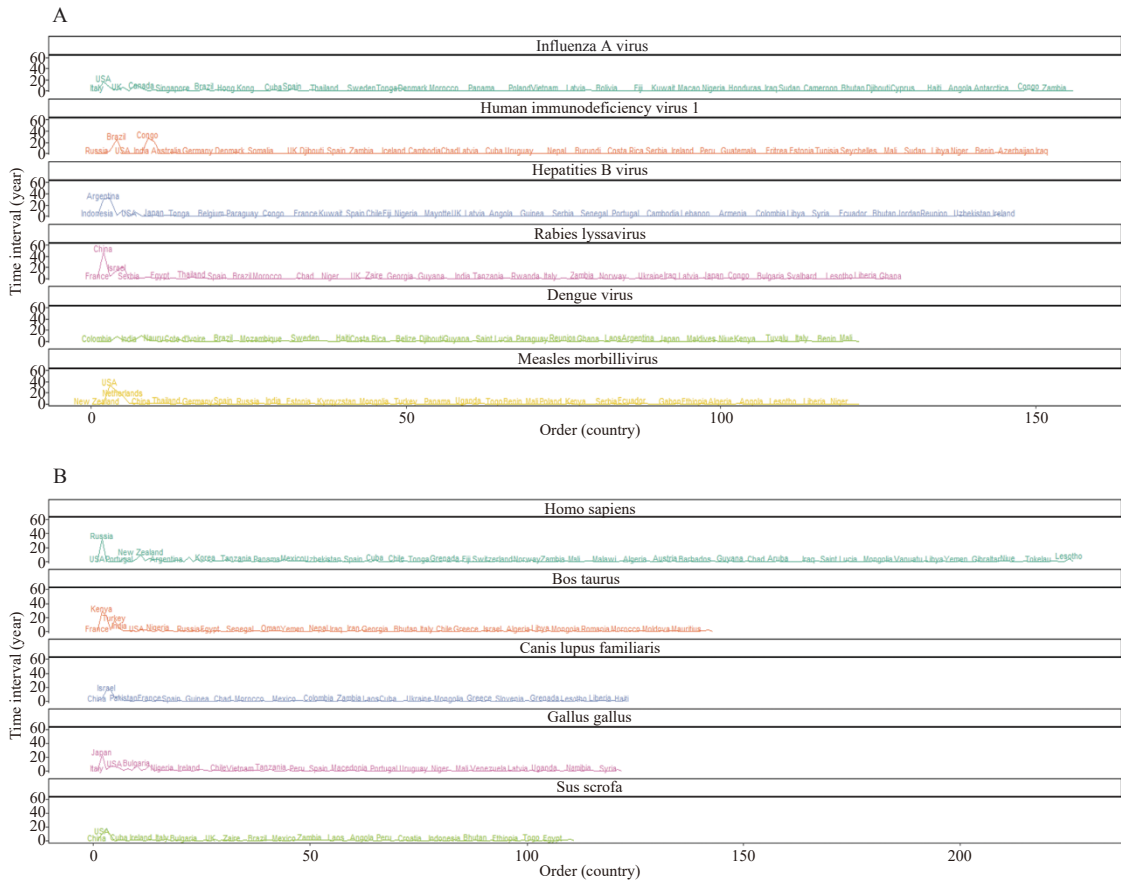


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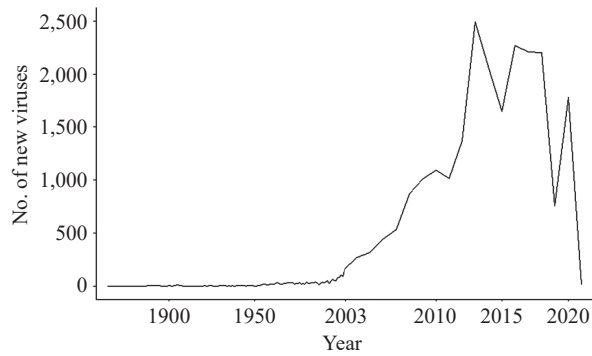
Host family	Tag
Cervidae	H32
Chiroptera	H33
Cicadellidae	H34
Coccoidea	H35
Commelinaceae	H36
Convolvulaceae	H37
Cucurbitaceae	H38
Culicidae	H39
Curculionidae	H40
Delphacidae	H41
Diptera	H42
Drosophilidae	H43
Eimeriidae	H44
Enterobacteriaceae	H45
Enterococcaceae	H46
Entomophthoraceae	H47
Fabaceae	H48
Firmicutes	H49
Gentianaceae	H50
Geraniaceae	H51
Gesneriaceae	H52
Gruidae	H53
Hexapoda	H54
Homo sapiens	H55
Iridaceae	H56
Lactobacillaceae	H57
Lamiaceae	H58
Laniidae	H59
Leporidae	H60
Liliaceae	H61
Lutjanidae	H62
Malvaceae	H63
Marantaceae	H64
Microcystaceae	H65
Moringaceae	H66
Muscicapidae	H67
Mycosphaerellaceae	H68
Nymphalidae	H69
Oleaceae	H70
Orchidaceae	H71
Pedaliaceae	H72
Peronosporaceae	H73
Phasianidae	H74

Continued

Host family	Tag
Phoenicopteridae	H75
Phthiracaridae	H76
Piperaceae	H77
Pittosporaceae	H78
Plantaginaceae	H79
Pleosporaceae	H80
Poaceae	H81
Primulaceae	H82
Prunellidae	H83
Pseudomonadaceae	H84
Ranunculaceae	H85
Rosaceae	H86
Rubiaceae	H87
Salmonidae	H88
Sclerotiniaceae	H89
Solanaceae	H90
Spermatophyta	H91
Sporormiaceae	H92
Staphylococcaceae	H93
Streptococcaceae	H94
Suidae	H95
Tetranychidae	H96
Thelephoraceae	H97
Thripidae	H98
Thysanoptera	H99
Tropaeolaceae	H100
Turdidae	H101
Viverridae	H102
Zygophyllaceae	H103



SUPPLEMENTARY FIGURE S1. Top 5 widely distributed (A) viruses and (B) hosts sorted by first report country or region.



SUPPLEMENTARY FIGURE S2. The trend of new reported viruses sorted by year.