Table 4: Recommended metadata standards to be collected for SARS-CoV-2 sequencing data

betails  number  Examples: "sputum", "blood", "serum", "saliva", "wastewater"  wastewater"  where the clinical specimen or virus isolate was first abb  Where sequence data have been generated Part of routine surveillance or focused sampling, reprega part of routine surveillance or focused sampling, reprega part of routine surveillance or focused sampling, reprega male, female, other, unknown  e.g. male, female, other, unknown  e.g. yes, no, unknown  humans)  e.g. yes, no, unknown  humans)  e.g. ever hospitalized, never hospitalized, unknown care unit (ICU)  e.g. yes, no, unknown  e.g. ever hospitalized, never hospitalized, unknown  e.g. yes, no, unknown  e.g. yes, no, unknown  Beceased/recovered  S-CoV-2 infection  S-CoV-2 infection	"saliva", "stool", "nasopharyngeal swab", was first obtained ling, representative or targeted sampling , unknown surveillance protocol for Health Workers	Potential Analyses  Introduction and evolutionary rates Introduction and transmission routes, using BEAST (Bayesian Evolutionary Analysis Sampling Tree) Sequencing capacity assessment Transmission routes Risk factors Risk factors Transmission routes, risk factors Transmission routes, risk factors
Sample Identification number Sample Identification number Sample type Sample type Sample type Sample type Country of collection Originating diagnostic lab Sampling method Sax Age Sex H-PCR assay used (if any) RT-PCR assay used (if any) RT-PCR assay used (if any) Symptomatic Vaccination status (for humans) Information (documented evidence such as vaccine recall) Date of symptom onset Hospitalization status Admission to intensive care unit (ICU) Symstome Outcome Deceased/recovered Past history of SARS-CoV-2 infection and date	"saliva", "stool", "nasopharyngeal swab", was first obtained lling, representative or targeted sampling , unknown	oduction and evolutionary rates oduction and transmission routes, using BEAST yesian Evolutionary Analysis Sampling Tree) uencing capacity assessment t factors t factors t factors t factors reactors
Sample type  Sample type  Country of collection  State/province of collection  Originating diagnostic lab Sequence submitting lab Sex and collection  Originating diagnostic lab Sequence submitting lab Sex and collection  Nhere the clinical specimen or virus isolate was first Sequence submitting lab Sex and collection  Nhere the clinical specimen or virus isolate was first Sequence submitting lab Sex and collection  Nhere the clinical specimen or virus isolate was first Sequence submitting lab Sex and collection  Race and/or ethnicity*  Race and/or dose 2, as needer information obset and/or dose 2, as needer information obset and ethnic etg. yes, no, unknown  Mechanical ventilation  Bate of symptom onset  Race and/or dose 2, as needer information (documented evidence such as vaccine needly)  Rachanical ventilation  Bate of symptom or etg. yes, no, unknown  Mechanical ventilation  Bate of symptom or etg. yes, no, unknown  Rachanical ventilation  Bate of symptom or etg. yes, no, unknown  Bate of symptom or etg. yes, no, unknown  Rachanical ventilation  Bate of symptom or etg. yes, no, unknown  Rachanical ventilation  Bate of symptom or etg. yes, no, unknown  Bate of symptom or etg. yes, no, unknown  Rachanical ventilation  Bate of sympto	'saliva", "stool", "nasopharyngeal swab", was first obtained lling, representative or targeted sampling , unknown surveillance protocol for Health Workers	oduction and evolutionary rates oduction and transmission routes, using BEAST yesian Evolutionary Analysis Sampling Tree) uencing capacity assessment r factors r factors r factors r factors r factors r factors
Sample collection date  Country of collection  State/province of collection  Originating diagnostic lab Sequence submitting lab Sequence data have Sequen	was first obtained ling, representative or targeted sampling unknown surveillance protocol for Health Workers	oduction and evolutionary rates oduction and transmission routes, using BEAST yesian Evolutionary Analysis Sampling Tree) uencing capacity assessment smission routes c factors c factors c factors nsmission routes, risk factors
State/province of collection  State/province of collection  Originating diagnostic lab Sequence submitting lab Sequence submitting lab Sequence submitting lab Sequence submitting lab Seampling method Host Age Sex Race and/or ethnicity* Heath worker status Travel History RT-PCR assay used (if any) RT-PCR ct value (if any) RT-PCR Ct value (if any) Symptomatic Vaccination status (for humans) Date of vaccination (documented expectably) Date of symptom onset Hospitalization status Admission to intensive care unit (ICU) Mechanical ventilation Outcome Past history of SARS-CoV-2 infection and date  State of collection Sex e.g. human, animal (specific e.g. yes, no, unknown and date and date  Sampling method Sary of sarsa-cov-2 infection and date  Sequence data have E.g. human, animal (specific e.g. yes, no, unknown e.g. yes, no, unknown e.g. yes, no, unknown and date	was first obtained ling, representative or targeted sampling , unknown surveillance protocol for Health Workers	oduction and transmission routes, using BEAST yesian Evolutionary Analysis Sampling Tree)  uencing capacity assessment  ramission routes  r factors  r factors  r factors  r factors  r factors  r factors
State/province of collection Originating diagnostic lab Sequence submitting lab Sequence data have Se	was first obtained ling, representative or targeted sampling , unknown surveillance protocol for Health Workers	uencing capacity assessment smission routes ( factors ( factors ( factors ) risk factors
Originating diagnostic lab Sequence submitting lab Sequence submitting lab Sampling method Host Age Sex Race and/or ethnicity* Heath worker status RT-PCR assay used (if any) RT-PCR ct value (if any) Symptomatic Vaccination status (for humans) Date of symptom onset Hospitalization status Admission to intensive care unit (ICU) Mechanical ventilation Outcome Past history of SARS-CoV-2 infection Sequence data have Seg. human, animal (specific e.g. human, animal (specific e.g. human, animal (specific e.g. human, animal (specific e.g. was, no, unknown outcome Deceased/recovered Past history of SARS-CoV-2 infection and date	was first obtained ling, representative or targeted sampling , unknown surveillance protocol for Health Workers	uencing capacity assessment nsmission routes t factors t factors t factors t factors reactors
Sequence submitting lab Sampling method Host Host Age Sex Race and/or ethnicity* Heath worker status Travel History RT-PCR assay used (if any) Symptomatic Vaccination status Hospitalization status Admission to intensive care unit (ICU) Mechanical ventilation Outcome Part of routine sequence data have e.g. human, animal (specific e.g. human, animal (specific e.g. male, female, other, un e.g. yes, no, unknown Date of vaccination (dose 1 information (documented expending to the status) Bate of symptom onset Hospitalization status Admission to intensive care unit (ICU) Mechanical ventilation Best history of SARS-CoV-2 infection and date  Sample of routine sequence of the sequence o	ling, representative or targeted sampling, unknown  unknown  surveillance protocol for Health Workers	uencing capacity assessment  nsmission routes  ( factors  ( factors  ( factors  ) reactors  nsmission routes, risk factors
Sampling method Host Host Age Sex Race and/or ethnicity* Heath worker status Travel History RT-PCR Ct value (if any) Symptomatic Vaccination status Hospitalization status Hospitalization to intensive care unit (ICU) Mechanical ventilation Outcome Past history of SARS-CoV-2 infection Hospitalization and date Age B.g. human, animal (specifically e.g. male, female, other, un animal (specifically e.g. was, no, unknown e.g. yes, no, unknown e.g. yes, no, unknown e.g. yes, no, unknown outcome Deceased/recovered Past history of SARS-CoV-2 infection and date	or focused sampling, representative or targeted sampling cs), environment, unknown known  HW definition in surveillance protocol for Health Workers	nsmission routes factors factors factors factors factors ramission routes, risk factors
Age Sex Race and/or ethnicity* Heath worker status Travel History RT-PCR assay used (if any) Symptomatic Vaccination status (for humans) Date of symptom onset Hospitalization status Admission to intensive care unit (ICU) Mechanical ventilation Outcome Past history of SARS-CoV-2 infection  Age  e.g. human, animal (specific e.g. male, female, other, un e.g. yes, no, unknown e.g. yes, no, unknown e.g. yes, no, unknown Deceased/recovered Deceased/recovered	known  HW definition in surveillance protocol for Health Workers	r factors ( factors ( factors ( factors ( factors ) risk factors
Sex Race and/or ethnicity* Heath worker status Travel History RT-PCR assay used (if any) Symptomatic Vaccination status (for humans) Date of symptom onset Hospitalization status Admission to intensive care unit (ICU) Mechanical ventilation Outcome Past history of SARS-CoV-2 infection  Seg. male, female, other, un e.g. yes, no, unknown. Beg. yes, no, unknown e.g. yes, no, unknown e.g. yes, no, unknown e.g. yes, no, unknown Deceased/recovered Past history of SARS-CoV-2 infection and date	known HW definition in <u>surveillance protocol for Health Workers</u>	r factors r factors r factors nsmission routes, risk factors
Sex  Race and/or ethnicity* Heath worker status Travel History RT-PCR assay used (if any) RT-PCR Ct value (if any) Symptomatic Vaccination status (for humans) Date of symptom onset Hospitalization status Mechanical ventilation Outcome Past history of SARS-CoV-2 infection  Race and/or ethnicity* e.g. wes, no, unknown e.g. yes, no, unknown Deceased/recovered  Outcome  Past history of SARS-CoV-2 infection  Race and/or ethnicity of status  Bace male female, other, unknown  Bace of yes, no, unknown  Bace of symptom on status  Bace of symptom on status  Bace of symptom on status  Bace of symptom (dose 1 information (dose 1 i	known  HW definition in <u>surveillance protocol for Health Workers</u>	( factors ( factors nsmission routes, risk factors
Race and/or ethnicity* Heath worker status Travel History RT-PCR assay used (if any) RT-PCR Ct value (if any) Symptomatic Vaccination status (for humans) Date of symptom onset Hospitalization status Admission to intensive care unit (ICU) Mechanical ventilation Outcome Past history of SARS-CoV-2 infection and date	HW definition in surveillance protocol for Health Workers	k factors nsmission routes, risk factors
Heath worker status  Travel History  RT-PCR assay used (if any)  RT-PCR assay used (if any)  Symptomatic  Vaccination status (for humans)  Date of symptom onset  Hospitalization status  Admission to intensive care unit (ICU)  Mechanical ventilation  Outcome  Past history of SARS-CoV-2 infection  Travel History  E.g. yes, no, unknown  Deceased/recovered	HW definition in surveillance protocol for Health Workers	nsmission routes, risk factors
Travel History RT-PCR assay used (if any) RT-PCR Ct value (if any) Symptomatic Vaccination status (for humans) Date of symptom onset Hospitalization status Admission to intensive care unit (ICU) Mechanical ventilation Outcome Past history of SARS-CoV-2 infection and date		
RT-PCR assay used (if any) RT-PCR Ct value (if any) Symptomatic Vaccination status (for humans) Date of symptom onset Hospitalization status Admission to intensive care unit (ICU) Mechanical ventilation Outcome Past history of SARS-CoV-2 infection and date		Introductions and transmission routes
Symptomatic Vaccination status (for humans)  Date of symptom onset Hospitalization status Admission to intensive care unit (ICU) Mechanical ventilation Outcome Past history of SARS-CoV-2 infection and date		
Symptomatic Vaccination status (for humans)  Date of symptom onset Hospitalization status Admission to intensive care unit (ICU) Mechanical ventilation Outcome Past history of SARS-CoV-2 infection and date		
Vaccination status (for humans)  Date of symptom onset Hospitalization status Admission to intensive care unit (ICU) Mechanical ventilation Outcome Past history of SARS-CoV-2 infection and date		Severity analysis
Date of symptom onset  Hospitalization status Admission to intensive care unit (ICU) Mechanical ventilation Outcome Past history of SARS-CoV-2 infection and date	ose 1 and/or dose 2, as needed), vaccine type, source of led evidence such as vaccine register or vaccine card versus	Vaccine failure
Hospitalization status Admission to intensive care unit (ICU) Mechanical ventilation Outcome Past history of SARS-CoV-2 infection and date	Delay	Delay between onset and sequence submission
Admission to intensive care unit (ICU) Mechanical ventilation Outcome Past history of SARS-CoV-2 infection and date		Severity analysis
Mechanical ventilation Outcome Past history of SARS-CoV-2 infection and date		Severity analysis
		Severity analysis
		Severity analysis
		Reinfection risk
I herapeutics received   COVID-19-specific	COVID-19-specific Therax	Therapeutic failure
e, link to known		Cluster/outbreak analysis, transmission routes
Contact with known animal reservoir e.g. yes, no, unknown; and type(s) of animal(s)	type(s) of animal(s)	Transmission routes
Comorbidities List comorbidities List comorbidities Loverity	increase COVID-19 severity	Risk factors

\*This item should be used in regard to local context and individual data collection laws