		Ontology				Deprecated Label Deprecated ID	Version		Editor	Notes
Parent Class	Field	Identifier	Definition	Guidance	Examples		Tracking		Zaitoi	10100
	Colour Code Legend					IMPORTANT: Only labels and/or IDs will be deprecated, always with replacement version	Label	ID	Description/Gui dance	
	field name in yellow = required					provided. If a term changes in its meaning, a			dance	
	field name in purple = recommended					new term will be created.				
	field name in white = optional									
	Database Identifiers	GENEPIO:0001122								
				Store the collector sample ID. If this number is						
				considered identifiable information, provide an alternative ID. Be sure to store the key that maps						
				between the original and alternative IDs for traceability and follow up if necessary. Every						
				collector sample ID from a single submitter must						
				be unique. It can have any format, but we suggest that you make it concise, unique and						
Database identifiers	specimen_collector_sample_ID	GENEPIO:0001123	The user-defined name for the sample.	consistent within your lab.	ASDFG123		1.0.0	1.0.0	1.0.0	
Database identifiers	specimen_collector_subsample_ID	GENEPIO:0100752	The user-defined identifier assigned to a portion of the original sample.	Store the ID for the subsample/aliquot. If the sample being analyzed is the result of	ASDFG123_12		1.0.0	1.0.0	1.0.0	
				pooling individual samples, rename the pooled						
Database identifiers	pooled_sample_ID	GENEPIO:0100996	The user-defined identifier assigned to a combined (pooled) set of samples.	sample with a new identifier. Store the pooled sample ID.	12345AYZ		1.0.0	1.0.0	1.0.0	
	a_campro_ro	02.12110.0100390		Store the ID for the site from which a sample	.2010/11/2		7.0.0	1.0.0		
				was taken. The "site" is user defined (e.g. it may be a building and its environs, a specific entity						
				within an environment). Please use the same						
				site ID for all samples from a given site, regardless of when these samples were taken.						
			The user-defined identifier assigned to a specific location from which	Any important changes in site location, should						
Database identifiers	sampling_site_ID	GENEPIO:0100760	samples are taken.	be represented with a new site ID. Store the ID for the event during which a sample	Site 12A		1.0.0	1.0.0	1.0.0	
				or samples were taken. For example, an event						
			The user-defined identifier assigned to a specific event during which	could be one person taking samples from multiple sites, or multiple people taking samples						
Database identifiers	sampling_event_ID	GENEPIO:0100761	one or more samples are taken, from one or more sites.	from one site.	Event 120522.1		1.0.0	1.0.0	1.0.0	
				Store the BioProject accession number. BioProjects are an organizing tool that links						
				together raw sequence data, assemblies, and						
				their associated metadata. Each province will be assigned a different bioproject accession						
				number by the National Microbiology Lab. A valid NCBI BioProject accession has prefix						
			The INSDC (i.e., ENA, NCBI, or DDBJ) accession number of the	PRJN e.g., PRJNA12345, and is created once at						
Database identifiers	BioProject_accession	GENEPIO:0001136	BioProject(s) to which the BioSample belongs.	the beginning of a new sequencing project. Store the accession returned from the	PRJNA608651 SAMN1418020		1.0.0	1.0.0	1.0.0	
				BioSample submission. NCBI BioSamples will	2,					
Database identifiers	BioSample_accession	GENEPIO:0001139	The identifier assigned to a BioSample in INSDC (i.e., ENA, NCBI, or DDBJ) archives.	have the prefix SAMN, ENA have the prefix SAMEA, DDBJ have SAMD	SAMD0000000		1.0.0	1.0.0	1.0.0	
Database Identifier	Biodanipio_docodoion	OLIVEI IO.SOUTIO	2550) (10.11105)	or their, Bobb have or this			1.0.0	1.0.0	1.0.0	
			The versioned identifier assigned to an assembly or consensus	Store the versioned GenBank accession						
Database identifiers	GenBank_accession_(versioned)	GENEPIO:0100754	sequence in GenBank archives.	assigned to the submitted sequence.	LZ986655.1		1.0.0	1.0.0	1.0.0	
			The Sequence Read Archive (SRA) identifier linking raw read data,	Store the accession assigned to the submitted						
			methodological metadata and quality control metrics submitted to the	sequence. NCBI-SRA accessions start with						
Database identifiers	SRA_accession	GENEPIO:0001142	INSDC.	SRR.	SRR11177792		1.0.0	1.0.0	1.0.0	
				Store the accession assigned to the submitted						
Database identifiers	ENA_accession	GENEPIO:0100755	The identifier assigned to a sequence in the European Nucleotide Archive (ENA).	sequence. ENA sequence accessions start with ERR.	ERR123456		1.0.0	1.0.0	1.0.0	
Database Identifiers	LIVI_accession	GENEFIO.0100/55	Priority (LIVY).	LINC	LINI IZOHOD		1.0.0	1.0.0	1.0.0	
			The identifier assigned to a sequence in DNA Data Bank of Japan	Store the accession assigned to the submitted						
Database identifiers	DRA_accession	GENEPIO:0100757	(DDBJ) sequence read archives.	sequence. DRA accessions start with DRR.	DRR123456		1.0.0	1.0.0	1.0.0	
	Sample collection and processing	GENEPIO:0001150								
Sample collection and processing	sample_collection_data_steward_name	GENEPIO:0100762	The name of the individual responsible for the data governance, (meta)data usage and distribution of the sample.	Provide the name of the sample collection data steward.	Joe Bloggs		1.0.0	1.0.0	1.0.0	
cample collection and processing	sample_collection_data_steWalid_flatfile	GENEPIO:0100762	(mora) data usage and distribution of the sample.	Provide the email address of the sample	oue bioggs		1.0.0	1.0.0	1.0.0	
				collection data steward. This may or may not be						
				the same individual/organization that collected the sample. If the contact is the same, provide						
Sample collection and processing	sample_collection_data_steward_contact_email	GENEPIO:0101107	The email address of the individual responsible for the data governance, (meta)data usage and distribution of the sample.	the same address as the "sample collector contact email".	bloggsj@aglab ca		1.0.0	1.0.0	1.0.0	
Gample collection and processing	sample_collection_data_steward_contact_email	GENEPIO:0101107	governance, (meta)uata usaye and distribution of the sample.	contact Citidii .	va		1.0.0	1.0.0	1.0.0	
				The name of the agency should be written out in						
Sample collection and processing	sample_collected_by	GENEPIO:0001153	The name of the organization with which the sample collector is affiliated.	full, (with minor exceptions) and be consistent across multiple submissions.	Agency of Canada		1.0.0	1.0.0	1.0.0	
Sample collection and processing	sample_collected_by	GENEPIO:0001153	The name of the organization with which the sample collector is affiliated.	full, (with minor exceptions) and be consistent across multiple submissions.	Agency of Canada		1.0.0	1.0.0	1.0.0	

		Outstand				Democrate del abol. Democrate della	Manadan			F-19 N-1-1
Parent Class	Field	Ontology Identifier	Definition	Guidance	Examples	Deprecated Label Deprecated ID	Version Tracking			Editor Notes
r drent oldss	ricia	identinei	Bernitton	Culdulico	Examples					
				The email address can represent a specific						
Sample collection and processing	sample_collector_contact_email	GENEPIO:0001156	The email address of the contact responsible for follow-up regarding the sample.	individual or lab e.g. johnnyblogs@lab.ca, or RespLab@lab.ca	WaterTester@f acility.ca		1.0.0	1.0.0	1.0.0	
Sample collection and processing	sample_collectol_contact_email	GENEFIO.0001130	Sample.	RespLab@iab.ca	acility.ca		1.0.0	1.0.0	1.0.0	
		OFNEDIO 0004404	7		0		4.0.0	100	400	
Sample collection and processing	geo_loc_name_(country)	GENEPIO:0001181	The country of origin of the sample.	If known, select a value from the pick list. Provide the state/province/territory name from	Canada		1.0.0	1.0.0	1.0.0	
				the GAZ geography ontology. Search for						
	(1.1)	GENEPIO:0001185	7	geography terms here:	Western Cape		1.0.0	1.0.0	1.0.0	
Sample collection and processing	geo_loc_name_(state/province/territory)	GENEPIO.0001165	The state/province/territory of origin of the sample.	https://www.ebi.ac.uk/ols/ontologies/ga	western Cape		1.0.0	1.0.0	1.0.0	
				Provide the county/region name from the GAZ						
0 1 1 1 1		GENEPIO:0100280	7	geography ontology. Search for geography terms	5 1 1:		1.0.0	1.0.0	1.0.0	
Sample collection and processing	geo_loc_name_(county/region)	GENEPIO:0100280	The county/region of origin of the sample.	here: https://www.ebi.ac.uk/ols/ontologies/gaz	Derbysnire		1.0.0	1.0.0	1.0.0	
				Provide the city name from the GAZ geography						
				ontology. Search for geography terms here:						
Sample collection and processing	geo_loc_name_(city)	GENEPIO:0001189	The city of origin of the sample.	https://www.ebi.ac.uk/ols/ontologies/gaz	Vancouver		1.0.0	1.0.0	1.0.0	
				Provide the name of the specific geographical						
			The name of a specific geographical location e.g. Credit River (rather	site using a specific noun (a word that names a						
Sample collection and processing	geo_loc_name_(site)	GENEPIO:0100436	than river).	certain place, thing).	Credit River		1.0.0	1.0.0	1.0.0	
				Provide latitude coordinates if available. Do not use the centre of the						
				city/region/province/state/country or the location						
			The letter of a constitution of the constitution of constituti	of your agency as a proxy, as this implicates a						
Sample collection and processing	geo_loc_latitude	GENEPIO:0100309	The latitude coordinates of the geographical location of sample collection.	real location and is misleading. Specify as degrees latitude in format "d[d.dddd] N S".	38.98 N		1.0.0	1.0.0	1.0.0	
	0			Provide longitude coordinates if available. Do not						
				use the centre of the						
				city/region/province/state/country or the location of your agency as a proxy, as this implicates a						
			The longitude coordinates of the geographical location of sample	real location and is misleading. Specify as						
Sample collection and processing	geo_loc_longitude	GENEPIO:0100310	collection.		77.11 W		1.0.0	1.0.0	1.0.0	
				Provide the official nomenclature for the organism(s) present in the sample. Multiple						
				organisms can be entered, separated by						
				semicolons. Avoid abbreviations. Search for						
Sample collection and processing	organism	GENEPIO:0001191	Taxonomic name of the organism.	taxonomic names here: ncbi.nlm.nih.gov/taxonomy.	Vibrio cholerae		1.0.0	1.0.0	1.0.0	
cample collection and proceeding	organism -	02.12.10.0001101	taxonomic name of the organism.	noonamingovaxonomy.	VIDIO GIOGICIO		1.0.0	1.0.0	1.0.0	
Sample collection and processing	influenza_subtype	GENEPIO:0101108					1.0.0	1.0.0	1.0.0	
cample collection and proceeding	mindonia_Gabtype	02.12.10.0101100					1.0.0	1.0.0	1.0.0	
Sample collection and processing	influenza_subtyping_scheme_name	GENEPIO:0101109					1.0.0	1.0.0	1.0.0	
cample collection and processing	Illidenza_subtyping_scriente_name	GENETIO:0101103					1.0.0	1.0.0	1.0.0	
Carrela adliantian and assessing	A	GENEPIO:0100583					1.0.0	1.0.0	1.0.0	
Sample collection and processing	taxonomic_identification_process	GENEPIO.0100563					1.0.0	1.0.0	1.0.0	
Sample collection and processing	virus_identifier	GENEPIO:0101110					1.0.0	1.0.0	1.0.0	
Carrala adliantian	WILLO/OLE/EAO LIE -II-d-	OENEDIO 0404:::					100	100	100	
Sample collection and processing	WHO/OIE/FAO_H5_clade	GENEPIO:0101111		If your sample is a continuous sample please			1.0.0	1.0.0	1.0.0	
				use this field to capture your start date. Sample						
				collection date is critical for surveillance and						
				many types of analyses. Required granularity includes year, month and day. The date should						
			The date on which the sample was collected, or sampling began for a	be provided in ISO 8601 standard format						
Sample collection and processing	sample_collection_date	GENEPIO:0001174	continuous sample.	"YYYY-MM-DD".	2020-03-16		1.0.0	1.0.0	1.0.0	
Comple collection and access to		OENEDIO-0404074	The data as which associated with a said of the said	Provide the date that sample collection ended in	2020 02 12		100	100	100	
Sample collection and processing	sample_collection_end_date	GENEPIO:0101071	The date on which sample collection ended for a continuous sample.	ISO 8601 format i.e. YYYY-MM-DD	2020-03-18		1.0.0	1.0.0	1.0.0	
Sample collection and processing	sample_collection_start_time	GENEPIO:0101072	The time at which sample collection began.	Provide this time in ISO 8601 24hr format, in your local time.	17:15 PST		1.0.0	1.0.0	1.0.0	
				Provide this time in ISO 8601 24hr format, in						
Sample collection and processing	sample_collection_end_time	GENEPIO:0101073	The time at which sample collection ended.	your local time.	19:15 PST		1.0.0	1.0.0	1.0.0	
				If known, select a value from the pick list. The						
				time of sample processing matters especially for grab samples, as fecal concentration in						
Sample collection and processing	sample_collection_time_of_day	GENEPIO:0100765	The descriptive time of day during which the sample was collected.	wastewater fluctuates over the course of the day.	Morning		1.0.0	1.0.0	1.0.0	
Sample collection and processing	sample_collection_time_duration_value	GENEPIO:0100766	The amount of time over which the sample was collected.	Provide the numerical value of time.	4		1.0.0	1.0.0	1.0.0	
Sample collection and processing	sample_collection_time_duration_unit	GENEPIO:0100767	The units of the time duration measurement of sample collection.	Provide the units from the pick list.	Hour		1.0.0	1.0.0	1.0.0	
				Provide the sample received date in ISO 8601					1	
Sample collection and processing	sample received date	GENEPIO:0001179	The date on which the sample was received.	format, i.e. "YYYY-MM-DD".	2020-03-28		1.0.0	1.0.0	1.0.0	

		Ontology			Deprecated Label	Deprecated ID Version			Editor Notes
Parent Class	Field	Ontology Identifier	Definition	Guidance	Examples	Deprecated ID Version Tracking			Editor Notes
Sample collection and processing	sample processing date	GENEPIO:0100763	The date on which the sample was processed.	Provide the sample processed date in ISO 8601 format, i.e. "YYYY-MM-DD". The sample may be collected and processed (e.g. filtered, extraction) on the same day, or on different dates.		1.0.0	1.0.0	1.0.0	
				If a sample is from a human or animal host that					
Sample collection and processing	host_origin_geo_loc_name (country)	GENEPIO:0100438	The country of origin of the host.	originated from outside of Canada, provide the the name of the country where the host originated by selecting a value from the template pick list. If the information is unknown or cannot be provided, leave blank or provide a null value.	[GAZ:0000109	1.0.0	1.0.0	1.0.0	
				or cannot be provided, leave blank or provide a	of America [GAZ:0000245				
Sample collection and processing	food_product_origin_geo_loc_name (country)	GENEPIO:0100437	The country of origin of a food product.	null value.	9]	1.0.0	1.0.0	1.0.0	
Sample collection and processing	food_product	GENEPIO:0100444	A material consumed and digested for nutritional value or enjoyment.	This field includes animal feed. If applicable, select the standardized term and ontology ID for the anatomical material from the picklist provided. Multiple values can be provided, separated by a semi-colon.	Feather meal [FOODON:000 03927]; Bone meal [ENV0:20000 54]; Chicken breast [FOODON:000 02703]	1.0.0	1.0.0	1.0.0	
				Provide any characteristics of the food product including whether it has been cooked, processed, preserved, any known information about its state (e.g. raw, ready-to-eat), any known information about its containment (e.g.	Food (chopped) [FOODON:000 02777]; Ready-to-eat (RTE)				
Sample collection and processing	food product properties	GENEPIO:0100445	Any characteristic of the food product pertaining to its state, processing a label claim, or implications for consumers.	(e.g. organic, fat-free).	16636]	1.0.0	1.0.0	1.0.0	
					Plastic tray or				
				If known, provide information regarding how the	pan IFOODON:034				
Sample collection and processing	food_packaging	GENEPIO:0100447	The type of packaging used to contain a food product.	food product was packaged.	90126]	1.0.0	1.0.0	1.0.0	
			A date recommended for the use of a product while at peak quality, this	This date is typically labeled on a food product as "best if used by", best by", "use by", or "freeze by" e.g. 5/24/2020. If the date is known,					
Sample collection and processing	food_quality_date	GENEPIO:0100615	date is not a reflection of safety unless used on infant formula.	leave blank or provide a null value. The packaging date should not be confused	2020-05-25	1.0.0	1.0.0	1.0.0	
Sample collection and processing	food_packaging_date	GENEPIO:0100616	A food product's packaging date as marked by a food manufacturer or retailer.	with, nor replaced by a Best Before date or other food quality date. If the date is known, leave blank or provide a null value.	2020-05-25	1.0.0	1.0.0	1.0.0	
Sample collection and processing	environmental_site	GENEPIO:0001232	An environmental location may describe a site in the natural or built environment e.g. hospital, wet market, bat cave.	If applicable, select the standardized term and ontology ID for the environmental site from the picklist provided. Multiple values can be provided, separated by a semi-colon.	Poultry hatchery [ENVO:010018 74]	1.0.0	1.0.0	1.0.0	
			A substance obtained from the natural or man-made environment e.g.	ontology ID for the environmental material from the picklist provided. Multiple values can be	[ENVO:035013				
Sample collection and processing	environmental_material	GENEPIO:0001223	soil, water, sewage, door handle, bed handrail, face mask.	provided, separated by a semi-colon. An anatomical material is a substance taken	77]	1.0.0	1.0.0	1.0.0	
Comple adjusting and assessing	anatomical material	GENEPIO:0001211	A substance obtained from an anatomical part of an organism e.g.	from the body. If applicable, select the standardized term and ontology ID for the anatomical material from the picklist provided. Multiple values can be provided, separated by a	Tissue [UBERON:000 0479]; Blood [UBERON:000	1.0.0	1.0.0	1.0.0	
Sample collection and processing	-		A substance excreted/secreted from an organism e.g. feces, urine,	product from the picklist provided. Multiple values can be provided, separated by a	Feces [UBERON:000 1988]; Urine [UBERON:000				
Sample collection and processing	body_product	GENEPIO:0001216	sweat.	semi-colon.	1088]	1.0.0	1.0.0	1.0.0	
Sample collection and processing	anatomical_part	GENEPIO:0001214	An anatomical part of an organism e.g. oropharynx.	An anatomical part is a structure or location in the body. If applicable, select the standardized term and ontology ID for the anatomical material from the picklist provided. Multiple values can be provided, separated by a semi-colon.	Snout [UBERON:000 6333]	1.0.0	1.0.0	1.0.0	
				This field includes animal feed. If applicable, select the standardized term and ontology ID for the anatomical material from the picklist provided. Multiple values can be provided,	Drag swab				
Sample collection and processing	collection_device	GENEPIO:0001234	The instrument or container used to collect the sample e.g. swab.	separated by a semi-colon.	[OBI:0002822]	1.0.0	1.0.0	1.0.0	
Sample collection and processing	collection method	GENEPIO:0001241	The process used to collect the sample e.g. phlebotomy, necropsy.	If applicable, provide the standardized term and ontology ID for the anatomical material from the picklist provided. Multiple values can be provided, separated by a semi-colon.		1.0.0	1.0.0	1.0.0	
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		Ontology			Denrecated La	bel Deprecated ID Ver	sion			Editor Notes
Parent Class	Field	Identifier	Definition	Guidance	Examples	Tra	cking			Editor Notes
			The numerical value of the volume measurement of the sample							
Sample collection and processing	sample_volume_measurement_value	GENEPIO:0100768	collected.	Provide the numerical value of volume.	5	1.0.	.0	1.0.0	1.0.0	
Sample collection and processing	sample_volume_measurement_unit	GENEPIO:0100769	The units of the volume measurement of the sample collected.	Provide the units from the pick list.	milliliter (mL) [UO:0000098]	1.0.	0	1.0.0	1.0.0	
cample collection and processing	sample_volume_measurement_unit	GENETIO:0100703	The units of the volume measurement of the sample confected.		No residual	1.0.	.0	1.0.0	1.0.0	
			The status of the residual sample (whether any sample remains after its	Residual samples are samples that remain after the sample material was used for its original purpose. Select a residual sample status from the picklist. If sample still exists, select "Residual	(sample all used) [GENEPIO:010					
Sample collection and processing	residual_sample_status	GENEPIO:0101090	original use).	sample remaining (some sample left)". The reason a sample was collected may provide	1088]	1.0.	.0	1.0.0	1.0.0	
Sample collection and processing	purpose of sampling	GENEPIO:0001198	The reason that the sample was collected.	information about potential biases in sampling strategy. Provide the purpose of sampling from the picklist in the template. Most likely, the sample was collected for Public health surveillance. The reason why a sample was originally collected may differ from the reason why it was selected for sequencing, which should be indicated in the "purpose of sequencing" field.	Public health surveillance	1.0.	0	1.0.0	1.0.0	
Sample collection and processing	purpose_or_sampling	GENEFIO.0001190	The reason that the sample was collected.	If there was an activity that would affect the	Surveillance	1.0.	.0	1.0.0	1.0.0	
Sample collection and processing	presampling_activity	GENEPIO:0100433	The activities or variables upstream of sample collection that may affect the sample.	sample prior to collection (this is different than sample processing), provide the activities by selecting one or more values from the template		10	0	100	1.0.0	
	F,				Agricultural		-			
			The details of the activities or variables that affected the sample	Briefly describe the presampling activities using						
Sample collection and processing	presampling_activity_details	GENEPIO:0100434	collected.	free text.	site sampled. The sample	1.0.	.0	1.0.0	1.0.0	
					and extracted 5					
Sample collection and processing	sample_storage_method	GENEPIO:0100448	The process used to store the sample.	note those here.	days later.	1.0.	.0	1.0.0	1.0.0	
Sample collection and processing	sample_storage_medium	GENEPIO:0100449	The medium in which a sample is stored.	Provide the name of the transport medium or storage medium used for this sample. If none was used, leave blank or write "None".	Cary-Blair transport medium	1.0.	.0	1.0.0	1.0.0	
Sample collection and processing	sample_storage_duration_value	GENEPIO:0101014	The numerical value of the time measurement during which a sample is in storage.	Provide the numerical value of time.	5	1.0.	.0	1.0.0	1.0.0	
. ,										
Sample collection and processing	sample_storage_duration_unit	GENEPIO:0101015	The units of a measured sample storage duration.	Provide the units from the pick list.	Day	1.0.	.0	1.0.0	1.0.0	
Sample collection and processing	specimen_processing	GENEPIO:0001253	Any processing applied to the sample during or after receiving the sample.	Select processes from the picklist that were applied to this sample.	Centrifugation	1.0.	.0	1.0.0	1.0.0	
Sample collection and processing	specimen_processing_details	GENEPIO:0100311	The details of the processing applied to the sample during or after receiving the sample.	Briefly describe the processes applied to the sample.	25 samples were pooled and further prepared as a single sample during library prep.	1.0.	.0	1.0.0	1.0.0	
Sample collection and processing	experimental_protocol	GENEPIO:0101029	The name of the overarching experimental methodology that was used to process the biomaterial.	Provide the name of the methodology used in your study. If available, provide a link to the protocol.		1.0.	.0	1.0.0	1.0.0	

		Ontology			Depreca	ted Label Deprecated ID	Version Tracking			Editor Notes
Parent Class	Field	Identifier	Definition	Guidance	Examples		Tracking			
Sample collection and processing	experimental_specimen_role_type	GENEPIO:0100921	The type of role that the sample represents in the experiment.	Samples can play different types of roles in experiments. A sample under study in one experiment may act as a control or be a replicate of another sample in another experiment. This field is used to distinguish samples under study from controls, replicates, etc. If the sample acted as an experimental control or a replicate, select a role type from the picklist. If the sample was not a control, leave blank or select "Not Applicable".			1.0.0	1.0.0	1.0.0	
Sample collection and processing	experimental_specimen_details	GENEPIO:0101112					1.0.0	1.0.0	1.0.0	
Sample collection and processing	available_data_types	GENEPIO:0100690	The type of data that is available, that may or may not require permission to access.	This field provides information about additional data types that are available that may provide context for interpretation of the sequence data. Provide a term from the picklist for additional data types that are available. Additional data types may require special permission to access. Contact the data provider for more information.	Total coliform count [GENEPIO:010 0729]		1.0.0	1.0.0	1.0.0	
Sample collection and processing	available_data_type_details Host information	GENEPIO:0101023 GENEPIO:0001288	Detailed information regarding other available data types.	Use this field to provide free text details describing other available data types that may provide context for interpreting genomic sequence data.	Pooled metagenomes containing extended spectrum beta-lactamase (ESBL) bacteria		1.0.0	1.0.0	1.0.0	
Host information	host (common_name)		The commonly used name of the host.	If the sample is directly from a host, either a common or scientific name must be provided (allhough both can be included, if known). If known, provide the common name.	Cow [NCBITaxon:99 13]; Chicken [NCBITaxon:99 13], Human [NCBITaxon:96 06]		1.0.0	1.0.0	1.0.0	
Host information	host (scientific name)		The taxonomic, or scientific name of the host.	If the sample is directly from a host, either a common or scientific name must be provided (although both can be included, if known). If known, select the scientific name from the picklist provided.	Bos taurus [NCBITaxon:99 13]; Homo sapiens [NCBITaxon:91 03]		1.0.0	1.0.0	1.0.0	
Host information	host (ecotype)		The biotype resulting from selection in a particular habitat, e.g. the A. thaliana Ecotype Ler.	Provide the name of the ecotype of the host organism.	Sea ecotype		1.0.0	1.0.0	1.0.0	
Host information	host_(breed)		A breed is a specific group of domestic animals or plants having homogeneous appearance, homogeneous behavior, and other characteristics that distinguish it from other animals or plants of the same species and that were arrived at through selective breeding.	Provide the name of the breed of the host organism.	Holstein		1.0.0	1.0.0	1.0.0	
Host information	host_(food production name)	GENEPIO:0100452	The name of the host at a certain stage of food production, which may depend on its age or stage of sexual maturity.	Select the host's food production name from the pick list.	Calf [FOODON:034 11349]		1.0.0	1.0.0	1.0.0	
Host Information	host_age	GENEPIO:0001392	Age of host at the time of sampling.	If known, provide age. Age-binning is also acceptable.	79		1.0.0	1.0.0	1.0.0	
Host Information	host_age_unit	GENEPIO:0001393	The units used to measure the host's age.	If known, provide the age units used to measure the host's age from the pick list.	year [UO:0000036]		1.0.0	1.0.0	1.0.0	
Host information	host_age_bin	GENEPIO:0001394	Age of host at the time of sampling, expressed as an age group.	Select the corresponding host age bin from the pick list provided in the template. If not available, provide a null value or leave blank.			1.0.0	1.0.0	1.0.0	
	host_gender			This field is only required if the Pathogen.cl package was selected. If the host was sick, provide the name of the disease. The standardized term can be sourced from this look-up service:			1.0.0	1.0.0	1.0.0	
Host information	host_disease	GENEPIO:0001391	The name of the disease experienced by the host.	https://www.ebi.ac.uk/ols/ontologies/doid If the disease is not known, put "missing".	mastitis, gastroenteritis		1.0.0	1.0.0	1.0.0	
Host Information	host_health_state	GENEPIO:0001388	Health status of the host at the time of sample collection.	If known, select a value from the pick list.	Asymptomatic [NCIT:C3833] Hospitalized		1.0.0	1.0.0	1.0.0	
Host Information	host_health_status_details	GENEPIO:0001389	Further details pertaining to the health or disease status of the host at time of collection.	If known, select a value from the pick list.	(ICU) [GENEPIO:010 0046]		1.0.0	1.0.0	1.0.0	
Host Information	host health outcome	GENEPIO:0001390	Disease outcome in the host.	If known, select a value from the pick list.	Recovered [NCIT:C49498]		1.0.0	1.0.0	1.0.0	
		SEREI 10.0001030		Should be a unique, user-defined identifier. This ID can help link laboratory data with epidemiological data, however, is likely sensitive	p.31.010100J			1.0.0	2.0.0	
Host Information	host_subject_ID	GENEPIO:0001398	A unique identifier by which each host can be referred to e.g. #131	information. Consult the data steward. Provide the case identifer. The case ID greatly facilitates linkage between laboratory and	BCxy123		1.0.0	1.0.0	1.0.0	
Host Information	case_ID		The identifier used to specify an epidemiologically detected case of disease.	epidemiological data. The case ID may be considered identifiable information. Consult the data steward before sharing.	ABCD1234		1.0.0	1.0.0	1.0.0	

		Ontolomi				anneated Label - Democrated ID	Version			Editor Notes
Parent Class	Field	Ontology Identifier	Definition	Guidance	Examples	eprecated Label Deprecated ID	Version Tracking			Editor Notes
Host Information		GENEPIO:0001399		If known, provide the symptom onset date in ISO 8601 standard format "YYYY-MM-DD".			1.0.0	1.0.0	1.0.0	
iost information	symptom_onset_date	GENEPIO.0001399	The date on which the symptoms began or were first noted.	ooo i standard format 1111-iviivi-DD .	Cough		1.0.0	1.0.0	1.0.0	
					[HP:0012735], Fever					
					[HP:0001945], Rigors (fever					
Host Information	signs_and_symptoms	GENEPIO:0001400	A perceived change in function or sensation, (loss, disturbance or appearance) indicative of a disease, reported by a patient.	Select all of the symptoms experienced by the host from the pick list.	shakes) [HP:0025145]		1.0.0	1.0.0	1.0.0	
			Patient pre-existing conditions and risk factors. Pre-existing condition: A medical condition that existed prior to the	Select all of the pre-existing conditions and risk						
			current infection.	factors experienced by the host from the pick list. If the desired term is missing, contact the	Asthma					
Host Information	pre-existing_conditions_and_risk_factors	GENEPIO:0001401	infection.	curation team.	[HP:0002099]		1.0.0	1.0.0	1.0.0	
					Acute respiratory					
			Patient medical complications that are believed to have occurred as a	Select all of the complications experienced by	failure [MONDO:0001					
Host Information	complications	GENEPIO:0001402	result of host disease.	the host from the pick list.	208]		4.0.0	400	400	
<u> </u>	Host exposure information	GENEPIO:0001409		Select an exposure event from the pick list			1.0.0	1.0.0	1.0.0	
Host exposure information	exposure event	GENEPIO:0001417	Event leading to exposure.	provided in the template. If the desired term is missing, contact the curation team.	Social Gathering		1.0.0	1.0.0	1.0.0	
				Select direct or indirect exposure from the						
Host exposure information	exposure contact level	GENEPIO:0001418	The exposure transmission contact type.	pick-list. Select the host's personal role(s) from the pick	Direct		1.0.0	1.0.0	1.0.0	
Host exposure information	host role	GENEPIO:0001419	The role of the host in relation to the exposure setting.	list provided in the template. If the desired term is missing, contact the curation team.	Inpatient		1.0.0	1.0.0	1.0.0	
Troot expedite information	1001100	OLIVEI IO.OOOTTIO	The fole of the floor in foldation to the expectate setting.	Select the host exposure setting(s) from the pick			1.0.0	1.0.0	1.0.0	
Host exposure information	exposure setting	GENEPIO:0001428	The setting leading to exposure.	list provided in the template. If a desired term is missing, contact the curation team.	Healthcare Setting		1.0.0	1.0.0	1.0.0	
Host exposure information	exposure details	GENEPIO:0001431	Additional host exposure information.	Free text description of the exposure.	Case infected family at home					
riost exposure information	Host vaccination information	GENEPIO:0001403	Additional flost exposure information.	The text description of the exposure.	lamily at nome		1.0.0	1.0.0	1.0.0	
Host vaccination information	host_vaccination_status	GENEPIO:0001404	#REF!				1.0.0	1.0.0	1.0.0	
Host vaccination information	number_of_vaccine_doses_received	GENEPIO:0001406					1.0.0	1.0.0	1.0.0	
Host vaccination information	vaccination_dose_1_vaccine_name	GENEPIO:0100313					1.0.0	1.0.0	1.0.0	
Host vaccination information	vaccination_dose_1_vaccination_date	GENEPIO:0100314					1.0.0	1.0.0	1.0.0	
Host vaccination information	vaccination_dose_2_vaccine_name	GENEPIO:0100315					1.0.0	1.0.0	1.0.0	
Host vaccination information	vaccination_dose_2_vaccination_date	GENEPIO:0100316					1.0.0	1.0.0	1.0.0	
Host vaccination information	vaccination history	GENEPIO:0100321					1.0.0	1.0.0	1.0.0	
	Host treatment information						1.0.0	1.0.0	1.0.0	
Host treatment information	influenza_antiviral_treatment_administration menu	GENEPIO:0101113					1.0.0	1.0.0	1.0.0	
Host treatment information	influenza_antiviral_agent	GENEPIO:0101114	A substance that destroys or inhibits replication of viruses.				1.0.0	1.0.0	1.0.0	
Host treatment information	influenza_antiviral_treatment_date	GENEPIO:0101115								
	Environmental conditions and measurements						1.0.0	1.0.0	1.0.0	
Environmental conditions and measurements	water_catchment_area_human_population_measurement_value	GENEPIO:0100773	The numerical value of the human population measurement that contributes to the composition of water in a catchment area.	Where known, provide the numerical value of population size, i.e. the number of people.	10,500		1.0.0	1.0.0	1.0.0	
				Where catchment population is not well known,						
Environmental conditions and measurements	water_catchment_area_human_population_range	GENEPIO:0100774	The human population range of the water catchment that contributes effluent to a wastewater site.	provide an estimation of population size by selecting a value from the picklist.	1,000 - 10,000 people		1.0.0	1.0.0	1.0.0	
					population of					
					jurisdiction encompassing					
Environmental conditions and			The method by which a water catchment 's human population size was	Provide a brief description of how catchment	the wastewater					
measurements	water_catchment_area_human_population_measurement_method	GENEPIO:0100775	measured or estimated	population size was measured or estimated.	service area					
Environmental conditions and measurements	water catchment area human population density value	GENEPIO:0100776	The numerical value describing the number of humans per geographical area in a water catchment.	Provide the numerical value of the population density in the catchement area.	4		1.0.0	1.0.0	1.0.0	
Environmental conditions and			The unit describing the number of humans per geographical area in a	Provide the unit of the population density in the	persons per					
measurements Environmental conditions and	water catchment area human population density unit	GENEPIO:0100777	water catchment.	catchement area. Provide the populated area type from the pick	Km^2		1.0.0	1.0.0	1.0.0	
measurements	populated area type	GENEPIO:0100778	A type of area that is populated by humans to different degrees.	list.	Urban area		1.0.0	1.0.0	1.0.0	
Environmental conditions and measurements	sampling weather conditions	GENEPIO:0100779	The state of the atmosphere at a place and time as regards heat, dryness, sunshine, wind, rain, etc.	Provide the weather conditions at the time of sample collection.	Rain		1.0.0	1.0.0	1.0.0	
Environmental conditions and measurements	presampling weather conditions	GENEPIO:0100780	Weather conditions prior to collection that may affect the sample.	Provide the weather conditions prior to sample collection.	Drizzle		1.0.0	1.0.0	1.0.0	
Environmental conditions and				Provide the quantity of precipitation in the area						
measurements Environmental conditions and	precipitation measurement value	GENEPIO:0100911	The amount of water which has fallen during a precipitation process.	leading up to the time of sample collection. Provide the numerical depth only of water only	12		1.0.0	1.0.0	1.0.0	
measurements Environmental conditions and	water_depth	GENEPIO:0100440	The depth of some water.	(without units). Provide the units of measurement for which the	5 motor (m)		1.0.0	1.0.0	1.0.0	
measurements	water_depth_units	GENEPIO:0101025	The units of measurement for water depth.	depth was recorded.	[UO:0000008]		1.0.0	1.0.0	1.0.0	
Environmental conditions and measurements	sediment_depth	GENEPIO:0100697	The depth of some sediment.	Provide the numerical depth only of the sediment (without units).	2		1.0.0	1.0.0	1.0.0	
Environmental conditions and measurements	sediment_depth_units	GENEPIO:0101026	The units of measurement for sediment depth.	,	meter (m) [UO:0000008]		1.0.0	1.0.0	1.0.0	
Environmental conditions and			·	Provide the numerical value for the temperature						
measurements	air_temperature	GENEPIO:0100441	The temperature of some air.	of the air (without units).	25		1.0.0	1.0.0	1.0.0	

		Ontology				Deprecated Label Deprecated ID	Version			Editor Notes
Parent Class	Field	Identifier	Definition	Guidance	Examples		Tracking			
Environmental conditions and				Provide the units of measurement for which the	degree Celsius (C)	•				
measurements	air_temperature_units	GENEPIO:0101027	The units of measurement for air temperature.	temperature was recorded.	[UO:0000027]		1.0.0	1.0.0	1.0.0	
Environmental conditions and measurements	water_temperature	GENEPIO:0100698	The temperature of some water.	Provide the numerical value for the temperature of the water (without units).		4	1.0.0	1.0.0	1.0.0	
					degree Celsius					
Environmental conditions and measurements	water_temperature_units	GENEPIO:0101028	The units of measurement for water temperature.	Provide the units of measurement for which the temperature was recorded.	(C) [UO:0000027]		1.0.0	1.0.0	1.0.0	
				B	Rain					
Environmental conditions and measurements	weather_type	GENEPIO:0100442	The state of the atmosphere at a place and time as regards heat, dryness, sunshine, wind, rain, etc.	Provide the weather conditions at the time of sample collection.	[ENVO:010015 64]	'	1.0.0	1.0.0	1.0.0	
Environmental conditions and		OFNEDIO 0400040	The units of measurement for the amount of water which has fallen	Provide the units of precipitation by selecting a	inch		1.0.0	1.0.0	1.0.0	
measurements	precipitation measurement unit	GENEPIO:0100912	during a precipitation process.	value from the pick list.	Rain gauge		1.0.0	1.0.0	1.0.0	
					over a 12 hour					
Environmental conditions and			The process used to measure the amount of water which has fallen		sample					
measurements Environmental conditions and	precipitation measurement method	GENEPIO:0100913	during a precipitation process.	used to measure precipitation. Provide the numerical value of the measured	collection		1.0.0	1.0.0	1.0.0	
measurements	ambient temperature measurement value	GENEPIO:0100935	The numerical value of a measurement of the ambient temperature.	temperature.	70	0	1.0.0	1.0.0	1.0.0	
Environmental conditions and measurements	ambient temperature measurement unit	GENEPIO:0100936	The units of a measurement of the ambient temperature.	Provide the units of the measured temperature.	degree Celsius (C)		1.0.0	1.0.0	1.0.0	
Environmental conditions and	ambient temperature measurement unit	GENEFIO.0100930	The measured pH value indicating the acidity or basicity(alkalinity) of an		(6)		1.0.0	1.0.0	1.0.0	
measurements	pH measurement value	GENEPIO:0001736	aqueous solution.	Provide the numerical value of the measured pH.	7.4	4	1.0.0	1.0.0	1.0.0	
Environmental conditions and measurements	pH measurement method	GENEPIO:0100781	The process used to measure pH value.	Provide the name of the procedure or technology used to measure pH.	pH test strip (litmus test)		1.0.0	1.0.0	1.0.0	
Environmental conditions and	Ĭ		The numerical value of a measured fluid flow rate over the course of a	Provide the numerical value of the measured						
measurements Environmental conditions and	total daily flow rate measurement value	GENEPIO:0100905	day.	flow rate. Provide the units of the measured flow rate by	million gallons	0	1.0.0	1.0.0	1.0.0	
measurements	total daily flow rate measurement unit	GENEPIO:0100906	The units of a measured fluid flow rate over the course of a day.	selecting a value from the pick list.	per day (MGD)		1.0.0	1.0.0	1.0.0	
Environmental conditions and measurements	total daily flow rate measurement method	GENEPIO:0100907	The process used to measure total daily fluid flow rate.	Provide the name of the procedure or technology used to measure flow rate.	Flow meter		1.0.0	1.0.0	1.0.0	
Environmental conditions and	total daily now rate measurement method		The process used to measure total daily hald now rate.	Provide the numerical value of the measured						
measurements Environmental conditions and	instantaneous flow rate measurement value	GENEPIO:0100908	The numerical value of a measured instantaneous fluid flow rate.	flow rate.	2:	•	1.0.0	1.0.0	1.0.0	
measurements	instantaneous flow rate measurement unit	GENEPIO:0100909	The units of a measured instantaneous fluid flow rate.	Provide the units of the measured flow rate by selecting a value from the pick list.	cubic meter per hour (m^3/h)		1.0.0	1.0.0	1.0.0	
Environmental conditions and measurements	instantaneous flow rate measurement method	GENEPIO:0100910	The process used to measure instantaneous fluid flow rate	Provide the name of the procedure or technology used to measure flow rate	Flow meter		1.0.0	100	100	
Environmental conditions and	instantaneous now rate measurement method	GENEFIO:0100910	The process used to measure instantaneous iluid flow rate.	Provide the numerical value of the measured	riow illetel		1.0.0	1.0.0	1.0.0	
measurements	turbidity measurement value	GENEPIO:0100783	The numerical value of a measurement of turbidity.	turbidity.	0.0	2	1.0.0	1.0.0	1.0.0	
Environmental conditions and				Provide the units of the measured turbidity by	nephelometric turbidity unit					
measurements	turbidity measurement unit	GENEPIO:0100914	The units of a measurement of turbidity.	,	(NTU)		1.0.0	1.0.0	1.0.0	
Environmental conditions and measurements	turbidity measurement method	GENEPIO:0101013	The process used to measure turbidity.	Provide the name of the procedure or technology used to measure turbidity.	Nephelometric method		1.0.0	1.0.0	1.0.0	
Environmental conditions and measurements	di	GENEPIO:0100915	The association of a second of discount of discount	Provide the numerical value of the measured		_	1.0.0	100	100	
Environmental conditions and	dissolved oxygen measurement value	GENEPIO:0100915	The numerical value of a measurement of dissolved oxygen.	dissolved oxygen. Provide the units of the measured dissolved	part per million	5	1.0.0	1.0.0	1.0.0	
measurements	dissolved oxygen measurement unit	GENEPIO:0100784	The units of a measurement of dissolved oxygen.	oxygen by selecting a value from the pick list.	(ppm)		1.0.0	1.0.0	1.0.0	
					Dissolved oxygen meter					
Environmental conditions and measurements	dissolved oxygen measurement method	GENEPIO:0100785	The method used to measure dissolved oxygen.	Provide the name of the procedure or technology used to measure dissolved oxygen.	in vertical direction		1.0.0	1.0.0	1.0.0	
Environmental conditions and	dissolved oxygen measurement method	GENEPIO:0100765	The numerical value of a measurement of oxygen reduction potential	Provide the numerical value of the measured	direction		1.0.0	1.0.0	1.0.0	
measurements	oxygen reduction potential (ORP) measurement value	GENEPIO:0100917	(ORP).	oxygen reduction potential.	-50	0	1.0.0	1.0.0	1.0.0	
Environmental conditions and				Provide the units of the measured oxygen reduction potential by selecting a value from the						
measurements	oxygen reduction potential (ORP) measurement unit	GENEPIO:0100786	The units of a measurement of oxygen reduction potential (ORP).	pick list.	milliVolt (mV)		1.0.0	1.0.0	1.0.0	
Environmental conditions and measurements	oxygen reduction potential (ORP) measurement method	GENEPIO:0100787	The method used to measure oxygen reduction potential (ORP).	Provide the name of the procedure or technology used to measure oxygen reduction potential.	ORP sensor		1.0.0	1.0.0	1.0.0	
Environmental conditions and		CENEDIO 0400757	i i i i i i i i i i i i i i i i i i i	Provide the numerical value of the COD test	_		100	100	100	
measurements Environmental conditions and	chemical oxygen demand (COD) measurement value	GENEPIO:0100788	The measured value from a chemical oxygen demand (COD) test. The units associated with a value from a chemical oxygen demand	result.	milligram per	0	1.0.0	1.0.0	1.0.0	
measurements	chemical oxygen demand (COD) measurement unit	GENEPIO:0100789	(COD) test.	Provide the units of the COD test result.	liter (mg/L)		1.0.0	1.0.0	1.0.0	
Environmental conditions and measurements	chemical oxygen demand (COD) measurement method	GENEPIO:0100790	The method used to measure chemical oxygen demand (COD).	Provide the name of the procedure or technology used to measure COD.	Hach LCK test kit		1.0.0	1.0.0	1.0.0	
Environmental conditions and	carbonaceous biochemical oxygen demand (CBOD) measurement		The numerical value of a measurement of carbonaceous biochemical	Provide the numerical value of the measured						
measurements Environmental conditions and	value carbonaceous biochemical oxygen demand (CBOD) measurement	GENEPIO:0100791	oxygen demand (CBOD). The units of a measurement of carbonaceous biochemical oxygen	CBOD. Provide the units of the measured CBOD by	milligram per	U	1.0.0	1.0.0	1.0.0	
measurements	unit	GENEPIO:0100792	demand (CBOD).		liter (mg/L)		1.0.0	1.0.0	1.0.0	
					CBOD measurement					
Environmental conditions and	carbonaceous biochemical oxygen demand (CBOD) measurement	OFNEDIO 0400===	The method used to measure carbonaceous biochemical oxygen	Provide the name of the procedure or technology	by optical		400	100	100	
measurements Environmental conditions and	method	GENEPIO:0100793	demand (CBOD).	used to measure CBOD. Provide the numerical value of the measured	probe		1.0.0	1.0.0	1.0.0	
	I control to the cont	GENEPIO:0100794	The numerical value from a total suspended solids (TSS) test.	TSS.		8	1.0.0	1.0.0	1.0.0	
measurements Environmental conditions and	total suspended solids (TSS) measurement value	GENEFIO.0100794	The units associated with a value from a total suspended solids (TSS)	100.		•		1.0.0		

		Ontology				Deprecated Label Deprecated ID	Version			Editor Notes
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					Vacuum filter through a 2-micron filter, then oven-dried					
Environmental conditions and neasurements	total suspended solids (TSS) measurement method	GENEPIO:0100796	The method used to measure total suspended solids (TSS).	Provide the name of the procedure or technology			1.0.0	1.0.0	1.0.0	
nvironmental conditions and neasurements	total dissolved solids (TDS) measurement value	GENEPIO:0100797	The numerical value from a total dissolved solids (TDS) test.	Provide the numerical value of the measured TDS	9		1.0.0	1.0.0	1.0.0	
nvironmental conditions and			The units associated with a value from a total dissolved solids (TDS)		_					
neasurements	total dissolved solids (TDS) measurement unit	GENEPIO:0100798	test.	Provide the units of the measured TDS.	percent (%) Subtract		1.0.0	1.0.0	1.0.0	
Environmental conditions and				Provide the name of the procedure or technology	calculated TSS from calculated					
neasurements invironmental conditions and	total dissolved solids (TDS) measurement method	GENEPIO:0100799	The method used to measure total dissolved solids (TDS).	used to measure TDS.	TS		1.0.0	1.0.0	1.0.0	
neasurements	total solids (TS) measurement value	GENEPIO:0100800	The numerical value from a total solids (TS) test.	Provide the numerical value of the measured TS.	10		1.0.0	1.0.0	1.0.0	
neasurements	total solids (TS) measurement unit	GENEPIO:0100801	The units associated with a value from a total solids (TS) test.		percent (%)		1.0.0	1.0.0	1.0.0	
invironmental conditions and neasurements	total solids (TS) measurement method	GENEPIO:0100802	The method used to measure total solids (TS).	Provide the name of the procedure or technology	Gravimetric method by oven drying, then weighing		1.0.0	1.0.0	1.0.0	
Environmental conditions and				Provide the numerical value of the measured						
measurements	alkalinity measurement value	GENEPIO:0100878	The numerical value of a measurement of alkalinity.	alkalinity.	milligram per	3	1.0.0	1.0.0	1.0.0	
Environmental conditions and					liter of calcium carbonate					
neasurements Environmental conditions and	alkalinity measurement unit	GENEPIO:0100879	The units of a measurement of alkalinity.	Provide the units of the measured alkalinity. Provide the name of the procedure or technology	(mg/L CaCO3)		1.0.0	1.0.0	1.0.0	
neasurements Environmental conditions and	alkalinity measurement method	GENEPIO:0100880	The process used to measure alkalinity.	used to measure alkalinity. Provide the numerical value of the measured	method		1.0.0	1.0.0	1.0.0	
neasurements	conductivity measurement value	GENEPIO:0100916	The numerical value of a measurement of conductivity.	conductivity.	1412 microSiemen	2	1.0.0	1.0.0	1.0.0	
Environmental conditions and neasurements	conductivity measurement unit	GENEPIO:0100803	The units of a measurement of conductivity.		per centimeter (uS/cm)		1.0.0	1.0.0	1.0.0	
	conductiny medical critical and	021121 10:0100000	The diffe of a medical small of contaderny.		Conductivity		1.0.0	1.0.0	1.0.0	
Environmental conditions and neasurements	conductivity measurement method	GENEPIO:0100804	The method used to measure conductivity.	Provide the name of the procedure or technology used to measure conductivity.	electrode and meter		1.0.0	1.0.0	1.0.0	
Environmental conditions and neasurements	salinity measurement value	GENEPIO:0100805	The numerical value of a measurement of salinity.	Provide the numerical value of the measured salinity.	35	5	1.0.0	1.0.0	1.0.0	
Environmental conditions and	salinity measurement unit	GENEPIO:0100806	The units of a measurement of salinity.		practical salinity unit (PSU)		1.0.0	1.0.0	1.0.0	
neasurements Environmental conditions and	saimity measurement unit	GENEPIO:0100606	The units of a measurement of saimity.	Provide the units of the measured sainity. Provide the name of the procedure or technology	,		1.0.0	1.0.0	1.0.0	
measurements	salinity measurement method	GENEPIO:0100807	The method used to measure salinity.	used to measure salinity.	meter		1.0.0	1.0.0	1.0.0	
Environmental conditions and neasurements	total nitrogen (TN) measurement value	GENEPIO:0100808	The numerical value of a measurement of total nitrogen (TN).	Provide the numerical value of the measured TN.	120)	1.0.0	1.0.0	1.0.0	
Environmental conditions and neasurements	total nitrogen (TN) measurement unit	GENEPIO:0100809	The units of a measurement of total nitrogen (TN).		milligram per liter (mg/L)		1.0.0	1.0.0	1.0.0	
Environmental conditions and neasurements	total nitrogen (TN) measurement method	GENEPIO:0100810	The method used to measure total nitrogen (TN).	Provide the name of the procedure or technology	Hach total nitrogen spectrophotom etric test		1.0.0	1.0.0	1.0.0	
Environmental conditions and measurements	total phosphorus (TP) measurement value	GENEPIO:0100811	The numerical value of a measurement of total phosphorus (TP).	Provide the numerical value of the measured TP.	2		1.0.0	1.0.0	1.0.0	
Environmental conditions and measurements	total phosphorus (TP) measurement unit	GENEPIO:0100812	The units of a measurement of total phosphorus (TP).		milligrams orthophosphate as phosphorus per liter (mg PO4-P/L)		1.0.0	1.0.0	1.0.0	
Environmental conditions and	total phosphorus (TP) measurement method	GENEPIO:0100813	The method used to measure total phosphorus (TP).	Provide the name of the procedure or technology	Merck phosphate		1.0.0	1.0.0	1.0.0	
Environmental conditions and measurements	fecal contamination indicator	GENEPIO:0100814	A gene, virus, bacteria, or substance used to measure the sanitary quality of water in regards to fecal contamination.	If a fecal contamination indicator was measured,	crAssphage		1.0.0	1.0.0	1.0.0	
nvironmental conditions and				Provide the numerical value of the measured						
neasurements	fecal contamination value	GENEPIO:0100815	The numerical value of a measurement of fecal contamination.		cycle threshold		1.0.0	1.0.0	1.0.0	
Environmental conditions and neasurements	fecal contamination unit	GENEPIO:0100816	The units of a measurement of fecal contamination.	Provide the units of the measured fecal	(Ct) / quantification cycle (Cq)		1.0.0	1.0.0	1.0.0	
Environmental conditions and neasurements	fecal contamination unit	GENEPIO:0100817	The units of a measurement of recal contamination. The method used to measure fecal contamination.	Provide the name of the procedure or technology			1.0.0	1.0.0	1.0.0	
Environmental conditions and	fecal coliform count value	GENEPIO:0100818	The numerical value of a measurement of fecal coliforms within a sample.	Provide the numerical value of the measured fecal coliforms	,		1.0.0	100	1.0.0	
nodaul GIII GIII S	ICCAI COINDINI COUNT VAIGE	GENEPIO:0100618	запри.		most probable number per		1.0.0	1.0.0	1.0.0	
				Provide the units of the measured fecal						

		Ontology			Deprecated Label	Deprecated ID Version			Editor Notes
Parent Class	Field	Identifier	Definition	Guidance	Examples	Tracking			
Environmental conditions and measurements	fecal coliform count method	GENEPIO:0100820	The method used to measure fecal coliforms.	Provide the name of the procedure or technology used to measure fecal coliforms.	MPN method via serial dilutions until lack of growth	100	100	100	
Environmental conditions and measurements	urinary contamination indicator	GENEPIO:0100837	A gene, virus, bacteria, or substance used to measure the sanitary quality of water in regards to urinary contamination.	If a urinary contamination indicator was measured, select it from the picklist.	urobilin	1.0.0	1.0.0	1.0.0	
Environmental conditions and measurements	urinary contamination indicator	GENEPIO:0100838	The numerical value of a measurement of urinary contamination.	Provide the numerical value of the measured urinary contamination.	3	1.0.0	1.0.0	1.0.0	
Environmental conditions and measurements	urinary contamination unit	GENEPIO:0100839	The units of a measurement of unitary contamination.	Provide the units of the measured urinary contamination.	nanograms per	1.0.0	1.0.0	1.0.0	
Environmental conditions and	unitary contamination unit	GENEFIO.0100839	The units of a measurement of unitary contamination.	Provide the name of the procedure or technology	Urobilin	1.0.0	1.0.0	1.0.0	
measurements Environmental conditions and	urinary contamination method	GENEPIO:0100840	The method used to measure urinary contamination. The numerical value of a measurement of temperature of a sample at	used to measure urinary contamination. Provide the numerical value of the measured	Test	1.0.0	1.0.0	1.0.0	
measurements Environmental conditions and	sample temperature value (at collection)	GENEPIO:0100821	The units of a measurement of temperature of a sample at the time of	temperature.	20 degree Celsius	1.0.0	1.0.0	1.0.0	
measurements Environmental conditions and	sample temperature unit (at collection)	GENEPIO:0100822	collection. The numerical value of a measurement of temperature of a sample.	Provide the units of the measured temperature. Provide the numerical value of the measured	(C)	1.0.0	1.0.0	1.0.0	
measurements	sample temperature value (when received)	GENEPIO:0100823	upon receipt.	temperature.	22	1.0.0	1.0.0	1.0.0	
Environmental conditions and measurements	sample temperature unit (when received)	GENEPIO:0100824	The units of a measurement of temperature of a sample at the time upon receipt.	Provide the units of the measured temperature.	degree Celsius (C)	1.0.0	1.0.0	1.0.0	
	Sequence information	GENEPIO:0001441		Every "library ID" from a single submitter must		1.0.0	1.0.0	1.0.0	
Sequence information	library ID	GENEPIO:0001448	The user-specified identifier for the library prepared for sequencing.	be unique. It can have any format, but we suggest that you make it concise, unique and consistent within your lab, and as informative as possible.	LS_2010_NP_ 123446	1.0.0	1.0.0	1.0.0	
Sequence information	-	GENEPIO:0100997	The overarching sequencing methodology that was used to determine the sequence of a biomaterial	Example Guidance: Provide the name of the DNA or RNA sequencing technology used in your study. If unsure refer to the protocol documentation or provide a null value	whole genome sequencing assay [OBI:0002117]	100	100	1.0.0	
Sequence information Sequence information	sequencing_assay_type sequencing_date	GENEPIO:0001447	the sequence of a biomaterial. The date the sample was sequenced.	ISO 8601 standard "YYYY-MM-DD".	2020-06-22	1.0.0	1.0.0	1.0.0	
				The reason why a sample was originally collected may differ from the reason why it was selected for sequencing. The reason a sample was sequenced may provide information about potential biases in sequencing strategy. Provide the purpose of sequencing from the picklist in the template. The reason for sample collection should be indicated in the "purpose of sampling"					
Sequence information	purpose_of_sequencing	GENEPIO:0001445	The reason that the sample was sequenced.	field.	ed surveillance	1.0.0	1.0.0	1.0.0	
Sequence information	purpose_of_sequencing_details	GENEPIO:0001446	The description of why the sample was sequenced providing specific details.	Provide an expanded description of why the sample was sequenced using free text. The description may include the importance of the sequences for a particular public heart investigation/surveillance activity/insearch question. Suggested standardized descriptions include: Assessing public health control measures, Determining early introductions and spread, Investigating arini-related exposures, Investigating remote regions, Investigating schools/universities.	Investigating schools/univers titles	1.0.0	1.0.0	1.0.0	
Sequence information	sequenced by	GENEPIO:0100416	The name of the agency, organization or institution responsible for sequencing the isolate's genome.	Provide the name of the agency, organization or institution that performed the sequencing in full (avoid abbreviations). If the information is unknown or cannot be provided, leave blank or provide a null value.	Public Health Agency of Canada (PHAC) [GENEPIO:010 05511	1.0.0	1.0.0	1.0.0	
			The specific laboratory affiliation of the responsible for sequencing the	Provide the name of the specific laboratory that that performed the sequencing in full (avoid abbreviations). If the information is unknown or cannot be provided, leave blank or provide a null					
Sequence information	sequenced_by_laboratory_name	GENEPIO:0100470	isolate's genome.	value.	Topp Lab	1.0.0	1.0.0	1.0.0	
Sequence information	sequenced_by_contact_name	GENEPIO:0100471	The name or title of the contact responsible for follow-up regarding the sequence.	Provide the name of an individual or their job title. As personnel turnover may render the contact's name obsolete, it is more prefereable to provide a job title for ensuring accuracy of information and institutional memory. If the information is unknown or cannot be provided, leave blank or provide a null value.	Enterics Lab Manager	1.0.0	1.0.0	1.0.0	
Sequence information	sequenced_by_contact_email	GENEPIO:0100422	The email address of the contact responsible for follow-up regarding th sequence.	Provide the email associated with the listed contact. As personnel turnover may render an individual's email obsolete, it is more prefereable to provide an address for a position or lab, to ensure accuracy of information and institutional	enterics@lab.c	1.0.0	1.0.0	1.0.0	
Sequence information	sequence_submitted_by		The name of the agency that submitted the sequence to a database.	The name of the agency should be written out in full, (with minor exceptions) and be consistent across multiple submissions. For Canadian institutions submitting specimens rather than sequencing data, please put the "National Microbiology Laboratory (NML)".	Public Health Ontario (PHO)	1.0.0	1.0.0	1.0.0	

		Ontology			Deprecated Label	Deprecated ID Version			Editor Notes
Parent Class	Field	Identifier	Definition	Guidance	Examples	Deprecated ID Version Tracking			
Sequence information	sequence_submitter_contact_email	GENEPIO:0001165	The email address of the contact responsible for follow-up regarding the sequence.	The email address can represent a specific individual or laboratory.	RespLab@lab.	1.0.0	1.0.0	1.0.0	
					Direct wastewater RNA capture and purification via the "Sewage, Salt, Silica and SARS-CoV-2 (4S)" method v4 found at https://www.pro tocols.joi/view/v -4-direct-waste water-ma-captu re-and-purificati				
Sample collection and processing	nucleic_acid_extraction_method	GENEPIO:0100939	The process used to extract genomic material from a sample.	Briefly describe the extraction method used.	on-36wgq581y gk5/v4	1.0.0	1.0.0	1.0.0	
		OFNEDIO 0400770		Provide the name of the genomic extraction kit	QIAamp PowerFecal	400	100	400	
Sample collection and processing Sample collection and processing	nucleic_acid_extraction_kit endogenous control details	GENEPIO:0100772 GENEPIO:0100923	The kit used to extract genomic material from a sample The description of the endogenous controls included when extracting a sample.	used. Provide the names of endogenous controls that were used as a reference during extraction. If relevant, include titers of these controls, as well as whether any controls were expected but not identified in the sample.	Pro DNA Kit	1.0.0	1.0.0	1.0.0	
, , ,			The name of the project/initiative/program for which sequencing was	Provide the name of the project and/or the project ID here. If the information is unknown or cannot be provided, leave blank or provide a null	AMR-GRDI				
Sequence information	sequencing_project_name	GENEPIO:0100472	performed.	value. Provide the name of the company that created the sequencing instrument by selecting a value from the template pick list. If the information is unknown or cannot be provided, leave blank or	(PA-1356) Illumina IGENEPIO:000	1.0.0	1.0.0	1.0.0	
Sequence information	sequencing_platform	GENEPIO:0100473	The platform technology used to perform the sequencing.	provide a null value.	1923]	1.0.0	1.0.0	1.0.0	
Sequence information	sequencing_instrument	GENEPIO:0001452	The model of the sequencing instrument used.	Provide the model sequencing instrument by selecting a value from the template pick list. If the information is unknown or cannot be provided, leave blank or provide a null value.	Illumina HiSeq 2500 [GENEPIO:010 0117]	1.0.0	1.0.0	1.0.0	
Sequence information						1.0.0	1.0.0	1.0.0	
Sequence information	library_preparation_kit	GENEPIO:0001450	The name of the DNA library preparation kit used to generate the library being sequenced.	Provide the name of the library preparation kit used.	Nextera XT	1.0.0	1.0.0	1.0.0	
Sequence information	DNA_fragment_length	GENEPIO:0100843	The length of the DNA fragment generated by mechanical shearing or enzymatic digestion for the purposes of library preparation.	Provide the fragment length in base pairs (do not include the units).	400 Hybrid	1.0.0	1.0.0	1.0.0	
Sequence information	genomic_target_enrichment_method	GENEPIO:0100966	The molecular technique used to selectively capture and amplify specific regions of interest from a genome.	Provide the name of the enrichment method	selection method (bait-capture) [GENEPIC:000 1950]	1.0.0	1.0.0	1.0.0	
Souvence information	connect toward and observed method details	CENERIO (1999)	to selectively capture and amplify specific regions of interest from a	Provide details that are applicable to the method you used. Note: If bait-capture methods were used for enrichment, provide the peanle name and version number for a URL providing that	m/products/ngs /fixed-panels/re spiratory-virus-r	100	100	100	
Sequence information	genomic_target_enrichment_method_details	GENEPIO:0100967	genome. The specifications of the primers (primer sequences, binding positions,	information). Provide the name and version of the primer	esearch-panel	1.0.0	1.0.0	1.0.0	
Sequence information	amplicon_pcr_primer_scheme	GENEPIO:0001456	fragment size generated etc) used to generate the amplicons to be sequenced.	scheme used to generate the amplicons for sequencing.	artic v3	1.0.0	1.0.0	1.0.0	
Sequence information	amplicon_size	GENEPIO:0001449	The length of the amplicon generated by PCR amplification.	Provide the amplicon size expressed in base pairs.	300	1.0.0	1.0.0	1.0.0	

		Ontology			Deprecated Label	Deprecated ID Version Tracking			Editor Notes
Parent Class	Field	Identifier	Definition	Guidance	Examples	Tracking			
Sequence information	sequencing_flow_cell_version	GENEPIO:0101102	The version number of the flow cell used for generating sequence data.	Flow cells can vary in terms of design, chemistry, capacity, etc. The version of the flow cell used to generate sequence data can affect sequence quantity and quality. Record the version of the flow cell used to generate sequence data. Do not include "version" or "v" in the version number.	R.9.4.1	1.0.0	1.0.0	1.0.0	
	344000019_000_000000000000000000000000000	52.12.15.01.102	The resident full field of the field control of generaling dequation data.	Provide the name and version of the procedure	https://www.pro tocols.jo/view/n cov-2019-sequ encing-protocol -bbmuik6w?ver sion_warning=n		1.0.0	1.0.0	
Sequence information	sequencing_protocol	GENEPIO:0001454	The protocol or method used for sequencing.	provide a link to a protocol online.	ABC123_S1_L	1.0.0	1.0.0	1.0.0	
Sequence information	r1_fastq_filename	GENEPIO:0001476	The user-specified filename of the r1 FASTQ file.	Provide the r1 FASTQ filename.	001_R1_001.fa stq.gz	1.0.0	1.0.0	1.0.0	
Sequence information	r2_fastq_filename	GENEPIO:0001477	The user-specified filename of the r2 FASTQ file.	Provide the r2 FASTQ filename.	ABC123_S1_L 001_R2_001.fa stq.gz	1.0.0	100	1.0.0	
					-14:5-				
Sequence information	fast5_filename	GENEPIO:0001480	The user-specified filename of the FAST5 file.	Provide the FAST5 filename.	batch1a_seque nces.fast5	1.0.0	1.0.0	1.0.0	
Sequence information	consensus_sequence_filename	GENEPIO:0101119				1.0.0	1.0.0	1.0.0	
Sequence information	assembly_filename	GENEPIO:0001461	The user-defined filename of the FASTA file.	Provide the FASTA filename.	pathogenasse mbly123.fasta	1.0.0	1.0.0	1.0.0	
	Bioinformatics and QC metrics	GENEPIO:0001457				1.0.0	1.0.0	1.0.0	
Bioinformatics and QC metrics	quality control method name	GENEPIO:0100557	The name of the method used to assess whether a sequence passed a predetermined quality control threshold.	Providing the name of the method used for quality control is very important for interpreting the rest of the QC information. Method names can be provided as the name of a pipeline or a link to a Gill+hub repository. Multiple methods should be listed and separated by a semi-colon. Do not include QC tags in other fields if no method name is provided.	ncov-tools	1.0.0	1.0.0	1.0.0	
			The version number of the method used to assess whether a sequence	Methods updates can make big differences to their outputs. Provide the version of the method used for quality control. The version can be expressed using whatever convention the developer implements (e.g. date, semantic versioning). If multiple methods were used, record the version much single method were used, record the version numbers in the same order as the method names. Separate the version					
Bioinformatics and QC metrics	quality control method version	GENEPIO:0100558	passed a predetermined quality control threshold.	numbers using a semi-colon.	1.2.3	1.0.0	1.0.0	1.0.0	
Bioinformatics and QC metrics	quality control determination	GENEPIO:0100559	The determination of a quality control assessment.	Select a value from the pick list provided. If a desired value is missing, submit a new term request to the PHA4GE QC Tag GitHub issuetracker using the New Term Request form.	sequence failed quality control				
Bioinformatics and QC metrics	quality control issues	GENEPIO:0100560	The reason contributing to, or causing, a low quality determination in a quality control assessment.	Select a value from the pick list provided. If a desired value is missing, submit a new term request to the PHA4GE QC Tag GitHub issuetracker using the New Term Request form.	low average genome coverage	1.0.0	1.0.0	1.0.0	
			The details surrounding a low quality determination in a quality control	Provide notes or details regarding QC results	CT value of 39. Low viral load. Low DNA concentration after				
Bioinformatics and QC metrics	quality control details	GENEPIO:0100561	assessment.	using free text.	amplification.	1.0.0	1.0.0	1.0.0	
Bioinformatics and QC metrics	raw sequence data processing method	GENEPIO:0001458	The method used for raw data processing such as removing barcodes, adapter trimming, filtering etc.	Raw data processing can have a significant impact on data quality and how it can be used. Provide the names and version numbers of software used for trimming adaptors, quality filtering, etc. (e.g. Trimmomatic v. 0.38, Porechop v. 0.2.3), or a link to a GitHub protocol.	Porechop 0.2.3	1.0.0	1.0.0	1.0.0	
				Provide the name and version number of the					
Bioinformatics and QC metrics	dehosting method	GENEPIO:0001459	The method used to remove host reads from the pathogen sequence.	software used to remove host reads.	Nanostripper SPAdes Genome	1.0.0	1.0.0	1.0.0	
Bioinformatics and QC metrics	sequence assembly software name	GENEPIO:0100825	The name of the software used to assemble a sequence.	Provide the name of the software used to assemble the sequence.	Assembler, Canu, wtdbg2, velvet	1.0.0	1.0.0	1.0.0	

		Ontology				Deprecated Label Deprecated ID	Version			Editor Notes
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				Provide the version of the software used to						
Bioinformatics and QC metrics	sequence assembly software version	GENEPIO:0100826	The version of the software used to assemble a sequence.	assemble the sequence.	3.15.5		1.0.0	1.0.0	1.0.0	
				Provide the name of the software used to						
Bioinformatics and QC metrics	consensus sequence software name	GENEPIO:0001463	The name of the software used to generate the consensus sequence.	generate the consensus sequence.	iVar		1.0.0	1.0.0	1.0.0	
B: : (i 100 i		OENIEDIO 2024 422	T	Provide the version of the software used to			400	400	100	
Bioinformatics and QC metrics	consensus sequence software version	GENEPIO:0001469	The version of the software used to generate the consensus sequence.	generate the consensus sequence.	1.3		1.0.0	1.0.0	1.0.0	
Bioinformatics and QC metrics	breadth of coverage value	GENEPIO:0001472	The percentage of the reference genome covered by the sequenced data, to a prescribed depth.	Provide value as a percent	95		1.0.0	1.0.0	1.0.0	
			,	·						
			The average number of reads representing a given nucleotide in the							
Bioinformatics and QC metrics	depth of coverage value	GENEPIO:0001474	reconstructed sequence.	Provide value as a fold of coverage.	400		1.0.0	1.0.0	1.0.0	
Bioinformatics and QC metrics	depth of coverage threshold	GENEPIO:0001475	The threshold used as a cut-off for the depth of coverage.	Provide the threshold fold coverage.	100		1.0.0	1.0.0	1.0.0	
			The percentage of expected genes identified in the genome being							
Bioinformatics and QC metrics	genome completeness	GENEPIO:0100844	sequenced. Missing genes indicate missing genomic regions (incompleteness) in the data.	Provide the genome completeness as a percent (no need to include units).	85		1.0.0	1.0.0	1.0.0	
Biolinormatics and QC metrics	genome completeness	GENEFIO:0100044	(incompleteness) in the data.	(no need to include units).	65		1.0.0	1.0.0	1.0.0	
				5 1						
Bioinformatics and QC metrics	number of base pairs sequenced	GENEPIO:0001482	The number of total base pairs generated by the sequencing process.	Provide a numerical value (no need to include units).	387566		1.0.0	1.0.0	1.0.0	
			The total number of non-unique reads generated by the sequencing	Provide a numerical value (no need to include						
Bioinformatics and QC metrics	number of total reads	GENEPIO:0100827	process.	units).	423867		1.0.0	1.0.0	1.0.0	
				Provide a numerical value (no need to include				1		
Bioinformatics and QC metrics	number of unique reads	GENEPIO:0100828	The number of unique reads generated by the sequencing process.	units).	248236		1.0.0	1.0.0	1.0.0	
Bioinformatics and OC metrics	minimum post-trimming read length	GENEPIO:0100829	The threshold used as a cut-off for the minimum length of a read after trimming.	Provide a numerical value (no need to include units).	150		1.0.0	100	1.0.0	
Distribution and Go mones	Internation poor uniforming road tonight	GENET 10.0100020	uning.	dina).			1.0.0	1.0.0	1.0.0	
			The number of contigs (contiguous sequences) in a sequence							
Bioinformatics and QC metrics	number of contigs	GENEPIO:0100937	assembly.	Provide a numerical value.	10		1.0.0	1.0.0	1.0.0	
				Provide a numerical value (no need to include						
Bioinformatics and QC metrics	percent Ns across total genome length	GENEPIO:0100830	The percentage of the assembly that consists of ambiguous bases (Ns)	units).	2		1.0.0	1.0.0	1.0.0	
Bioinformatics and QC metrics	Ns per 100 kbp	GENEPIO:0001484	The number of ambiguous bases (Ns) normalized per 100 kilobasepairs (kbp).	Provide a numerical value (no need to include units).	342		1.0.0	1.0.0	1.0.0	
Significance and QC Hitting	110 pc. 100 kbp	GENET 10.0001404	(map).	uniaj.	342		1.0.0	1.0.0	7.0.0	
			The length of the shortest read that, together with other reads,							
Bioinformatics and QC metrics	N50	GENEPIO:0100938	represents at least 50% of the nucleotides in a set of sequences.	Provide the N50 value in Mb.	150		1.0.0	1.0.0	1.0.0	
			The percent of the total number of reads identified as contamination	Provide the percent contamination value (no						
Bioinformatics and QC metrics	percent read contamination	GENEPIO:0100845	(not belonging to the target organism) in a sequence dataset.	need to include units).	2		1.0.0	1.0.0	1.0.0	
Pininformation and OC	acquence accombly length	CENEDIO-0400040	The length of the genome generated by assembling reads using a	Provide a numerical value (no need to include	34272		100	100	100	
Bioinformatics and QC metrics	sequence assembly length	GENEPIO:0100846	scaffold or by reference-based mapping.	units).	34272		1.0.0	1.0.0	1.0.0	
Bioinformatics and QC metrics	consensus genome length	GENEPIO:0001483	The length of the genome defined by the most common nucleotides at each position.	Provide a numerical value (no need to include units).	38677		1.0.0	1.0.0	1.0.0	
	<u> </u>									
				Provide the accession number of the reference						
Bioinformatics and QC metrics	reference genome accession	GENEPIO:0001485	A persistent, unique identifier of a genome database entry.	genome.	NC_045512.2		1.0.0	1.0.0	1.0.0	
				Provide the deduplication software name						
			The method used to remove duplicated reads in a sequence read	followed by the version, or a link to a tool or						
Bioinformatics and QC metrics	deduplication method	GENEPIO:0100831	dataset.	method.	DeDup 0.12.8		1.0.0	1.0.0	1.0.0	

Parent Class	Field	Ontology	Definition	Guidanaa		Deprecated Label Deprecated ID	Version Tracking			Editor Notes
Parent Class	FIEIG	Identifier	Definition	Guidance Further details regarding the methods used to	Examples		Truoming	_		
				process raw data, and/or generate assemblies.						
				and/or generate consensus sequences can. This						
				information can be provided in an SOP or	https://github.c					
				protocol or pipeline/workflow. Provide the name and version number of the protocol, or a GitHub	om/phac-nml/n					
Bioinformatics and QC metrics	bioinformatics protocol	GENEPIO:0001489	A description of the overall bioinformatics strategy used.	link to a pipeline or workflow.	f		1.0.0	1.0.0	1.0.0	
	Taxonomic identification information	GENEPIO:0101082					1.0.0	1.0.0	1.0.0	
	Taxonomic facilities and information	02112110.0101002					1.0.0	1.0.0	1.0.0	
					Bowtie2,					
Taxonomic identification information		GENEPIO:0100832	The name of the software used to map sequence reads to a reference	5	BWA-MEM,		1.0.0	100	100	
Taxonomic identification information	read mapping software name	GENEPIO:0100032	genome or set of reference genes.	Provide the name of the read mapping software.	торпац		1.0.0	1.0.0	1.0.0	
			The version of the software used to map sequence reads to a reference	Provide the version number of the read mapping						
Taxonomic identification information	read mapping software version	GENEPIO:0100833	genome or set of reference genes.		2.5.1		1.0.0	1.0.0	1.0.0	
Taxonomic identification information	taxonomic reference database name	GENEPIO:0100834	The name of the taxonomic reference database used to identify the organism.	Provide the name of the taxonomic reference database.	NCBITaxon					
Taxonomic Identification Information	daxonomic reference database name	OLIVEI 10:0100004	organism.	database.	IVODITAXOII					
	l		The version of the taxonomic reference database used to identify the	Provide the version number of the taxonomic						
Taxonomic identification information	taxonomic reference database version	GENEPIO:0100835	organism.	reference database.	1.3		1.0.0	1.0.0	1.0.0	
			The filename of the report containing the results of a taxonomic	Provide the filename of the report containing the	WWtax report					
Taxonomic identification information	taxonomic analysis report filename	GENEPIO:0101074	analysis.	results of the taxonomic analysis.	Feb1_2024.doc		1.0.0	1.0.0	1.0.0	
				Providing the date that an analyis was performed						
				can help provide context for tool and reference database versions. Provide the date that the						
				taxonomic analysis was performed in ISO 8601						
Taxonomic identification information	taxonomic analysis date	GENEPIO:0101075	The date a taxonomic analysis was performed.	format, i.e. "YYYY-MM-DD".	2024-02-01		1.0.0	1.0.0	1.0.0	
				Provide a description of the read mapping	D					
Taxonomic identification information	read mapping criteria	GENEPIO:0100836	A description of the criteria used to map reads to a reference sequence.	criteria.	Phred score >20		1.0.0	1.0.0	1.0.0	
	Pathogen diagnostic testing	GENEPIO:0001506					1.00	1.0.0	1.0.0	
	r attrogen diagnostic testing	GENET 10:0001300		Provide the full name of the gene used in the			1.0.0	1.0.0	1.0.0	
				test. Standardized gene names can be found in						
				the Gene Ontology using this look-up service:						
Pathogen diagnostic testing	genetic target name	GENEPIO:0101116	The name of the genetic marker used for testing.	https://bit.ly/2Sq1LbI	gyrase A		1.0.0	1.0.0	1.0.0	
Pathogen diagnostic testing	genetic target region	GENEPIO:0101117					1.0.0	1.0.0	1.0.0	
Pathogen diagnostic testing Pathogen diagnostic testing	genetic target region genetic target region reference genome	GENEPIO:0101117 GENEPIO:0101118					1.0.0	1.0.0	1.0.0	
				Calcular coulos form the cirls for a societa de			1.0.0	1.0.0	1.0.0	
				Select a value from the pick list provided, to describe whether a target was determined to be	diagnostic		1.0.0	1.0.0	1.0.0	
			The binary value of the result from a diagnostic test.	Select a value from the pick list provided, to describe whether a target was determined to be present or absent within a sample.	diagnostic target present		1.0.0	1.0.0	1.0.0	
Pathogen diagnostic testing	genetic target region reference genome	GENEPIO:0101118	The binary value of the result from a diagnostic test.	describe whether a target was determined to be	diagnostic target present					
Pathogen diagnostic testing	genetic target region reference genome	GENEPIO:0101118	The binary value of the result from a diagnostic test.	describe whether a target was determined to be present or absent within a sample.	diagnostic target present					
Pathogen diagnostic testing	genetic target region reference genome	GENEPIO:0101118	The binary value of the result from a diagnostic test. The value of the result from a diagnostic test.	describe whether a target was determined to be	diagnostic target present					
Pathogen diagnostic testing Pathogen diagnostic testing	genetic target region reference genome diagnostic target presence	GENEPIO:0101118 GENEPIO:0100962		describe whether a target was determined to be present or absent within a sample. Provide the numerical result of a diagnostic test	target present		1.0.0	1.0.0	1.0.0	
Pathogen diagnostic testing Pathogen diagnostic testing	genetic target region reference genome diagnostic target presence	GENEPIO:0101118 GENEPIO:0100962		describe whether a target was determined to be present or absent within a sample. Provide the numerical result of a diagnostic test (no need to include units).	target present		1.0.0	1.0.0	1.0.0	
Pathogen diagnostic testing Pathogen diagnostic testing Pathogen diagnostic testing	genetic target region reference genome diagnostic target presence diagnostic measurement value	GENEPIO:0101118 GENEPIO:0100962 GENEPIO:0100963	The value of the result from a diagnostic test.	describe whether a target was determined to be present or absent within a sample. Provide the numerical result of a diagnostic test (no need to include units). Select a value from the pick list provided, to	target present 1000 cycle threshold		1.0.0	1.0.0	1.0.0	
Pathogen diagnostic testing Pathogen diagnostic testing	genetic target region reference genome diagnostic target presence	GENEPIO:0101118 GENEPIO:0100962		describe whether a target was determined to be present or absent within a sample. Provide the numerical result of a diagnostic test (no need to include units).	target present		1.0.0	1.0.0	1.0.0	
Pathogen diagnostic testing Pathogen diagnostic testing Pathogen diagnostic testing	genetic target region reference genome diagnostic target presence diagnostic measurement value	GENEPIO:0101118 GENEPIO:0100962 GENEPIO:0100963	The value of the result from a diagnostic test.	describe whether a target was determined to be present or absent within a sample. Provide the numerical result of a diagnostic test (no need to include units). Select a value from the pick list provided, to	target present 1000 cycle threshold		1.0.0	1.0.0	1.0.0	
Pathogen diagnostic testing Pathogen diagnostic testing Pathogen diagnostic testing Pathogen diagnostic testing	genetic target region reference genome diagnostic target presence diagnostic measurement value diagnostic measurement unit	GENEPIO:0101118 GENEPIO:0100962 GENEPIO:0100963 GENEPIO:0100964	The value of the result from a diagnostic test. The unit of the result from a diagnostic test.	describe whether a target was determined to be present or absent within a sample. Provide the numerical result of a diagnostic test (no need to include units). Select a value from the pick list provided, to describe the units of the given diagnostic test. Select a value from the pick list provided to describe the method used for a given diagnostic describe the method used for a given diagnostic.	1000 cycle threshold (Ct)		1.0.0	1.0.0	1.0.0	
Pathogen diagnostic testing Pathogen diagnostic testing Pathogen diagnostic testing	genetic target region reference genome diagnostic target presence diagnostic measurement value	GENEPIO:0101118 GENEPIO:0100962 GENEPIO:0100963	The value of the result from a diagnostic test.	describe whether a target was determined to be present or absent within a sample. Provide the numerical result of a diagnostic test (no need to include units). Select a value from the pick list provided, to describe the units of the given diagnostic test. Select a value from the pick list provided to describe the method used for a given diagnostic describe the method used for a given diagnostic.	target present 1000 cycle threshold		1.0.0	1.0.0	1.0.0	
Pathogen diagnostic testing Pathogen diagnostic testing Pathogen diagnostic testing Pathogen diagnostic testing	genetic target region reference genome diagnostic target presence diagnostic measurement value diagnostic measurement unit	GENEPIO:0101118 GENEPIO:0100962 GENEPIO:0100963 GENEPIO:0100964	The value of the result from a diagnostic test. The unit of the result from a diagnostic test.	describe whether a target was determined to be present or absent within a sample. Provide the numerical result of a diagnostic test (no need to include units). Select a value from the pick list provided, to describe the units of the given diagnostic test. Select a value from the pick list provided to describe the method used for a given diagnostic describe the method used for a given diagnostic.	1000 cycle threshold (Ct)		1.0.0	1.0.0	1.0.0	
Pathogen diagnostic testing	genetic target region reference genome diagnostic target presence diagnostic measurement value diagnostic measurement unit diagnostic measurement method	GENEPIO:0101118 GENEPIO:0100962 GENEPIO:0100963 GENEPIO:0100964 GENEPIO:0100965	The value of the result from a diagnostic test. The unit of the result from a diagnostic test.	describe whether a target was determined to be present or absent within a sample. Provide the numerical result of a diagnostic test (no need to include units). Select a value from the pick list provided, to describe the units of the given diagnostic test. Select a value from the pick list provided to describe the method used for a given diagnostic describe the method used for a given diagnostic.	1000 cycle threshold (Ct)		1.0.0	1.0.0	1.0.0	
Pathogen diagnostic testing Pathogen diagnostic testing Pathogen diagnostic testing Pathogen diagnostic testing	genetic target region reference genome diagnostic target presence diagnostic measurement value diagnostic measurement unit	GENEPIO:0101118 GENEPIO:0100962 GENEPIO:0100963 GENEPIO:0100964	The value of the result from a diagnostic test. The unit of the result from a diagnostic test.	describe whether a target was determined to be present or absent within a sample. Provide the numerical result of a diagnostic test (no need to include units). Select a value from the pick list provided, to describe the units of the given diagnostic test. Select a value from the pick list provided to describe the method used for a given diagnostic describe the method used for a given diagnostic.	1000 cycle threshold (Ct)		1.0.0	1.0.0	1.0.0	
Pathogen diagnostic testing	genetic target region reference genome diagnostic target presence diagnostic measurement value diagnostic measurement unit diagnostic measurement method	GENEPIO:0101118 GENEPIO:0100962 GENEPIO:0100963 GENEPIO:0100964 GENEPIO:0100965	The value of the result from a diagnostic test. The unit of the result from a diagnostic test.	describe whether a target was determined to be present or absent within a sample. Provide the numerical result of a diagnostic test (no need to include units). Select a value from the pick list provided, to describe the units of the given diagnostic test. Select a value from the pick list provided to describe the method used for a given diagnostic describe the method used for a given diagnostic.	1000 cycle threshold (Ct)		1.0.0	1.0.0	1.0.0	
Pathogen diagnostic testing	genetic target region reference genome diagnostic target presence diagnostic measurement value diagnostic measurement unit diagnostic measurement method	GENEPIO:0101118 GENEPIO:0100962 GENEPIO:0100963 GENEPIO:0100964 GENEPIO:0100965	The value of the result from a diagnostic test. The unit of the result from a diagnostic test.	describe whether a target was determined to be present or absent within a sample. Provide the numerical result of a diagnostic test (no need to include units). Select a value from the pick list provided, to describe the units of the given diagnostic test. Select a value from the pick list provided to describe the method used for a given diagnostic describe the method used for a given diagnostic.	1000 cycle threshold (Ct)		1.0.0	1.0.0	1.0.0	
Pathogen diagnostic testing	genetic target region reference genome diagnostic target presence diagnostic measurement value diagnostic measurement unit diagnostic measurement method	GENEPIO:0101118 GENEPIO:0100962 GENEPIO:0100963 GENEPIO:0100964 GENEPIO:0100965	The value of the result from a diagnostic test. The unit of the result from a diagnostic test.	describe whether a target was determined to be present or absent within a sample. Provide the numerical result of a diagnostic test (no need to include units). Select a value from the pick list provided, to describe the units of the given diagnostic test. Select a value from the pick list provided to describe the method used for a given diagnostic describe the method used for a given diagnostic.	1000 cycle threshold (Ct)		1.0.0	1.0.0	1.0.0	
Pathogen diagnostic testing	genetic target region reference genome diagnostic target presence diagnostic measurement value diagnostic measurement unit diagnostic measurement method diagnostic testing threshold value	GENEPIO:0101118 GENEPIO:0100962 GENEPIO:0100963 GENEPIO:0100964 GENEPIO:0100965 GENEPIO:0101104	The value of the result from a diagnostic test. The unit of the result from a diagnostic test.	describe whether a target was determined to be present or absent within a sample. Provide the numerical result of a diagnostic test (no need to include units). Select a value from the pick list provided, to describe the units of the given diagnostic test. Select a value from the pick list provided to describe the method used for a given diagnostic describe the method used for a given diagnostic.	1000 cycle threshold (Ct)		1.0.0	1.0.0 1.0.0 1.0.0 1.0.0	1.0.0	
Pathogen diagnostic testing	genetic target region reference genome diagnostic target presence diagnostic measurement value diagnostic measurement unit diagnostic measurement method diagnostic testing threshold value	GENEPIO:0101118 GENEPIO:0100962 GENEPIO:0100963 GENEPIO:0100964 GENEPIO:0100965 GENEPIO:0101104	The value of the result from a diagnostic test. The unit of the result from a diagnostic test.	describe whether a target was determined to be present or absent within a sample. Provide the numerical result of a diagnostic test (no need to include units). Select a value from the pick list provided, to describe the units of the given diagnostic test. Select a value from the pick list provided to describe the method used for a given diagnostic describe the method used for a given diagnostic.	1000 cycle threshold (Ct)		1.0.0	1.0.0 1.0.0 1.0.0 1.0.0	1.0.0	
Pathogen diagnostic testing Pathogen diagnostic testing	genetic target region reference genome diagnostic target presence diagnostic measurement value diagnostic measurement unit diagnostic measurement method diagnostic testing threshold value	GENEPIO:0101118 GENEPIO:0100962 GENEPIO:0100963 GENEPIO:0100964 GENEPIO:0100965 GENEPIO:0101104	The value of the result from a diagnostic test. The unit of the result from a diagnostic test.	describe whether a target was determined to be present or absent within a sample. Provide the numerical result of a diagnostic test (no need to include units). Select a value from the pick list provided, to describe the units of the given diagnostic test. Select a value from the pick list provided to describe the method used for a given diagnostic describe the method used for a given diagnostic.	1000 cycle threshold (Ct)		1.0.0 1.0.0 1.0.0 1.0.0	1.0.0 1.0.0 1.0.0 1.0.0	1.0.0	
Pathogen diagnostic testing	genetic target region reference genome diagnostic target presence diagnostic measurement value diagnostic measurement unit diagnostic measurement method diagnostic testing threshold value	GENEPIO:0101118 GENEPIO:0100962 GENEPIO:0100963 GENEPIO:0100964 GENEPIO:0100965 GENEPIO:0101104	The value of the result from a diagnostic test. The unit of the result from a diagnostic test.	describe whether a target was determined to be present or absent within a sample. Provide the numerical result of a diagnostic test (no need to include units). Select a value from the pick list provided, to describe the units of the given diagnostic test. Select a value from the pick list provided to describe the method used for a given diagnostic describe the method used for a given diagnostic.	1000 cycle threshold (Ct)		1.0.0	1.0.0 1.0.0 1.0.0 1.0.0	1.0.0	
Pathogen diagnostic testing Pathogen diagnostic testing	genetic target region reference genome diagnostic target presence diagnostic measurement value diagnostic measurement unit diagnostic measurement method diagnostic testing threshold value	GENEPIO:0101118 GENEPIO:0100962 GENEPIO:0100963 GENEPIO:0100964 GENEPIO:0100965 GENEPIO:0101104	The value of the result from a diagnostic test. The unit of the result from a diagnostic test.	describe whether a target was determined to be present or absent within a sample. Provide the numerical result of a diagnostic test (no need to include units). Select a value from the pick list provided, to describe the units of the given diagnostic test. Select a value from the pick list provided to describe the method used for a given diagnostic describe the method used for a given diagnostic.	1000 cycle threshold (Ct)		1.0.0 1.0.0 1.0.0 1.0.0	1.0.0 1.0.0 1.0.0 1.0.0	1.0.0	
Pathogen diagnostic testing Pathogen diagnostic testing	genetic target region reference genome diagnostic target presence diagnostic measurement value diagnostic measurement unit diagnostic measurement method diagnostic testing threshold value diagnostic testing threshold units	GENEPIO:0101118 GENEPIO:0100962 GENEPIO:0100963 GENEPIO:0100964 GENEPIO:0100965 GENEPIO:0101104 GENEPIO:0101105	The value of the result from a diagnostic test. The unit of the result from a diagnostic test.	describe whether a target was determined to be present or absent within a sample. Provide the numerical result of a diagnostic test (no need to include units). Select a value from the pick list provided, to describe the units of the given diagnostic test. Select a value from the pick list provided to describe the method used for a given diagnostic describe the method used for a given diagnostic.	1000 cycle threshold (Ct)		1.0.0 1.0.0 1.0.0 1.0.0	1.0.0 1.0.0 1.0.0 1.0.0	1.0.0 1.0.0 1.0.0 1.0.0	
Pathogen diagnostic testing Pathogen diagnostic testing	genetic target region reference genome diagnostic target presence diagnostic measurement value diagnostic measurement unit diagnostic measurement method diagnostic testing threshold value	GENEPIO:0101118 GENEPIO:0100962 GENEPIO:0100963 GENEPIO:0100964 GENEPIO:0100965 GENEPIO:0101104	The value of the result from a diagnostic test. The unit of the result from a diagnostic test.	describe whether a target was determined to be present or absent within a sample. Provide the numerical result of a diagnostic test (no need to include units). Select a value from the pick list provided, to describe the units of the given diagnostic test. Select a value from the pick list provided to describe the method used for a given diagnostic describe the method used for a given diagnostic.	1000 cycle threshold (Ct)		1.0.0 1.0.0 1.0.0 1.0.0	1.0.0 1.0.0 1.0.0 1.0.0	1.0.0	

		Ontology				Deprecated Label Deprecated ID	Version			Editor Notes
Parent Class	Field	Identifier	Definition	Guidance	Examples		Tracking			
Risk assessment information	prevalence metrics	GENEPIO:0100480	Metrics regarding the prevalence of the pathogen of interest obtained from a surveillance project.	total samples collected", "Number of positive	Number of tota samples collected, Number of positive samples		1.0.0	1.0.0	1.0.0	
Risk assessment information	prevalence_metrics_details	GENEPIO:0100481	The details pertaining to the prevalence metrics from a surveillance project.	If there are details pertaining to samples or organism counts in the sample plan that might be informative, provide details using free text.	Hazard organism counts (i.e. Salmonella) do not distinguish between serovars.		1.0.0	1.0.0	1.0.0	
Risk assessment information	stage_of_production	GENEPIO:0100482	The stage of food production.	Provide the stage of food production as free text.	Abattoir [ENVO:010009 25]					
Risk assessment information	experimental_intervention	GENEPIO:0100483	The category of the experimental intervention applied in the food production system.	In some surveys, a particular intervention in the food supply chain in studied. If there was an intervention specified in the sample plan, select the intervention category from the pick list provided.	Vaccination [NCIT:C15346]		1.0.0	1.0.0	1.0.0	
Risk assessment information	experiment_intervention_details	GENEPIO:0100484	The details of the experimental intervention applied in the food production system.	If an experimental intervention was applied in the survey, provide details in this field as free text.			1.0.0	1.0.0	1.0.0	