```
output directory
      aligned_reads
             <reference_id>-
                                        -<sample_id>.bam
                                                                                                                                Unfiltered read alignements to references in BAM format
          - <reference_id>--<sample_id>.formatted.bam
- <reference_id>--<sample_id>.formatted.bam.csi
- <reference_id>--<sample_id>.formatted.bam.csi
- <reference_id>--<sample_id>.formatted.MarkDuplicates.metrics.txt
                                                                                                                                Quality filtered read alignements to references in BAM format
Index for the filtered BAM files produced by samtools index
Output from picard MarkDuplicates containing summary data tables
      annotations
             <method>
                - <sample_id>.embl
- <sample_id>.faa
- <sample_id>.ffn
                                                                                                                                Genome annotations and sequences in (multi) EMBL format CDS/ORF amino acid sequences in FASTA format Feature nucleotide sequences in FASTA format
                                                                                                                                reature nucleotice sequences in FASTA format
Replicon/contig DNA sequences in FASTA format
Annotations of genomes in (multi) GenBank format
Annotations of genomes in GFF3 format
Hypothetical protein CDS amino acid sequences in FASTA format
Information on hypothetical protein CDSs in TSV format
Information for protein CDSs in TSV format
                 - <sample_id>.fna
                - <sample_id>.gbff
- <sample_id>.gff3
- <sample_id>.hypotheticals.faa
                - <sample_id>.hypotheticals.tsv
- <sample_id>.tsv
                   <sample_id>.txt
                                                                                                                                Genome annotation summary statistics in plain text format
       assemblies
             flye
                .ye — <sample_id>.assembly_graph.gfa.gz
— <sample_id>.assembly_graph.gv.gz
— <sample_id>.assembly_info.txt
— <sample_id>.assembly.fasta.gz
— <sample_id>.flye.log
                                                                                                                               Genome assembly graphs in gzipped GFA format
Genome assembly in gzipped Graphviz format
Statistics on contigs produced by Flye in TSV fomrat
Genome assemblies in gzipped FASTA format
Log file produced by Flye in plain text format
Parameters used to run Flye in JSON format
                - <sample_id>.params.json
             spades
                - <sample_id>.assembly.gfa.gz
- <sample_id>.scaffolds.fa.gz
- <sample_id>.spades.log
                                                                                                                               Genome assembly graphs in gzipped GFA format
Genome assemblies in gzipped FASTA format
Log file produced by Spades in plain text format
Warnings produced by Spades in plain text format
                - <sample_id>.warnings.log
      busco
             <sample_id>---<database>-busco
<sample_id>---<database>-busco.batch_summary.txt
<sample_id>---<database>-busco.log
                                                                                                                             : BUSCO output directory
: BUSCO analysis summary statistics in TSV format
: Log file produced by BUSCO in plain text format
            : Genome annotations downloaded by the pipeline in gzipped GFF format
                - <reference_id>.fasta.gz
                                                                                                                             : Genome assemblies downloaded by the pipeline in gzipped FASTA format
             reads
                 - <reference_id>_<orientation>.fastq.gz
                                                                                                                             : Reads downloaded by the pipeline in gzipped FASTQ format
      fastp
                                                                                                                             : FASTP report with read quality and adapter trimming statistics in HTML format : FASTP report with read quality and adapter trimming statistic in JSON format : Log file produced by FASTP
          - <sample_id>.fastp.html
- <sample_id>.fastp.json
- <sample_id>.fastp.log
      metadata
      - reference_metadata.tsv
                                                                                                                             : Reference metadata in TSV format : Sample metadata in TSV format
            sample metadata.tsv
      Statistics like time and ram usage for pipeline execution as a HTML report Statistics like time and ram usage for pipeline execution in TSV format Errors, warnings, and messages produced by the pipeline in TSV format Parameters used when running the pipeline in JSON format Pipeline run metadata in YML format Flowchart of the pathogensurveillance pipeline automatically generated by Nextflow Versions of software used in the pipeline in YML format
            execution_trace_<date>.txt
messages.tsv
          params_ctsv
- params_date>.json
- pathogensurveillance_run_info.yml
- pipeline_dag_date>.html
- version_info.yml
     pirate
            <report_id>_results
                                                                                                                             : Pirate output directory with gene orthology information
     bocb
      <report_id>_pocp.tsv
quality_control
                                                                                                                             : Percentage of conserved proteins in TSV format
           fastqc
                                                                                                                             : FastQC report on read quality in HTML format : Zipped directory of FastQC output
                multiqc
                    <report_id>_multiqc
                                                                                                                             : Directory of MultiQC output with intermediate files used to make the MultiQC report : MultiQC report combining the summary quality control output in HTML format
                        - multiqc_report.html
             nanoplot
                                                                                                                             : Nanoplot report on read quality in HTML format : Nanoplot report on read quality in plain text format
             quast
                 - <sample_id>.tsv
- <sample_id>
- report.html
                                                                                                                             : Quast summary statistics on genome assembly quality in headerless TSV format
                        - report .html
                                                                                                                             : Ouast report with data on genome assembly quality in HTML format
      reference_data
considered
             : Metadata of available assemblies on NCBI in TSV format
             --- <sample_id>.tsv
selected
                                                                                                                             : Metadata of references selected for download from NCBI in TSV format
                - <report_id> busco_references.tsv
- <report_id>_core_references.tsv
- <report_id>_mapping_references.tsv
                                                                                                                             : IDs of references selected for multigene phylogenies in TSV format
: IDs of references selected for multigene phylogenies in TSV format
: IDs of references selected for multigene phylogenies in TSV format
      reports
             <report_id>_pathsurveil_report.html
                                                                                                                             : Primary report for pathogensurveillance in HTML format
      sendsketch
            <sample_id>.txt
                                                                                                                             : Table returned by BBmap sendsketch with initial identifications in TSV format
      - <gene_id>.aligned.fas
                                                                                                                             : Aligned sequences for each gene shared amoung a group of organisms in FASTA format
      <report_id>_comp.csv
                                                                                                                             : Estimated ANI similarity matrix made by sourmash compare in CSV format
             sketches
                  - <id>.sia
                                                                                                                             : FracMinHash signature of the given sequence made by sourmash sketch in JSON
            busco
                 - <report_id>--<cluster_id>.treefile
                                                                                                                             : Trees infered from multigene phylogeny in Newick format
                  - <report_id>--<cluster_id>.treefile
                                                                                                                             : Trees infered from multigene phylogeny in Newick format
             : Trees inferred from variant analysis in Newick format
       variants
          riants
- <report_id>--<reference_id>.fasta
- <report_id>--<reference_id>.vcf.gz
- <report_id>--<reference_id>.vcffilter.vcf.gz
                                                                                                                             : Filtered variants in FASTA format
: Unfiltered variants in VCF format
                                                                                                                             : Filtered variants in VCF format
```