

## Glossary of less known terms used in this course

- **AMR:** Antimicrobial Resistance, which occurs when a microbe or pathogen genome evolves or acquires genes or plasmids that confer resistance to an antimicrobial.
- **Antimicrobials:** agents (e.g drugs) that can interrupt the life cycle or replication of a microbe or pathogen.
- **Endemic:** refers to a disease that is prevalent in or restricted to a particular location, region, or population.
- **Epidemic:** is an increase in the expected number of cases of a disease in a particular population and area.
- **HIC:** High-Income Countries, which is defined as a group of countries with highly developed economies by the World Bank classification.
- **Limnology:** the study of aquatic ecosystems in inland waters such as lakes, reservoirs, rivers, streams, wetlands and groundwater.
- **LMICs:** Low-and-Middle-Income Countries, a group of countries with less developed economies by the World Bank classification.
- **MDR:** Multidrug-Resistant, which refers to genes or pathogen strains that confer resistance to most or all available antimicrobials.
- **NCD:** Non-Communicable Disease, a disease that is not transmissible from one person to another. Instead, they are the result of a combination of genetic, physiological, environmental and behavioural factors.
- **NGS:** Next-Generation Sequencing, a high-throughput sequencing methodology.
- **ONT:** Oxford Nanopore Technologies, a sequencing technology company. Their sequencing platform is also referred to as ONT.
- **Outbreak:** is a sudden increase in the expected number of cases of a disease in a limited area.

- **Pandemic:** refers to an epidemic that has spread over several countries or continents, usually affecting a large number of people.
- **Plasmid:** in nature, this is a small circular double-strand DNA molecule that can benefit survival or selective advantage to bacteria.
- **RT-qPCR:** Reverse Transcriptase Quantitative PCR, also known as reverse transcriptase real-time PCR. A PCR method to quantify RNA copies present in a sample; includes a step to synthesise cDNA from the template RNA before the PCR amplification.
- **SEDRIC:** Surveillance and Epidemiology of Drug-resistance Infections Consortium, a genomics working group to monitor drug-resistance.
- **TB:** is the acronym for tuberculosis, a lung infectious disease caused by the pathogenic bacteria *Mycobacterium tuberculosis*.
- **Transposon:** is a DNA fragment that can change its position in a genome through cellular mechanisms.
- **VOC:** SARS-CoV-2 Variant of Concern, a viral variant with mutations that confer a beneficial feature to the virus, e.g. increased transmissibility or virulence.
- **WASH:** Water, Sanitation and Hygiene, a commonly used term among stakeholders advocating for universal access to WASH, especially in resource-limited settings.
- **WGS:** Whole-Genome Sequencing, a method of determining the entirety, or almost the entirety, of an organism's genomic DNA sequence all at once. This entails sequencing all of an organism's chromosomal DNA, as well as, DNA found in mitochondria and, in plants, chloroplasts.