Influenza and SARS-CoV-2 Integrated Surveillance
LABORATORY TESTING ALGORITHM
1 – Samples collected out of routine surveillance from events of public health interests. International Health Regulations 2005: shorturl.at/fJL02

2 – Recommended clinical samples based on laboratory diagnostic: samples with Ct values ≤ 25; samples transported through an unbroken cold chain and stored under ultra-low temperature. Samples with Ct values above 30 can be sequenced to determine influenza subtype/lineage and SARS-CoV-2 lineage/variant. Recommended selection criteria for representativeness: different age groups; different geographic locations within the country; different time points; patients representing the spectrum of disease meeting case definitions in use for ILI/ARI or SARI; clinically significant cases from sentinel surveillance (e.g. fatal cases, vaccinated individuals, immunocompromised individuals, patients receiving treatment such as antivirals, plasma therapy or monoclonal antibodies), re-infected cases. https://apps.who.int/iris/handle/10665/336689

3 – Other respiratory viruses testing conducted molecularly or by immunofluorescence according to the country surveillance strategy. According to selection criteria According to each laboratory strategy
1 – Samples collected out of routine surveillance from events of public health interests. International Health Regulations: shorturl.at/sCNX9

2 – Recommended clinical samples based on laboratory diagnostic: samples with Ct values ≤ 25; samples transported through an unbroken cold chain and stored under ultra-low temperature. Samples with Ct values above 30 can be sequenced to determine influenza subtype/lineage and SARS-CoV-2 lineage/variant. Recommended selection criteria for representativeness: different age groups; different geographic locations within the country; different time points; patients representing the spectrum of disease meeting case definitions in use for ILI/ARI or SARI; clinically significant cases from sentinel surveillance (e.g. fatal cases, vaccinated individuals, immunocompromised individuals, patients receiving treatment such as antivirals, plasma therapy or monoclonal antibodies), re-infected cases. https://apps.who.int/iris/handle/10665/336689
3 – Influenza: Clinical samples recently collected (within 4-8 weeks) specimens; different type/subtypes; from: different age groups; different geographical locations; Severe Acute Respiratory Inflection (SARI) cases; Influenza-Like (ILI) cases; atypical pneumonia cases; unusual outbreaks; clinically significant cases (e.g. fatal cases, vaccinated patients, immunocompromised patients, patients receiving antiviral treatment, viruses known to be resistant to antiviral drugs). Samples with Ct value ≤ 30. Same viruses should not be sent to multiple WHO CCs. Operational Guidance on Sharing Seasonal Influenza viruses: https://t.ly/JU-6

According to selection criteria
According to laboratory capacity
1 – Samples collected out of routine surveillance from events of public health interests. International Health Regulations: https://www.who.int/publications/i/item/9789241580410?msclkid=128025ecaabc11eca7819f61281e007b

2 – Recommended clinical samples based on laboratory diagnostic: samples with Ct values ≤ 25; samples transported through an unbroken cold chain and stored under ultra-low temperature. Samples with Ct values above 30 can be sequenced to determine influenza subtype/lineage and SARS-CoV-2 lineage/variant. Recommended selection criteria for representativeness: different age groups; different geographic locations within the country; different time points; patients representing the spectrum of disease meeting case definitions in use for ILI/ARI or SARI; clinically significant cases from sentinel surveillance (e.g. fatal cases, vaccinated individuals, immunocompromised individuals, patients receiving treatment such as antivirals, plasma therapy or monoclonal antibodies), re-infected cases. https://apps.who.int/iris/handle/10665/336689

NIC testing for Influenza and SARS-CoV-2 using CDC multiplex assay
3 – Other respiratory viruses testing conducted molecularly or by immunofluorescence according to the country.

4 – Influenza: Clinical samples recently collected (within 4-8 weeks) specimens; different type/subtypes; from: different age groups; different geographical locations; Severe Acute Respiratory Inflection (SARI) cases; Influenza-Like (ILI) cases; atypical pneumonia cases; unusual outbreaks; clinically significant cases (e.g. fatal cases, vaccinated patients, immunocompromised patients, patients receiving antiviral treatment, viruses known to be resistant to antiviral drugs). Samples with Ct value ≤ 30. Same viruses should not be sent to multiple WHO CCs. Operational Guidance on Sharing Seasonal Influenza viruses: https://www.who.int/publications/i/item/operational-guidance-on-sharing-seasonal-influenza-viruses

According to selection criteria
According to each laboratory strategy
According to laboratory capacity