Rationale for referring samples for Influenza surveillance

The NVRL is the designated World Health Organization (WHO) National Influenza Centre (NIC) for the Republic of Ireland and, as such, is required to provide virus isolates for characterisation, risk assessment, and antiviral susceptibility monitoring. The results form the basis for WHO recommendations on the composition of influenza vaccine each year, as well as relevant risk assessment activities of WHO.

In order to provide representative national data and to maximise the detection of genetic variants we would be extremely grateful if you would consider referring positive Influenza A samples for molecular sequencing and antigenic characterisation in the following circumstances;

Clinically significant isolates

Influenza A

- 1. Influenza A positive samples which cannot be subtyped as H3 or H1 N1 pdm 09 (where subtyping is performed)
- 2. Influenza A positive samples from patients with a recent travel history to Asia.
- 3. Fatal cases of Influenza A infection
- 4. Cases requiring ITU/HDU admission, in particular in those who have no underlying clinical condition or medical history of note
- 5. Patients who are known to have received seasonal Influenza vaccine but subsequently develop Influenza A infection which results in admission to hospital

Influenza B

- 1. Fatal Cases of Influenza B infection
- 2. Cases requiring ITU/HDU admission, in particular in those who have no underlying clinical condition or medical history of note
- 3. Patients who are known to have received seasonal Influenza vaccine but subsequently develop Influenza B infection which results in admission to hospital

In referring samples to the NVRL please state clearly that the sample is for surveillance purposes and the following code "ISEQ" should be noted on the referral form. Clinical details would be appreciated.

Sample Types

Please note, where possible a nasopharyngeal aspirate or brochoalveolar lavage is the specimen of choice for genetic/antigenic characterisation.

Oseltamivir Resistance Testing

NVRL can provide testing for oseltamivir resistance on request. Please contact the NVRL clinical team on 01 7164418 to discuss the case & arrange testing if required.

Interlaboratory Verifications

As part of ongoing quality assurance the NVRL is very interested in participating in interlaboratory verifications for respiratory virus assays/platforms. Please contact Dr Suzie Coughlan (suzie.coughlan@ucd.ie (01 716 1359) if you are interested in sending a proportion of positive/negative samples for testing. A full report will be provided for your institution.