Guidance for surveillance to detect clusters/outbreaks of influenza or influenza-like illness or respiratory illness

Surveillance to detect outbreaks of influenza or influenza-like illness (ILI) or respiratory illness is currently in place. The purpose of this surveillance is to detect outbreaks of ILI, influenza A and influenza B and other respiratory pathogens e.g. respiratory syncytial virus, human metapneumovirus etc. in the community.

Surveillance of outbreaks will be confined to:

1. Clusters of influenza or ILI or respiratory illness in institutions e.g. schools, residential care facilities for the elderly, prisons, hospitals, special needs schools, etc.
2. Unusual clusters of serious illness suggestive of influenza

A case definition for the surveillance of clusters/outbreaks of ILI or influenza or respiratory illness in the above situations is outlined below:

Case Definition

Three or more cases of influenza-like illness (ILI) or influenza or serious respiratory illness arising within the same 72 hour period in the above settings/situations which meet the same clinical case definition and where an epidemiological link can be established.

Note:

In older adults, influenza symptoms may initially be very subtle and difficult to recognise. Instead, elderly patients may present only with cough, fatigue and confusion. The fever response may be more blunted in older adults and in nursing home elderly, influenza often fails to produce fever over 37.2°C. Elderly patients are also more susceptible to pulmonary complications from influenza. **Influenza may present in the elderly patient as an exacerbation of an underlying condition such as chronic pulmonary and cardiovascular disease, Asthma, Diabetes Mellitus etc. If an increased number of residents become unwell over a short period of time with respiratory illness, influenza should be suspected.**

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1 Influenza includes all types/subtypes of influenza i.e. A(H1)pdm09, influenza A(H3), influenza A (not subtyped), influenza A (unsubtypable) and influenza B

2 This does not preclude investigation at lower number of cases following public health risk assessment
ILI symptoms using the Irish case³ definition include:
Sudden onset of symptoms and at least one of the following four systemic symptoms: fever, malaise, headache, myalgia and at least one of the following three respiratory symptoms: cough, sore throat and shortness of breath.

The case definition for influenza is available at: http://www.hpsc.ie/hpsc/A-Z/Respiratory/Influenza/SeasonalInfluenza/CaseDefinitions/.

Actions to be taken by Public Health on receiving a report of a suspected cluster of ILI/influenza/respiratory illness

Once a suspected cluster of ILI/influenza/respiratory illness is reported to Public Health, the following actions should be considered:

1. Collect information on the number of suspect cases including symptoms.
2. Decide if the cluster meets the criteria outlined above including the case definition:
   a. If yes, then combined nose and throat swabs are taken from the initial cases (at least 2 cases and up to 5 cases depending on local resources). This may be carried out by the attending clinician.
   b. Swabs should be sent to the laboratory for routine influenza testing and in some instances testing for other respiratory pathogens using the multiplex-PCR.
   c. Treatment for influenza is recommended only if cases are in a defined risk group⁴ or have clinically severe illness. This decision will be based on the clinical judgment of the treating physician.
   d. Following a risk assessment by Public Health, advice may be given to initiate chemoprophylaxis which should be prescribed by the patient’s physician.
   e. Advise on infection prevention and control measures e.g. hand hygiene, respiratory etiquette, staying out of work/school while symptomatic etc as per HPSC guidance at: http://www.hpsc.ie/hpsc/A-Z/Respiratory/Influenza/SeasonalInfluenza/Infectioncontroladvice/

³ The Irish ILI definition is used by sentinel GPs for influenza surveillance
⁴ Defined risk groups are those with: Chronic respiratory disease including people on medication for asthma; Chronic heart disease; Chronic kidney disease; Chronic liver disease; Chronic neurological disease; Immunosuppression (whether caused by treatment or disease e.g. HIV); Diabetes mellitus; Haemoglobinopathies, Persons aged ≥ 65 years of age; Children < 2 years of age; Severely obese people (BMI ≥ 40), Pregnant women (including up to two weeks postpartum), Children with any condition (e.g. cognitive dysfunction, spinal cord injury, seizure disorder, or other neuromuscular disorder) that can compromise respiratory function especially those attending special schools/ day centres, Those with Down Syndrome and Children with moderate to severe neurodevelopmental disorders such as cerebral palsy and intellectual disability