

CANTERBURY PRIMARY RESPONSE GROUP UPDATE



Winter Planning

Every year in winter we see an upsurge in illness within our communities caused by respiratory viruses. What might cause very few symptoms for one individual may be enough to cause hospital admission in another. For this reason in Canterbury about 10 general practices are designated as surveillance practices to monitor influenza like illness (ILI) activity. This both informs clinicians what is currently circulating but also prepares the Canterbury health system to prepare for increased activity and patient presentations with a view to initiating winter capacity plans.

Influenza and Influenza Like Illness (ILI)

The surveillance practices are asked to report to ESR (the Institute of Environmental Science and Research) cases that they see of ILI from the 1st May through to 30th September in a typical year. The case definition of ILI is in the adjacent illustration.

ESR ILI SURVEILLANCE CASE DEFINITION

An acute respiratory illness with onset during the last 10 days with a history of fever, or measured fever of $\geq 38^{\circ}\text{C}$, cough and requiring a general practice consultation.

In practice most clinicians recognise that symptomatic influenza is characterised by sudden onset fevers, headache, myalgia and cough with a moderately severe illness.

However, in reality, when infected with the influenza virus only some individuals will become symptomatic. In 2009 with the novel pandemic Influenza A(H1N1)pdm09 coined as 'swine flu', studies looking at seroconversion rates found that those individuals who did seroconvert (had been infected and formed antibodies against that novel virus) split into three groups. About one third were entirely asymptomatic, one third felt they had experienced something akin to a cold and one third had a severe influenza illness.

Seasonal influenza will infect about 20-25% of the population every year but will likely only cause significant symptoms for about 5% of the population (or 20-25% of those infected). Many individuals may still be shedding virus but be asymptomatic.

The funded annual influenza vaccine has been quadrivalent since 2018 in NZ. The components are made up from the most likely circulating strains that are anticipated for the coming year: Influenza A(H3N2), Influenza A (H1N1)pdm09 and two strains of Influenza B.

Other Respiratory Viruses

Each week during the surveillance period Community and Public Health produce a respiratory virus report in Canterbury (able to be accessed through HealthPathways/Influenza infection and control). One feature of this report is to alert the health community to numbers of positive viral swabs (taken during hospital admissions, suspected community outbreaks and sentinel practices) and the rates for each viral type. It is often asked, what characteristics does each different virus exhibit? In reality every individual swabbed has exhibited ILI symptoms as per the above definition.

Most of the respiratory viruses would be indistinguishable to clinicians from each other and will at their worst cause some patients distress enough to cause hospital admission, when others will have only experienced a few days of a sniffle. Three viruses within the reports deserve attention:

- 1) The most prevalent virus isolated annually, apart from influenza, is rhinovirus, also referred to as the common cold. Normally colds differ in severity to true ILI. They normally cause milder illness, mild fever, mild headache, coryza with or without a cough.
- 2) Coronaviruses typically cause a longer lasting sinusitis and cough related to the post-nasal drip.
- 3) Respiratory Syncytial Virus (RSV) typically causes bronchiolitis in infants and children with a significant wheeze. This frequently leads to high paediatric admission rates and frequently an RSV wave precedes the influenza wave for any particular year.