The WHO National Influenza Centre, New Zealand

ESR - NCBID, Wallaceville



New Zealand's National Influenza Centre (NIC) has been recognised by the World Health Organization (WHO) since 1954.

It has a dual role as the national reference laboratory and in running New Zealand's national influenza surveillance. It provides the contact nationally and internationally for the virological and epidemiological surveillance of influenza. It also provides influenza virus isolates to the WHO Global Influenza Surveillance Network.

Influenza Surveillance at the NIC

Information on epidemiological and virological surveillance is reported and distributed weekly, monthly and annually to relevant national and international levels including WHO Flunet.

Influenza surveillance involves monitoring incidence and distribution of influenza, early detection of epidemics and identifying the dominant circulating strains. The surveillance system includes sentinel general practice surveillance, laboratory -based surveillance, hospital morbidity and mortality surveillance and vaccine coverage surveillance.

Sentinel General Practice (GP) Surveillance

Since 1991 ESR, through the NIC, has been operating the national sentinel general practitioners (GP) influenza surveillance.

Based on geographical and population distribution, about 80 volunteer sentinel GPs are recruited to participate in the surveillance by reporting influenza-like illness and providing respiratory specimens during the 'flu' season (May to September). Each sentinel practice records the daily number of consultations for influenza like illness and reports this to ESR weekly. Each sentinel practice also collects three respiratory samples from the first patient seen with an influenza like illness on Monday Tuesday and Wednesday of each week.



Laboratory-based Surveillance

ESR's National Influenza Centre and three hospital laboratories at Auckland, Waikato and Christchurch form a laboratory network. The NIC collates year-round laboratory testing information nationally from hospital in-and-out patients. The laboratory network conducts strain surveillance (initial typing and sub-typing) for influenza from the respiratory specimens collected from hospital patients.

Hospital Based Morbidity and Mortality Surveillance

Hospital admission and death data for influenza from the New Zealand Health Information Service's National Minimum Dataset forms the basis of influenza morbidity and mortality surveillance.

Vaccine Recommendations

The head of the NIC, currently Dr Sue Huang, also participates in the influenza vaccine recommendations for the Southern Hemisphere. The annual NIC vaccine recommendation report for New Zealand is available on <u>www.surv.esr.cri.nz</u>.

Other research

ESR, in collaboration with other partners of NCBID (MAF's Investigation and Diagnostic Centre and AgResearch), is undertaking an ongoing research "Risk-targeted study of avian influenza zoonosis". The study aims to improve our understanding of how viruses move from wild birds to poultry and what circumstances (if any) lead to these viruses appearing in humans.

In addition, the NIC participates in international monitoring and reporting. Recent publications include "Influenza surveillance in New Zealand in 2005" (New Zealand Medical Journal, 2007, 120(1256):2581-2593) and "Influenza surveillance and immunization in New Zealand, 1997-2006" (submitted to the journal *Influenza and Other Respiratory Viruses*).



More information

- ESR's annual national influenza surveillance programme starts in week 18 of the year (at the end of April) and continues for at least 22 weeks.
- Weekly, monthly and annual influenza reports are available at www.surv.esr.cri.nz./virology

For further information, please contact:

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