



DIRECTORATE
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THE SEASONAL INFLUENZA IS IMMINENT

Last December and in the beginning of this year, two cases of influenza A were confirmed. At the same time there has been an increase in attendance at a sentinel outpatient clinic in Reykjavik (Fig. 1) with a significant increase in acute respiratory infections and patients with influenza-like illness (ILI), all of which indicates the arrival of the seasonal influenza. Another indication is a significantly increased influenza activity in our neighbouring countries in the last few weeks. As yet there has not been any increase in attendance at the hospital emergency wards in Reykjavik (Fig. 2–4).

The use of antiviral drugs

In recent years, there has been limited usage of antiviral drugs for the treatment of influenza. In 2007 and 2008, Tamiflu® was prescribed to 500 patients and Relenza® to only six. These drugs may be helpful if treatment is started at an early stage of the disease and they have been assumed to be active against all of the three influenza subtypes circulating in wintertime (H1N1, H3N2 and influenza B).

Sensitivity testing of the influenza viruses (H1N1, H3N2 and influenza B) causing influenza in the United States and Europe has revealed that all of the H3N2 and B subtypes are sensitive to Tamiflu and Relenza while almost all of the H1N1 subtypes are resistant to Tamiflu but sensitive to Relenza. The resistance to Tamiflu is not related to the use of the drug.

This information has the following relevance in Iceland:

- It is of importance to know the types of influenza circulating in the country and doctors are encouraged to send

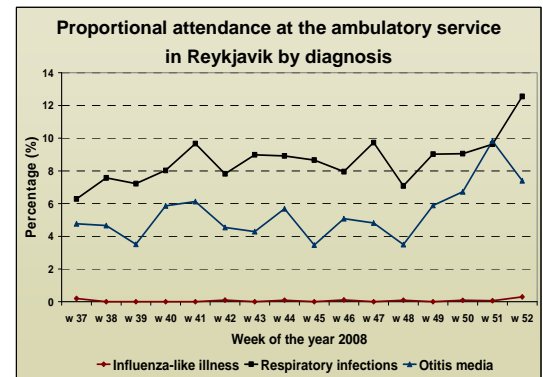


Figure 1

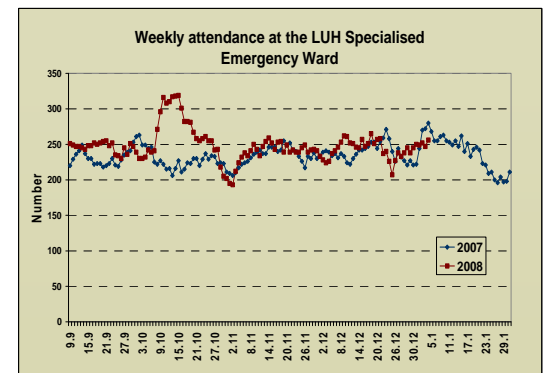


Figure 2

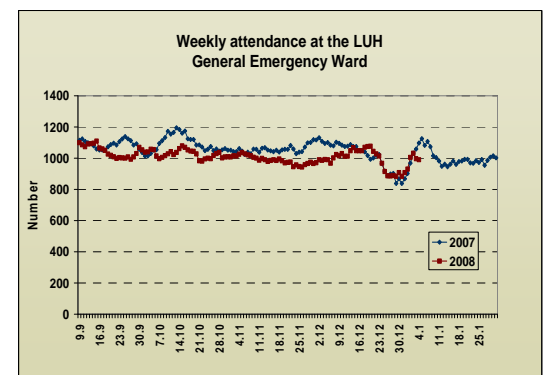


Figure 3

Cont. p. 2

A significantly increased influenza activity in our neighbouring countries in the last few weeks is among indications of an imminent influenza outbreak in Iceland.

nasopharyngeal samples from patients with ILI to the Department of Virology at Landspítali University Hospital (LUH), where it is possible to differentiate between the H1, H2 and B subtypes of the virus and consequently a good epidemiological picture of the epidemic will be obtained.

- If it is likely that the patient is infected with either H3 or B subtype, prescription of Tamiflu or Relenza is recommended if treatment is deemed necessary.
- If it is likely that the patient is infected with H1 subtype, Relenza is recommended.
- The best way to prevent influenza is vaccination. As recommended by ECDC,

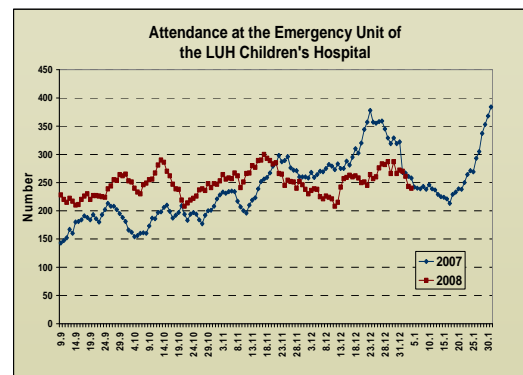


Figure 4

defined risk groups are encouraged to get the vaccination now since the epidemic is only in its initial stage.

*Haraldur Briem
Thorolfur Gudnason*

DIAGNOSES AT THE LUH DEPARTMENT OF VIROLOGY IN DECEMBER 2008

I. Respiratory infections

In December 2008, RSV was diagnosed in 30% of the samples sent to the department and therefore it is concluded that RSV epidemic is now ongoing. Herpes simplex was diagnosed in 25% of the samples and metapneumovirus in almost 20%. Other types of viruses were CMV, enteroviruses and parainfluenza. As stated before one case of influenza was confirmed in December and another one in early January 2009.

Metapneumoviruses

Metapneumovirus infection in humans was first described in 2001. The virus is related to RSV and belongs to the family of paramyxoviruses. Patients are mostly young children infected during wintertime. The symptoms are similar to those caused by RSV, i.e. cold, cough and wheezing respiration. The virus may cause serious breathing difficulties

but it is unclear whether it is dangerous for people with underlying diseases.

The number of cases diagnosed during last December with metapneumovirus is of interest as it has been technically difficult until recently to diagnose the virus in patients. All the cases were children.

There is no treatment available for infections caused by metapneumovirus but hand washing is important in order to limit the spread of the disease.

II. Gastrointestinal infections

In December 2008, 34 individuals, children and adults, were diagnosed with noroviral infections and three with astrovirus. Noroviral infections are therefore still common in Iceland.

Thorolfur Gudnason

Metapneumovirus was diagnosed in almost 20% of the samples diagnosed at the LUH Dept. of Virology in December 2008.