EPI-NEWS

NATIONAL SURVEILLANCE OF COMMUNICABLE DISEASES

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INFLUENZA A (H1N1)v – DEVELOPMENTS IN DANMARK

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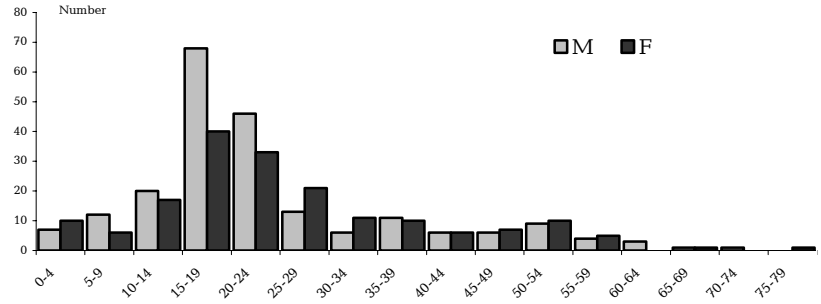
When the new influenza virus A (H1N1)v was first detected, there was considerable uncertainty concerning the infection's seriousness and limited knowledge of potential risk groups prone to a more serious disease course. Furthermore, it was not known if the virus had pandemic potential and the societal consequences of a pandemic were also unknown.

We now know that an influenza pandemic is in progress and it is believed that in the years to come, the new virus will replace other influenza A viruses currently in circulation. Globally, the virus has primarily affected persons < 50 years, while persons above 60 years of age seem to be partially immune, probably thanks to previous infection with a similar virus. The clinical picture is generally mild with 2-4 days of self-limiting symptoms. Therefore, in the individual case, the disease is not considered more serious than common seasonal influenza. However, as the overall morbidity during a pandemic is expected to exceed that of seasonal influenza, society may face higher sickness absence rates, among others, than normally.

Figure 1. Age and sex of the 391 confirmed cases of A (H1N1)v infection in Denmark, 10 August 2009.



Risk of complications

It has been demonstrated that persons suffering from chronic conditions such as pulmonary disease (including asthma), coronary disease, immune deficiencies (also pharmaceutically induced), neuromuscular diseases (including diabetes), etc., have an elevated risk of serious disease and complications. It has been shown that pregnant women, particularly in the final stages of pregnancy, have a heightened risk of serious disease and admission to hospital. The same applies to the severely obese with a BMI > 35, probably because obesity affects the lungs and heart. Globally, deaths caused by influenza A (H1N1)v have occurred primarily among younger patients in the above-mentioned groups. Furthermore, a limited number of deaths have been reported among otherwise healthy young persons, as is the case for seasonal influenza.

Surveillance

In July 2009, individual notifiability of influenza A (H1N1) was lifted and replaced by mandatory laboratory notification, EPI-NEWS 27-29/09. The pandemic's development is currently monitored via data from sentinel practitioners and emergency call services and confirmed cases are recorded via laboratory notification.

Occurrence

Contacts made to GPs and emergency call services due to influenza-like symptoms show an increasing trend and currently comprise 0.7% and 1.0%, respectively, of all consultations. Contacts primarily relate to persons aged 5-64 years, but characteristically not to children aged < 5 years as opposed to the age distribution for seasonal influenza. Currently, a total of 391 cases of influenza A (H1N1)v have been detected in Denmark, of whom 311 (80%) presented with symptoms or were diagnosed as from week 29, see epidemic curve at www.ssi.dk. The median age is 20 years, and seven cases are > 60 years, Figure 1. The majority of the cases did not belong to any risk group and 232 (77%) of 301 respondents were probably infected abroad. Travel to Bulgaria, USA, Spain and Great Britain accounted for 70% of the imported cases.

A total of 27 patients have been admitted, mainly on grounds of infection hygiene. Four cases have had pneumonia or other serious disease. Denmark has not seen any influenza related deaths.

Practical measures

Infection may be prevented through hand disinfection and frequent handwashing. Anyone presenting with symptoms should avoid going to work/school institution and cough or sneeze into a paper handkerchiefs or one's sleeve. For practical purposes, affected persons are considered non-infectious 24 hours after normal temperature is achieved, provided the affected person generally feels well and has not taken any antipyretics.

Antiviral agents

Antiviral agents may be indicated for treatment of acute influenza-like symptoms in persons at risk of suffering complications. Furthermore, antiviral agents may be used as post exposure prophylaxis in persons at risk of complications, EPI-NEWS 27-29/09. Long-term prophylaxis is not indicated, not even in connection with possible occupational influenza exposure, e.g. health staff and pregnant women.

Pandemic vaccine

Delivery of pandemic vaccines is expected to start by October 2009 and to be completed over a period of several months. The vaccine will be offered to persons at risk of suffering complications from the influenza, to a limited number of health care professionals and to certain other groups. The National Board of Health will issue guidelines for vaccination and planning of the vaccination process.

Commentary

There is a tendency to swab non-risk group persons for influenza virus. This is no longer recommended, EPI-NEWS 27-29/09.

It has been shown that pregnant women have an increased risk in case of A (H1N1)v infection which can also be the case for the normal seasonal influenza. Influenza activity in Denmark is expected to increase further over the next months as schools reopen and workplaces are repopulated. As the disease is generally mild and influenza is not easily transferred during summer, it seems unlikely that the epidemic should spread quickly and comprehensively. It is, however, currently difficult to assess the scope of the coming pandemic wave and to determine if another wave will follow in winter. Developments and recommendations are available at www.sst.dk and www.ssi.dk.

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Individually notifiable diseases and selected laboratory-confirmed infections

The first report after the sommer vacations on individually notifiable diseases and selected laboratory-confirmed infections will be published in a future issue of EPI-NEWS.
(Department of Epidemiology)

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