EPI-NEWS

NATIONAL SURVEILLANCE OF COMMUNICABLE DISEASES

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INFLUENZA A H1N1 OF NEW SUBTYPE (SWINE INFLUENZA) No. 18, 2009

Several countries report disease caused by influenza A H1N1 of a new subtype. Human-to-human transmission has been observed, and the WHO has declared a phase 4 pre-pandemic alert period.
The virus primarily contains genes from swine influenza virus of American and Euro-Asian origin and has possibly been formed by recombination. Transmission from swine has not been seen, and the new subtype has not previously been diagnosed in humans or animals.
The first cases were reportedly detected by mid March in Mexico. Subsequently, cases have been reported in USA, Canada, New Zealand and Israel. European cases have presently been found in Spain, Scotland and Germany. A number of countries are in the process of testing patients on suspicion of infection, and the number of confirmed cases is expected to increase in the days to come.

Diagnostics
The SSI has established real time PCR analysis for the new virus and presently the analysis is only performed at the Department of Virology, SSI. Test results from samples received before 9.30 am will generally be available later the same day. Plans have been made to facilitate testing at other microbiology laboratories in the near future.

Precautions, foreign travel
Persons returning from affected areas who present with influenza symptoms up to seven days after their journey ended should contact their GP or an emergency call service by phone.
For further precautions, please see the websites of the National Board of Health and the Ministry of Foreign Affairs. www.sst.dk and www.um.dk

PRACTICAL HANDLING OF SUSPECTED PATIENTS
The National Board of Health has published a guideline (excerpt follows):

Patient assessment
Assessment of suspected cases should primarily be performed by the GP, alternatively at an emergency medical service or emergency ward.
To the extent possible, the examining physician should collect information on the patient's whereabouts prior to disease onset, possible exposures and contacts.
Patients should be attended in their homes when possible. If this is not possible, patients should be seen in a surgery and contact to other patients in waiting-rooms etc. should be avoided to limit spreading. If the patient is seen at an emergency ward, the patient should be examined in a separate room with independent access.
If the patient is not admitted, the physician should notify the case (see below), samples should be taken and the patient should be started on oseltamivir (Tamiflu®).
The Medical Officer of Health identifies close contacts and implements prophylactic measures including preventive oseltamivir (Tamiflu®) treatment of such contacts. The Medical Officer of Health may, after consultation with the reporting physician, also initiate treatment of the affected patient. Be sure to get relevant contact information from patients and pass these on to the Medical Officer of Health.
To the extent possible, patients should stay at home until they are symptom-free.

Who should be tested?
Patients meeting the following criteria should be tested:
Suddenly occurring disease with fever $\geq$ 38°C, airway symptoms and muscle pain
- AND stays in an area with virus transmission of the new subtype within a period of seven days
- OR close contact to other influenza cases of the new subtype or severe airway infection/unexplained death.
Currently, areas with sustained infection have been confirmed in Mexico.
Up to date information on such areas is available at www.ssi.dk.

Notification of cases
Cases should be notified by phone and in writing.
Notification by phone shall be made to the Medical Officer of Health covering the area where the patient is currently staying.
Written notification is sent to:
1) the Medical Officer of Health where the patient is currently staying, and 2) Statens Serum Institut, Department of Epidemiology.
The Danish Board of Health form no. 1515 is used for notification.
Where the patient is admitted to hospital, the admitting physician need not notify the case. In such cases, notification by phone and in writing rests with the treating physician at the hospital.

Protective measures
Measures to avoid droplet/aerosol and contact transference should be implemented. Where direct contact is called for, the physician/treating health professional should wear a coat, gloves and protective eye-wear and optimally an FFP3 mask, alternatively a surgical mask. Remember that hand disinfection or washing should follow removal of personal protective gear.
The patient should wear a surgical mask whenever contact with other persons may occur. Instructions should be given concerning the importance of frequent hand washing and the use of paper handkerchiefs for coughing and sneezing.

Diagnostics and treatment at home
1. Perform throat swab using a plastic or wooden swab with white cotton or dacron and place the swab in a virus transport medium or, less optimally, in saltwater (1 ml).
2. Presently, samples should be sent to the Department of Virology, SSI.
3. Treatment - including any oseltamivir (Tamiflu®) – is administered in consultation with an infection specialist.
4. The patient should be told to stay in his or her home until symptom free. Daily contact on the phone should be agreed.
5. Ask the patient to contact the GP, emergency call service or a department of infectious diseases in case symptoms deteriorate.
6. Inform the patient that the Medical Officer of Health will be notified and will subsequently contact the patient for further information of any contacts who may have been exposed. The Medical Officer of Health will decide if preventive treatment of any contacts is warranted.
7. Finally, keep the Medical Officer of Health up to date on the patient's clinical condition and laboratory test results.
(Department of Epidemiology)

29 April 2009

Individually notifiable diseases

Number of notifications received in the Department of Epidemiology, SSI (2009 figures are preliminary)

Table 1	Week 17 2009	Cum. 2009 [1]	Cum. 2008 [1]
AIDS	0	8	12
Anthrax	0	0	0
Botulism	0	0	0
Cholera	0	0	0
Creutzfeldt-Jakob	1	5	1
Diphtheria	0	0	0
Food-borne diseases	9	126	99
of these, infected abroad	0	23	27
Gonorrhoea	4	173	118
Haemorrhagic fever	0	0	0
Hepatitis A	1	10	16
of these, infected abroad	0	6	8
Hepatitis B (acute)	0	9	5
Hepatitis B (chronic)	0	63	59
Hepatitis C (acute)	0	4	4
Hepatitis C (chronic)	5	119	125
HIV	3	85	80
Legionella pneumonia	1	35	35
of these, infected abroad	0	5	12
Leprosy	0	0	0
Leptospirosis	0	0	2
Measles	0	9	6
Meningococcal disease	0	27	24
of these, group B	0	15	11
of these, group C	0	9	4
of these, unspec. + other	0	3	9
Mumps	0	3	15
Neuroborreliosis	0	3	19
Ornithosis	0	0	1
Pertussis (children < 2 years)	2	38	35
Plague	0	0	0
Polio	0	0	0
Purulent meningitis			
Haemophilus influenzae	0	3	1
Listeria monocytogenes	0	2	1
Streptococcus pneumoniae	0	35	41
Other aethiology	0	5	12
Unknown aethiology	0	3	12
Under registration	2	15	-
Rabies	0	0	0
Rubella (congenital)	0	0	0
Rubella (during pregnancy)	0	0	0
Shigellosis	5	33	24
of these, infected abroad	0	26	22
Syphilis	4	84	34
Tetanus	0	0	0
Tuberculosis	12	130	128
Typhoid/paratyphoid fever	0	6	12
of these, infected abroad	0	3	10
Typhus exanthematicus	0	0	0
VTEC/HUS	1	33	39
of these, infected abroad	0	8	14

[1] *Cumulative number 2009 and in corresponding period 2008*

Selected laboratory diagnosed infections

Number of specimens, isolates, and/or notifications received in SSI laboratories

Table 2	Week 17 2009	Cum. 2009 [2]	Cum. 2008 [2]
Bordetella pertussis (all ages)	2	47	42
Gonococci	6	135	121
of these, females	1	31	24
of these, males	5	104	97
Listeria monocytogenes	1	17	16
Mycoplasma pneumoniae			
Resp. specimens [3]	0	26	41
Serum specimens [4]	2	54	48
Streptococci [5]			
Group A streptococci	2	71	58
Group B streptococci	5	35	37
Group C streptococci	1	11	4
Group G streptococci	5	56	38
S. pneumoniae	29	539	451
Table 3	**Week 15 2009**	**Cum. 2009 [2]**	**Cum. 2008 [2]**
MRSA	4	199	157
Pathogenic int. bacteria [6]			
Campylobacter	21	457	495
S. Enteritidis	3	65	82
S. Typhimurium	15	267	145
Other zoon. salmonella	5	180	226
Yersinia enterocolitica	1	55	70
Verocytotoxin-producing E. coli	0	32	36
Enteropathogenic E. coli	3	40	22
Enterotoxigenic E. coli	3	64	89

[2] *Cumulative number 2009 and in corresponding period 2008*

[3] *Resp. specimens with positive PCR*

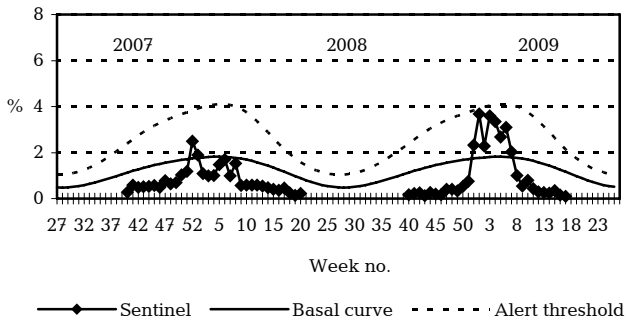
[4] *Serum specimens with pos. complement fixation test*

[5] *Isolated in blood or spinal fluid*

[6] *See also www.germ.dk*

Sentinel surveillance of the influenza activity

Weekly percentage of consultations, 2007/2008/2009



Sentinel:	Influenza consultations (as percentage of total consultations)
Basal curve:	Expected frequency of consultations under non-epidemic conditions
Alert threshold:	Possible incipient epidemic

29 April 2009