EPI-NEWS

NATIONAL SURVEILLANCE OF COMMUNICABLE DISEASES

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SEASONAL INFLUENZA VACCINATION 2009/2010

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The vaccine against seasonal influenza does not provide protection against pandemic influenza virus A (H1N1)v.
Information on vaccination against pandemic influenza virus A (H1N1)v will follow in a later EPI-NEWS.

Free influenza vaccination
Certain population groups living in Denmark are offered free influenza vaccination. The scheme comprises persons ≥ 65 years, the chronically ill < 65 years following medical assessment, and anyone on early retirement. The scheme comes into force on 1 October and vaccination must be administered by the end of 2009. The executive order providing free influenza vaccination for specific population groups is available at www.sst.dk (Danish language)
As in previous years, the National Board of Health will run a campaign to boost vaccination coverage. Furthermore, posters and postcards have been distributed to medical practices among others.

Chronically ill below 65 years
Following specific medical assessment, the chronically ill include:
- Persons in treatment for, or attending check-ups related to chronic pulmonary disease with permanently reduced lung function.
- Persons with ischaemic heart disease – with or without cardiac insufficiency – and cardiac insufficiency caused by other factors.
- Persons being treated for diabetes mellitus who have at least one disease complication.
- Persons with congenital or acquired immunodeficiency.
- Persons with other chronic diseases which, according to a physician's assessment, pose a serious health risk in conjunction with influenza.

Children
Children above the age of six months with a risk of suffering a serious influenza course should be vaccinated. In the majority of cases, such children will be monitored by a paediatric clinic, but they may also receive free vaccination at a specialist or at a vaccination clinic. Detailed guidelines on influenza vaccination of risk group children prepared by the Danish Paediatric Society are available (in Danish) at www.paediatri.dk.
Children aged 6 months to 9 years who have not previously been vaccinated against influenza should receive two vaccinations at a four-week interval.
Children aged 6 to 36 months are vaccinated using only half the vaccine dose. It may be relevant to vaccinate household contacts and other persons who come into close contact with children belonging to risk the groups.

Pregnancy and lactation
Limited data on vaccination of pregnant women have not demonstrated harmful effects on either foetus or mother. Vaccination may be considered as from the second pregnancy trimester. Pregnant women who belong to one of the mentioned chronically ill risk groups should be vaccinated irrespective of pregnancy stage. Influenza vaccines may be given during the breastfeeding period.

Disseminated sclerosis and HIV
Patients with disseminated sclerosis are at risk of new attacks in the event of influenza illness, but no increased risk of new attacks has been observed as a result of vaccination.
Guidance concerning vaccination of HIV-infected patients is available from the infectious diseases department responsible for the patient.

Influenza vaccine season 2009/2010
The vaccine contains the primary strains from the three seasonal influenza viruses currently in global circulation
1. A/Brisbane/59/2007 (H1N1)-like virus
2. A/Brisbane/10/2007 (H3N2)-like virus
3. B/Brisbane/60/2008-like virus

The influenza A virus strains remain unchanged from the previous year; the influenza B virus strain is new. The vaccine fulfils the WHO recommendation for the Northern Hemisphere as well as EU stipulations for the 2009/2010 season.

Delivery
To ensure an adequate supply, stocks of vaccine will be distributed from three producers. The vaccines are considered equally good for protection against influenza, and they have all been approved for vaccination of children as well as adults. Vaccines from last season should be discarded.

Degree of protection
Immunity is achieved 2-3 weeks after vaccination and is generally effective for a period of 6-12 months. Protection depends heavily on the correlation between circulating viruses and vaccine virus strains. In young, healthy persons, vaccination prevents 70-90% of illness cases caused by infection with influenza virus. In elderly persons, protection against ordinary influenza illness is somewhat lower. Protection against serious complications, hospital admission and death in the elderly is up to 50%.

Adverse events and contraindications
The vaccine contains components of inactivated influenza virus (split-virus vaccine) and thus does not cause influenza. Temporary local reactions with flushing and tenderness surrounding the injection site may occur. There is no difference in the incidence of fever or other general effects between influenza-vaccinated and placebo-vaccinated subjects. Fever, malaise, rigors and tiredness are common reactions which normally recede after 1-2 days.
Persons who are hypersensitive to chickens' eggs/chicken protein or other vaccine ingredients (e.g. antibiotics or formaldehyde), and persons who have previously experienced a reaction of anaphylactoid character (urticaria, angio-oedema, asthma, allergic rhinitis or anaphylactic shock), should not be vaccinated.
Allergy to the ingredient formaldehyde will usually manifest itself as contact dermatitis; in such cases patch tests may be positive. Contact dermatitis is not a contraindication. To avoid such reaction the vaccine may be administered intramuscularly.
The vaccine may be administered in conjunction with other vaccines but this may aggravate adverse effects. If several vaccines are given in conjunction, they should not be administered to the same arm or leg.

Antiviral agents
Neuraminidase inhibitors are effective against both influenza A and B virus, but are not an alternative to prophylaxis by vaccination. Development of resistance against oseltamivir has not caused any changes in recommendations, EPI-NEWS 23/08. Neuraminidase inhibitors may be used for influenza treatment and prophylactically in persons who are unvaccinated due to counter indications and in any unvaccinated contact persons.
(S. Glismann, A. H. Christiansen, Department of Epidemiology)

23 September 2009

Individually notifiable diseases

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

Table 1	Week 38 2009	Cum. 2009 [1)]	Cum. 2008 [1)]
AIDS	1	28	29
Cholera	0	0	1
Creutzfeldt-Jakob	0	9	4
Food-borne diseases	10	400	613
of these, infected abroad	0	70	105
Gonorrhoea	7	404	284
Hepatitis A	2	26	30
of these, infected abroad	2	19	15
Hepatitis B (acute)	0	20	19
Hepatitis B (chronic)	1	121	141
Hepatitis C (acute)	0	13	6
Hepatitis C (chronic)	7	210	258
HIV	0	173	173
Legionella pneumonia	4	101	91
of these, infected abroad	2	24	33
Leptospirosis	0	0	2
Measles	0	9	10
Meningococcal disease	0	50	42
of these, group B	0	27	17
of these, group C	0	17	14
of these, unspec. + other	0	6	11
Mumps	0	11	21
Neuroborreliosis	2	27	39
Ornithosis	0	9	2
Pertussis (children < 2 years)	4	82	80
Purulent meningitis			
Haemophilus influenzae	0	5	3
Listeria monocytogenes	0	4	1
Streptococcus pneumoniae	0	55	69
Other aethiology	0	9	17
Unknown aethiology	0	10	17
Under registration	1	26	-
Rubella (during pregnancy)	0	0	2
Rubella (congenital)	0	0	0
Shigellosis	1	75	60
of these, infected abroad	0	59	49
Syphilis	9	202	90
Tetanus	0	0	2
Tuberculosis	6	274	281
Typhoid/paratyphoid fever	0	18	27
of these, infected abroad	0	15	21
VTEC/HUS	7	109	109
of these, infected abroad	0	28	36

Table 1, comments
In 2009, none of the following have been reported: Anthrax, botulism, cholera, diphtheria, haemorrhagic ffever, leprosy, plague, polio, rabies, typhus exanthematicus
1) Cumulative no. 2009 and corresponding period 2008

Selected laboratory diagnosed infections

Number of specimens, isolates, and/or notifications received at Statens Serum Institut

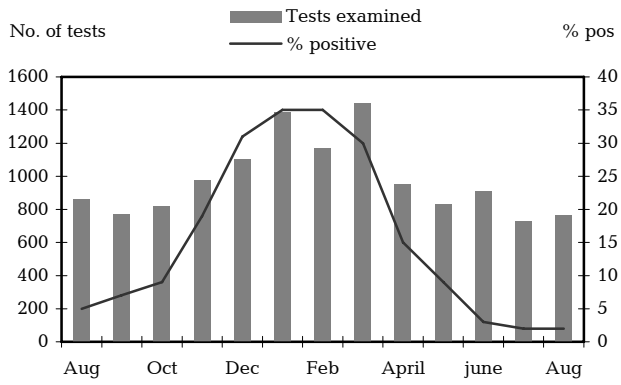
Table 2	Week 38 2009	Cum. 2009 [2)]	Cum. 2008 [2)]
Bordetella pertussis (all ages)	4	165	148
Gonococci	7	319	270
of these, females	2	87	55
of these, males	5	232	215
Listeria monocytogenes	0	55	35
Mycoplasma pneumoniae			
Resp. specimens *3)*	1	47	60
Serum specimens *4)*	1	83	65
Streptococci *5)*			
Group A streptococci	2	113	112
Group B streptococci	2	88	93
Group C streptococci	2	29	14
Group G streptococci	5	126	100
S. pneumoniae	10	773	682

Table 3	Week 36 2009	Cum. 2009 [2)]	Cum. 2008 [2)]
MRSA	15	515	476
Pathogenic int. bacteria [6)]			
Campylobacter	60	2124	2355
S. Enteritidis	13	419	424
S. Typhimurium	11	640	1420
Other zoon. salmonella	11	494	728
Yersinia enterocolitica	2	156	229
Verocytotoxin-prod. E.coli	11	108	106
Enteropathogenic E. coli	11	166	125
Enterotoxigenic E. coli	6	209	278

Tables 2 & 3, comments
2) Cumulative no. 2009 and corresponding period 2008
3) Respiratory 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

Norovirus 2008-2009

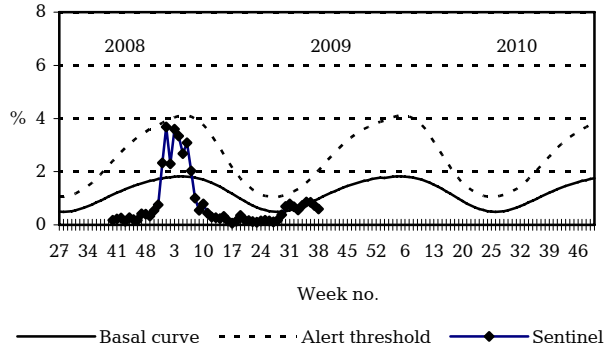
Examined samples and percent positive, Aug 08 - Aug 09



Samples from clinical microbiology departments at Odense University Hospital, Copenhagen University Hospital, and the Department of Virology, SSI

Sentinel surveillance of the influenza activity

Weekly percentage of consultations, 2008/2009/2010



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

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