EPI-NEWS
NATIONAL SURVEILLANCE OF COMMUNICABLE DISEASES

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INFLUENZA VACCINATION 2004/2005

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Influenza vaccine 2004/2005
In order to secure the best possible protection against influenza, the vaccine must contain the most recent strains of the three influenza viruses that are circulating worldwide:

1. A/Fujian/411/2002(H3N2)-like
2. A/New Caledonia/20/99 (H1N1)-like
3. B/Shanghai/361/2002-like

Two of the three virus strains have changed from last season. The vaccine fulfils the World Health Organization's recommendation for the northern hemisphere and the European Union's stipulations for the season. Vaccines from last season cannot be used.

Risk groups
The Danish National Board of Health recommends unchanged vaccination of persons belonging to the risk groups below:

- Persons who are receiving treatment or follow-up for chronic lung diseases, cardiovascular diseases or diabetes mellitus.
- Persons with congenital or acquired immune deficiencies, HIV-positive persons, see below.
- Persons with other diseases for which, according to the doctor, influenza constitute a serious health risk.
- Persons who live in a retirement home or the like, where the doctor must assess, on the basis of local conditions, whether there is a need to vaccinate the resident in question.
- Persons aged 65 years and over.

Patients with disseminated sclerosis have a risk of new attacks in the event of influenzal illness, while no increased risk of new attacks has been found as a result of vaccination.
Counselling about possible vaccination of HIV-positive persons will be available at the department of infectious medicine that is following the patient.

Children
Vaccination is recommended for children over f 6 months who belong to one of the risk groups mentioned above.
Children with cystic fibrosis and other serious chronic lung diseases may develop an exacerbation of respiratory symptoms and require admission to hospital if they catch influenza.
However, there is no indication to vaccinate children with well-treated asthma.
Children aged 6 months to 9 years, who have not previously received influenza vaccine, should receive two vaccinations at an interval of four weeks.
Children aged 6 to 36 months should receive half-dose of the vaccine.

Degree of protection
Influenza epidemics occur in Denmark in the period December-April. The vaccination should therefore be renewed each year in October-November. The onset of protection is approx. 1 week after vaccination.
Protection depends particularly on the correlation between circulating viruses and the virus strains in the vaccine. In younger, healthy persons, vaccination yields 70-90% protection of cases of disease.
In older persons, protection against ordinary influenzal illness is somewhat lower, approx. 60%. Protection against serious complications, hospital admissions and death in the elderly is up to 70%.

Adverse effects and contraindications
The vaccine contains inactivated virus and does not cause influenza. It can cause transient local reactions with redness and tenderness around the injection site. There is no difference in incidence of fever or other general effects between influenza-vaccinated and placebo-vaccinated persons.
Persons who are allergic to hens' eggs or other contents (e.g. antibiotic residues or formalin) and in whom previous reaction has been of anaphylactoid nature (urticaria, angio-oedema, asthma, allergic rhinitis or anaphylactic shock) should not be vaccinated.
Allergy to formaldehyde will usually manifest itself as contact dermatitis, where patch tests may be positive. Contact dermatitis is not a contraindication, and in order to avoid reactions, the vaccine can be given IM.
Pregnant women should usually be vaccinated only if they belong to one of the aforementioned risk groups.

Vaccines without thiomersal
This year's vaccines now do not contain thiomersal and are considered to be equally effective for protection against influenza. As has been the case in recent years, for reasons of security of supply, vaccines will be distributed from two different producers.
Both vaccines are approved for vaccination of both children and adults.

Antiviral agents
Neuraminidase inhibitors work against both influenza A and B virus, but are not an alternative to prevention by vaccination. They can be used as a supplement to treatment of influenza in patients who catch influenza despite vaccination, or for patients who have not been vaccinated because of contraindications. Furthermore, they can be used for prophylaxis in contact persons who have not been vaccinated.

Free influenza vaccination
For the third year in a row, persons over the age of 65 will again in 2004 be offered vaccination free of charge. In 2003, 372,000 persons, corresponding to 47% of the country's population over the age of 65, availed of the free offer. This was an increase relative to the first year, where 30% availed of the offer.
As in previous years, there were also great differences in uptake in 2003; Aarhus Amt came first with 67% uptake, followed by 65% in the City of Copenhagen, where free vaccination has been on offer for eight years. After this came the Regional Municipality of Bornholm with 58%, Ribe County and the City of Frederiksberg with 54% and Frederiksborg County with 48%. The lowest was Ringkøbing County with 33%.
Of all the free vaccinations, 161,000 (43%) were carried out by general practitioners.
The free influenza vaccination scheme for persons over 65 will continue unchanged in 2004. Payment for vaccination performed before the end of 2004 is thus DKK 110. The payment covers all costs, and further payment may not be charged. If, for reasons of health, the vaccination is performed in the vaccinated person's own home, apart from retirement homes, protected accommodation, apartments for the elderly and the like, payment is DKK 275.
The announcement concerning provisional free influenza vaccination for everybody over the age of 65 can be read on www.im.dk.

(S. Glismann, Department of Epidemiology, M. Stellfeld, Department of Medicine)

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Individually notifiable diseases

Number of notifications received in the Department of Epidemiology, Statens Serum Institut.
Figures for 2004 are preliminary.

Table 1	Week 38 2004	Cum. 2004 [1)]	Cum. 2003 [1)]
AIDS	0	32	22
Anthrax	0	0	0
Botulism	0	0	1
Cholera	0	1	0
Creutzfeldt-Jakob	0	0	0
Dipththeria	0	0	0
Food-borne diseases	21	437	400
of these, infected abroad	6	69	82
Gonorrhoea	10	245	108
Haemorrhagic fever	0	0	0
Hepatitis A	4	160	56
of these, infected abroad	0	46	26
Hepatitis B (acute)	2	29	36
Hepatitis B (chronic)	3	112	134
Hepatitis C (acute)	0	0	6
Hepatitis C (chronic)	9	197	189
HIV	6	221	174
Legionella pneumonia	6	70	57
of these, infected abroad	0	17	15
Leprosy	0	0	0
Leptospirosis	1	2	2
Measles	0	0	0
Meningococcal disease	0	63	81
of these, group B	0	38	45
of these, group C	0	9	18
of these, unspec. + other	0	16	18
Mumps	0	2	2
Neuroborreliosis	2	58	32
Ornithosis	0	5	6
Pertussis (children < 2 years)	13	153	85
Plague	0	0	0
Polio	0	0	0
Purulent meningitis			
Haemophilus influenzae	0	3	2
Listeria monocytogenes	0	1	1
Streptococcus pneumoniae	0	73	81
Other aethiology	0	5	2
Unknown aethiology	0	11	11
Under registration	3	15	-
Rabies	0	0	0
Rubella (congenital)	0	0	0
Rubella (during pregnancy)	0	0	0
Shigellosis	3	55	78
of these, infected abroad	2	41	66
Syphilis	2	104	40
Tetanus	0	0	0
Tuberculosis	8	336	312
Typhoid/paratyphoid fever	1	15	23
of these, infected abroad	0	10	16
Typhus	0	0	0
VTEC/HUS	3	104	85
of these, infected abroad	1	19	20

[1)] *Cumulative number of cases notified in 2004 and in the corresponding period of 2003*

Selected laboratory-diagnosed infections

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

Table 2	Week 38 2004	Cum. 2004 [2)]	Cum. 2003 [2)]
Bordetella pertussis			
(all ages)	38	690	384
Gonococci	9	275	182
of these, females	0	35	24
of these, males	9	240	158
Listeria monocytogenes	0	29	21
Mycoplasma pneumoniae			
Resp. specimens [3)]	13	129	134
Serum specimens [4)]	6	267	374
Pathogenic int. bacteria [5)]			
Campylobacter	93	2674	2542
S. Enteritidis	9	366	540
S. Typhimurium	16	355	341
Other zoon. salmonella	17	360	380
Yersinia enterocolitica	7	158	177
Streptococci [6)]			
Group A streptococci	1	96	118
Group C streptococci	0	17	16
Group G streptococci	3	82	92
S. pneumoniae	17	914	863

[2)] *Cumulative number in 2004 and in the corresponding period of 2003*

[3)] *Resp. specimens with positive PCR*

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

[5)] *See also www.germ.dk*

[6)] *Isolated in blood or spinal fluid*

Patients with laboratory-diagnosed RSV and rotavirus infections

2nd quarter 2004 compared with 2nd quarter 2003

	RSV		Rota	
	2004	2003	2004	2003
April	122	44	97	81
May	33	1	71	63
June	5	0	56	21
Total	160	45	224	165

Reported from the following Clinical Microbiology departments:

Aalborg Hospital (South), Aarhus Mun. Hospital, Herning Hospital, Hvidovre Hospital, Slagelse Hospital, Viborg Hospital, Dept. of Virology, Statens Serum Institut.

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