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Fall: Football and Influenza Vaccine Seasons Arrive!

Background

The onset of football season heralds the arrival of the influenza (flu) vaccine season, which ends with the opening of the baseball season in April. Flu vaccine usually becomes available in late September /early October. Flu vaccine is primarily administered during October and November, although it is recommended that providers continue to offer flu vaccine throughout the influenza season. Historically, influenza virus activity is at a low level from early November through December. The latter half of January usually starts the peak season which continues through February and into early March. It is note worthy that often it is not until mid/late March that flu activity begins to decline, ending sometime during April or early May.

Key Point : Influenza vaccinations must continue throughout the football season and through baseball spring training, while ending with the start of the baseball season.

Influenza virus infects 5% to 20 % of the population, resulting in about 36, 000 deaths and well over 200,000 hospitalizations nationwide. During '06 – '07 season there were 68 pediatric deaths; 94% were unvaccinated. The best presently available medical weapon against influenza is aggressive vaccination continuing throughout the 6 month season (October through March).

Influenza Vaccine

Both the live intra-nasal vaccine (LAIV) and the inactivated vaccine (TIV) contain the same flu strains. The A/Wisconsin/67/2005 (H3N2)-like and B/Malaysia/2506/2004-like antigens are held-over from last year's vaccine. The A/Solomon Islands/3/2000 (H1N1)-like has replaced last year's H1N1 strain.

TIV is approved for persons aged ≥ 6 months including those with high risk conditions, whereas LAIV is approved for healthy, non-pregnant persons aged 2 through 49 years. The Table illustrates the available approved influenza vaccines. MSDH clinics have only TIV whereas VFC and CHIP providers will have the option of selecting either or both LAIV or TIV. Children aged 6 months to their fifth birthday can only receive TIV (although LAIV is licensed down to age 2 years, ACIP/VFC have not approved LAIV for use in 2-5 years olds [non-VFC/CHIP children ages 2-5 years can receive LAIV])

Dosage Change for Children Ages 6 Months to Their 8th Birthday

Two doses of vaccine are required for children who are receiving influenza vaccine for the first time or who in the previous season received their first dose of flu vaccine and received only one dose. Children in their third or more years of being vaccinated who had received only 1 dose in each of the prior years (2 or more years) only need a single dose. Other than the above, doses for children and adults remain unchanged.

RECOMMENDATIONS FOR INFLUENZA VACCINE: '07/'08

Key Strategy: All persons, including children (≥age 6 mos), who wish to reduce their chances of getting flu or transmitting flu can be vaccinated.

Target Groups:

- Children age 6 months to their 5th birthday;
- All persons aged ≥50 years;
- Pregnant women (and women who are considering pregnancy);
- Adults and children with chronic pulmonary, cardiovascular (except hypertension), renal, hepatic, hematologic, metabolic disorders; immunosuppression from medications/HIV; receiving long term aspirin therapy; or any condition that can compromise respiratory function or handling secretions or increase risks for aspiration;
- Residents of nursing homes and other chronic care facilities;
- Persons who live with or care for target groups as listed above (can receive either TIV or LAIV [unless contraindicated])
- Health care workers (can receive either TIV or LAIV [unless contraindicated]).

Key Points:

- 1. An adequate supply of vaccine is anticipated (~ 130 million doses);
- 2. Vaccination season is from October through late March/early April;
- 3. Vaccinate anyone who wants to reduce their risk for influenza; other than infants aged less than 6 months everyone can be offered influenza vaccine and fall within guidelines;
- 4. Vaccinate anyone who wants to reduce their risk of transmitting influenza to others, including health care workers, and contacts of persons at high risk for complications from the flu (including adult and child daycare workers)
- 5. Vaccinate anyone with a (any) chronic condition ("be liberal") which could increase the risk for severe disease/complications;
- 6. FluMistTM is FDA approved for ages 2 thru 49 years (and is now a refrigerated preparation), however FluMistTM is NOT APPROVED for VFC usage, ages 2 to 5 years, as of Oct 1, 2007;
- 7. Remember pneumococcal vaccine for eligible seniors and other high risk individuals

For more information on influenza vaccine: www.cdc.gov/flu/keyfacts.htm, www.cdc.gov/mwwr/pdf/rr/rr5606.pdf (MMWR, July 13, 2007/vol. 56/no.rr-6: Prevention Control of Influenza)

Table-Approved influenza vaccines for different ages groups-United States 2007-08 Season

Vaccine	Trade name	Manufacturer	Presentation	Thimerosal mercury content (mcg Hg/0.5 mL dose)	Age group	No. of doses	Route	
TIV*	Fluzone®	Sanofi Pasteur	0.25-mL prefilled syringe	. 0	6–35 mos	1 or 2†	Intramuscular§	
			0.5-mL prefilled syringe	0	>36 mos	1 or 2†	Intramuscular§	
			0.5 mL vial	0	>36 mos	1 or 2†	Intramuscular§	
			5.0-mL multidose vial	25	>6 mos	1 or 2†	Intramuscular§	
TIV*	Fluvirin TM	Novartis Vaccine	5.0-mL multidose vial	24.5	>4 yrs	1 or 2†	Intramuscular§	
TIV*	Fluarix™	GlaxoSmithKline	0.5-mL prefilled syringe	<1.0	>18 yrs	1	Intramuscular§	
TIV*	FluLuval™	GlaxoSmithKline	5.0-mL multidose vial	25	>18 yrs	1	Intramuscular§	
LAIV¶	FluMist TM **	MedImmune	0.2-mL sprayer	0	2–49 yrs	1 or 2††	Intranasal	

^{*} Trivalent inactivated vaccine (TIV). A 0.5-mL dose contains 15 mcg each of A/Solomon Islands/3/2006 (H1N1)-like, A/Wisconsin/67/2005 (H3N2)-like, and B/Malaysia/2506/2004-like antigens.

[†] Two doses administered at least 1 month apart are recommended for children aged 6 months—8 years who are receiving TIV for the first time and those who only received 1 dose in their first year of vaccination should receive 2 doses in the following year.

[§] For adults and older children, the recommended site of vaccination is the deltoid muscle. The preferred site for infants and young children is the anterolateral aspect of the thigh.

[•] Live attenuated influenza vaccine (LAIV).** FluMist dosage and storage requirements have changed for the 2007–08 influenza season. FluMist is now shipped to end users at 35°F–46°F (2°C–8°C). LAIV should be stored at 35°F–46°F (2°C–8°C) upon receipt and should remain at that temperature until the expiration date is reached. The dose is 0.2 mL, divided equally between each nostril.

^{††} Two doses administered at least 4 weeks apart are recommended for children aged 5-8 years who are receiving LAIV for the first time, and those who received only 1 dose in their first year of vaccination should receive 2 doses in the following year.



Mississippi Provisional Reportable Disease Statistics

September 2007

		Public Health District							State Totals*					
		I	II	III	IV	V	VI	VII	VIII	IX	Sept 2007	Sept 2006	YTD 2007	YTD 2006
Sexually Transmitted Diseases	Primary & Secondary Syphilis	2	0	4	0	2	1	0	1	2	12	5	88	48
	Total Early Syphilis	3	0	6	1	12	1	0	4	8	35	21	310	165
	Gonorrhea	41	44	92	53	204	65	45	73	70	687	642	6281	5658
	Chlamydia	150	136	194	110	447	138	117	148	137	1577	1476	16493	14380
	HIV Disease	7	3	2	0	14	4	3	3	10	46	38	477	459
Myco- bacterial Diseases	Pulmonary Tuberculosis (TB)	2	1	2	1	3	2	0	0	1	12	12	82	74
	Extrapulmonary TB	0	0	0	0	0	0	0	0	0	0	2	8	7
	Mycobacteria Other Than TB	1	1	1	0	6	3	3	2	2	19	27	187	159
Vaccine Preventable Diseases	Diphtheria	0	0	0	0	0	0	0	0	0	0	0	0	0
	Pertussis	0	0	0	1	1	7	0	0	0	10	5	171	30
	Tetanus	0	0	0	0	0	0	0	0	0	0	0	0	0
	Poliomyelitis	0	0	0	0	0	0	0	0	0	0	0	0	0
	Measles	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mumps	0	0	0	0	0	0	0	0	0	0	0	1	2
is	Hepatitis A (acute)	0	0	0	0	0	0	0	1	0	1	1	8	6
Viral Hepatitis	Hepatitis B (acute)	0	0	0	0	0	0	0	0	0	0	0	21	9
	Hepatitis C (Non-A, Non-B)	0	0	0	0	0	0	0	0	0	0	0	4	3
Enteric Diseases	Salmonellosis	11	32	3	7	56	9	17	21	13	169	152	714	603
	Shigellosis	1	1	7	0	121	7	2	2	23	164	21	542	73
	Campylobacter Disease	0	0	1	0	4	0	0	1	1	7	6	106	70
	E. coli O157:H7/HUS	0	0	0	0	0	0	0	0	0	0	0	5	7
Other Conditions of Public Health Significance	Meningococcal Infections	0	0	0	0	0	0	0	0	0	0	0	10	4
	Invasive H. influenzae Disease	0	0	0	0	0	0	0	0	0	0	1	7	11
	RMSF	0	0	0	0	0	0	0	0	0	0	1	9	5
	West Nile Virus	1	1	3	1	13	3	3	5	2	32	33	109	171
	Lyme Disease	0	0	0	0	0	0	0	0	0	0	0	0	3
	Animal Rabies (bats)	0	0	0	0	0	0	0	0	0	0	0	1	4

Totals include reports from Department of Corrections and those not reported from a specific District

^{**} Temporarily not available