



# Mississippi Morbidity Report

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## Influenza Vaccination Recommendations for the 2008-2009 Season

Excerpted from: CDC. Prevention and control of influenza: Recommendations of the Advisory Committee on Immunization Practices (ACIP), 2008. MMWR 2008;57(No. RR-7).

In the United States, annual epidemics of influenza occur typically during the late fall through early spring seasons. An annual average of approximately 36,000 deaths during 1990–1999 and 226,000 hospitalizations during 1979–2001 have been associated with influenza epidemics (6,7). Annual influenza vaccination is the most effective method for preventing influenza virus infection and its complications.

### Primary Changes and Updates in the Recommendations:

- Beginning with the 2008--09 influenza season, **annual vaccination of all children aged 5--18 years** is recommended. Annual vaccination of all children aged 5--18 years should begin in September or as soon as vaccine is available for the 2008--09 influenza season, if feasible, but annual vaccination of all children aged 5--18 years should begin no later than during the 2009--10 influenza season.
- **Annual vaccination of all children aged 6 months--4 years (59 months) and older children with conditions that place them at increased risk for complications from influenza should continue.** Children and adolescents at high risk for influenza complications should continue to be a focus of vaccination efforts as providers and programs transition to routinely vaccinating all children.
- **Either TIV or LAIV can be used when vaccinating healthy persons aged 2--49 years.** Children aged 6 months--8 years should receive 2 doses of vaccine if they have not been vaccinated previously at any time with either LAIV or TIV (doses separated by  $\geq 4$  weeks); 2 doses are required for protection in these children. Children aged 6 months--8 years who received only 1 dose in their first year of vaccination should receive 2 doses the following year. LAIV should not be administered to children aged  $< 5$  years with possible reactive airways disease, such as those who have had recurrent wheezing or a recent wheezing episode. Children with possible reactive airways disease, persons at higher risk for influenza complications because of underlying medical conditions, children aged 6--23 months, and persons aged  $> 49$  years should receive TIV.
- The 2008--09 trivalent vaccine virus strains are A/Brisbane/59/2007 (H1N1)-like, A/Brisbane/10/2007 (H3N2)-like, and B/Florida/4/2006-like antigens.
- Oseltamivir-resistant influenza A (H1N1) strains have been identified in the United States and some other countries. However, oseltamivir or zanamivir continue to be the recommended antivirals for treatment of influenza because other influenza virus strains remain sensitive to oseltamivir, and resistance levels to other antiviral medications remain high.

### Summary of influenza vaccination recommendations, 2008: children and adolescents aged 6 months--18 years

Vaccination of all children aged 6 months--18 years should begin before or during the 2008--09 influenza season if feasible, but no later than during the 2009--10 influenza season. Vaccination of all children aged 5--18 years is a new ACIP recommendation.

Children and adolescents at high risk for influenza complications should continue to be a focus of vaccination efforts as providers and programs transition to routinely vaccinating all children and adolescents. Recommendations for these children have not changed. Children and adolescents at higher risk for influenza complication are those:

- aged 6 months--4 years;
- who have chronic pulmonary (including asthma), cardiovascular (except hypertension), renal, hepatic, hematological or metabolic disorders (including diabetes mellitus);
- who are immunosuppressed (including immunosuppression caused by medications or by human immunodeficiency virus);
- who have any condition (e.g., cognitive dysfunction, spinal cord injuries, seizure disorders, or other neuromuscular disorders) that can compromise respiratory function or the handling of respiratory secretions or that can increase the risk for aspiration;
- who are receiving long-term aspirin therapy who therefore might be at risk for experiencing Reye syndrome after influenza virus infection;
- who are residents of chronic-care facilities; and,
- who will be pregnant during the influenza season.

**Note:** Children aged  $< 6$  months should not receive influenza vaccination. Household and other close contacts (e.g., daycare providers) of children aged  $< 6$  months, including older children and adolescents, should be vaccinated.

**Live, attenuated influenza vaccine (LAIV) compared with inactivated influenza vaccine (TIV) for seasonal influenza, United States formulations.**

<b>Factor</b>	<b>LAIV</b>	<b>TIV</b>
• Route of administration	Intranasal spray	Intramuscular injection
• Type of vaccine	Live-attenuated virus	Killed virus
• No. of included virus strains	Three (two influenza A, one influenza B)	Three (two influenza A, one influenza B)
• Vaccine virus strains updated	Annually	Annually
• Frequency of administration	Annually*	Annually*
• Approved age	Persons aged 2–49 yrs†	Persons aged >6 months
• Interval between 2 doses recommended for children aged >6 months–8 years who are receiving influenza vaccine for the first time	4 weeks	4 weeks
• Can be administered to persons with medical risk factors for influenza-related complications†	No	Yes
• Can be administered to children with asthma or children aged 2–4 years with wheezing during the preceding year§	No	Yes
• Can be administered to family members or close contacts of immunosuppressed persons not requiring a protected environment	Yes	Yes
• Can be administered to family members or close contacts of immunosuppressed persons requiring a protected environment (e.g., hematopoietic stem cell transplant recipient)	No	Yes
• Can be administered to family members or close contacts of persons at high risk but not severely immunosuppressed	Yes	Yes
• Can be simultaneously administered with other vaccines	Yes¶	Yes**
• If not simultaneously administered, can be administered within 4 weeks of another live vaccine	Prudent to space 4 weeks apart	Yes
• If not simultaneously administered, can be administered within 4 weeks of an inactivated vaccine	Yes	Yes

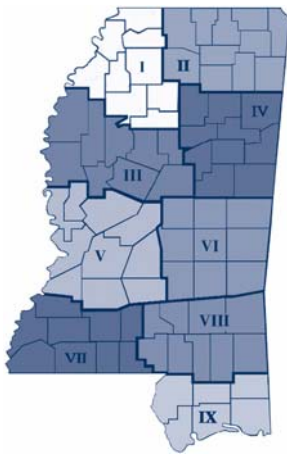
\* Children aged 6 months–8 years who have never received influenza vaccine before should receive 2 doses. Those who only receive 1 dose in their first year of vaccination should receive 2 doses in the following year, spaced 4 weeks apart.

† Persons at high risk for complications of influenza infection because of underlying medical conditions should not receive LAIV. Persons at higher risk for complications of influenza infection because of underlying medical conditions include adults and children with chronic disorders of the pulmonary or cardiovascular systems; adults and children with chronic metabolic diseases (including diabetes mellitus), renal dysfunction, hemoglobinopathies, or immunosuppression; children and adolescents receiving long-term aspirin therapy (at risk for developing Reye syndrome after wild-type influenza infection); persons who have any condition (e.g., cognitive dysfunction, spinal cord injuries, seizure disorders, or other neuromuscular disorders) that can compromise respiratory function or the handling of respiratory secretions or that can increase the risk for aspiration; pregnant women; and residents of nursing homes and other chronic-care facilities that house persons with chronic medical conditions.

§ Clinicians and vaccination programs should screen for possible reactive airways diseases when considering use of LAIV for children aged 2–4 years, and should avoid use of this vaccine in children with asthma or a recent wheezing episode. Health-care providers should consult the medical record, when available, to identify children aged 2–4 years with asthma or recurrent wheezing that might indicate asthma. In addition, to identify children who might be at greater risk for asthma and possibly at increased risk for wheezing after receiving LAIV, parents or caregivers of children aged 2–4 years should be asked: “In the past 12 months, has a health-care provider ever told you that your child had wheezing or asthma?” Children whose parents or caregivers answer “yes” to this question and children who have asthma or who had a wheezing episode noted in the medical record during the preceding 12 months, should not receive FluMist.

¶ Live attenuated influenza vaccine coadministration has been evaluated systematically only among children aged 12–15 months who received measles, mumps and rubella vaccine or varicella vaccine.

\*\* Inactivated influenza vaccine coadministration has been evaluated systematically only among adults who received pneumococcal polysaccharide or zoster vaccine.



# Mississippi

## Provisional Reportable Disease Statistics

August 2008

		Public Health District									State Totals*			
		I	II	III	IV	V	VI	VII	VIII	IX	Aug 2008	Aug 2007	YTD 2008	YTD 2007
Sexually Transmitted Diseases	Primary & Secondary Syphilis	1	2	0	1	4	0	0	1	5	14	11	105	76
	Total Early Syphilis	1	6	0	2	19	1	0	2	7	38	17	242	268
	Gonorrhea	75	41	86	45	186	74	54	63	80	704	725	4,883	5,598
	Chlamydia	233	146	258	131	525	206	149	192	225	2,065	1,913	13,379	14,923
	HIV Disease	2	2	8	1	15	1	3	5	11	48	64	394	406
Mycobacterial Diseases	Pulmonary Tuberculosis (TB)	0	0	0	1	1	0	0	0	0	2	14	51	70
	Extrapulmonary TB	0	0	0	0	0	0	1	0	0	1	2	13	8
	Mycobacteria Other Than TB	6	1	3	3	7	1	0	6	5	32	29	195	168
Vaccine Preventable Diseases	Diphtheria	0	0	0	0	0	0	0	0	0	0	0	0	0
	Pertussis	0	0	0	0	1	0	0	0	0	1	101	67	189
	Tetanus	0	0	0	0	0	0	0	0	0	0	0	0	0
	Polio	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	0	1
Viral Hepatitis	Hepatitis A (acute)	0	0	0	0	0	0	0	0	0	0	1	4	7
	Hepatitis B (acute)	1	2	1	0	1	0	0	1	0	6	4	32	26
Enteric Diseases	Salmonellosis	9	25	4	17	61	11	12	9	11	159	114	663	550
	Shigellosis	2	2	0	3	1	1	0	2	1	12	111	262	377
	Campylobacter Disease	1	2	0	1	5	3	0	0	3	15	9	89	100
	E. coli O157:H7/HUS	0	0	0	0	0	0	0	0	0	0	1	4	5
Other Conditions of Public Health Significance	Invasive Meningococcal Disease	0	0	0	0	0	0	0	0	0	0	0	9	10
	Invasive <i>H. influenzae</i> b Disease	0	0	0	0	0	0	0	0	0	0	0	2	0
	RMSF	0	0	0	0	0	0	0	0	0	0	2	5	12
	West Nile Virus	1	0	2	1	16	7	1	6	3	37	54	78	81
	Lyme Disease	0	0	0	0	0	0	0	0	0	0	0	1	1
	Animal Rabies (bats)	0	0	0	0	0	0	0	0	0	0	1	2	1

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

#### **Summary of influenza vaccination recommendations, 2008: adults**

Annual recommendations for adults have not changed. Annual vaccination against influenza is recommended for any adult who wants to reduce the risk for becoming ill with influenza or of transmitting it to others. Vaccination also is recommended for all adults in the following groups, because these persons are either at high risk for influenza complications, or are close contacts of persons at higher risk:

- persons aged >50 years;
- women who will be pregnant during the influenza season;
- persons who have chronic pulmonary (including asthma), cardiovascular (except hypertension), renal, hepatic, hematological or metabolic disorders (including diabetes mellitus);
- persons who have immunosuppression (including immunosuppression caused by medications or by human immunodeficiency virus);
- persons who have any condition (e.g., cognitive dysfunction, spinal cord injuries, seizure disorders, or other neuromuscular disorders) that can compromise respiratory function or the handling of respiratory secretions or that can increase the risk for aspiration;
- residents of nursing homes and other chronic-care facilities;
- health-care personnel;
- household contacts and caregivers of children aged <5 years and adults aged >50 years, with particular emphasis on vaccinating contacts of children aged <6 months; and,

Although annual vaccination is recommended for health care providers (HCP) and is a high priority for reducing morbidity associated with influenza in health-care settings and for expanding influenza vaccine use (338–340), national survey data demonstrated a vaccination coverage level of only 42% among HCP during the 2005–06 season (Table 3). Vaccination of HCP has been associated with reduced work absenteeism (286) and with fewer deaths among nursing home patients (292,293) and elderly hospitalized patients (294).

The full CDC document, “Prevention and Control of Influenza, Recommendations of the Advisory Committee on Immunization Practices (ACIP), 2008,” can be found at: <http://www.cdc.gov/mmwr/PDF/rr/rr5707.pdf>

All Mississippi State Department of Health clinics will offer the influenza vaccine beginning October 6, 2008, for a charge of \$25 for adults and for an administration fee of \$10 for children 6 months through 18 years of age.