



MONTHLY MORBIDITY REPORT

Provisional Statistics

REPORTED MORBIDITY
JULY, 1983

PUBLIC HEALTH STATISTICS and
DIVISION OF DISEASE CONTROL

INFLUENZA VACCINATION PROGRAM 1983-84

Louisiana's influenza immunization program for high risk individuals will begin September 12, 1983. Influenza virus infections occur every year in the United States but vary greatly in incidence and geographic distribution. During the 1982-83 season the disease occurred at moderate levels. Although the number of virus isolates reported to CDC more than doubled that of 1981-82. Influenza surveillance in Louisiana demonstrated low activity with only influenza A (H₃N₂) being identified among the few cases reported during the 1982-83 season. Almost 80% of influenza virus isolates reported in the United States during the 1982-1983 winter were type A (H₃N₂) strains mostly similar to A/Bangkok/79 (H₃H₂), a strain included in the vaccine for the past 3 years. However, variants that are poorly inhibited by animal sera to A/Bangkok/1/79 (reference strain A/Philippines/2/82) have accounted for an increasing proportion of H₃N₂ strains recovered in Asia since mid-1982 and have been identified during the 1982-1983 winter in Europe and North America. Also, animal studies have shown the A/Philippines/2/82 induces antibodies that react broadly with the Bangkok strain. This strain was therefore selected to replace the A/Bangkok/79 (H₃N₂) component in this year's vaccine.

The specific antigens and their potency in the 1983-84 vaccine are: 15 ug each of hemagglutinin of A/Brazil/78 (H₁N₁), A/Philippines/82 (H₃N₂), and B/Singapore/79 viruses per 0.5 ml dose.

Adults and children older than 12 years will require only one dose. However, children 12 - and under who have already had at least one of the influenza vaccines recommended for use from 1978 to 1983 will require only one dose of the 1983-1984 vaccine. Only sub-virion (split virus) vaccines are recommended for children 12 years and under. Those over 12 may receive either sub-virion or whole-virion vaccine.

Annual influenza vaccination is recommended for older persons (over 65) and for all individuals at increased risk of adverse consequences from infections of the lower respiratory tract. Conditions predisposing to such risk include acquired or congenital heart disease associated with altered circulatory dynamics, chronic pulmonary dysfunction, chronic renal disease, diabetes mellitus and other metabolic disorders predisposing to infection, chronic anemia, and immune deficiency states. There has been no evidence to suggest that influenza vaccination of pregnant women poses any special maternal or fetal risk; thus, pregnant females should be evaluated for vaccination according to the same criteria applied to other individuals.

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* Measles — United States, First 26 Weeks, 1983

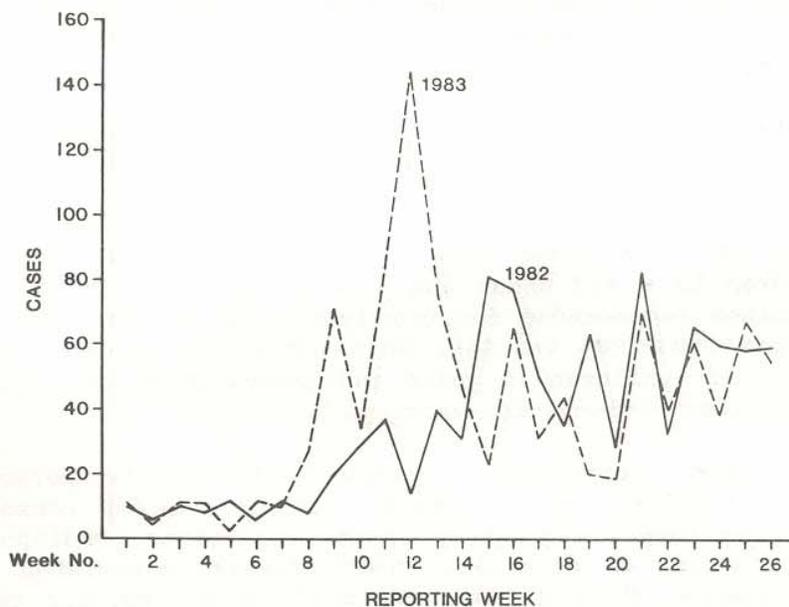
Provisional data for the first 26 weeks of 1983 (January 2–July 2) show an 11.0% increase (1,037 vs. 934) in reported measles cases in the United States, compared with the same period in 1982 (Figure 1). Transmission was limited to a few foci; 97% of the nation's 3,138 counties reported no measles cases during the 26-week period. Of the 1,037 reported cases, 784 (75.6%) occurred in 16 separate outbreaks or chains of transmission*. Eight of the 16 outbreaks occurred on college and university campuses.

The proportion of all measles cases on college campuses has increased from 1.5% (200/13,506) in 1980 to 27.2% (282/1,037) in the first 26 weeks of 1983 (Table 1). During the latter period, cases were reported from 22 campuses in 14 states. In addition, 248 secondary cases resulted from campus outbreaks; campus outbreaks and campus-associated cases together accounted for 51.1% (530/1,037) of all reported measles cases in the first 26 weeks of 1983. Extensive outbreaks lasting more than two generations occurred in Indiana, Ohio, and Texas (2,3). The outbreak that began at Indiana University ultimately accounted for 38.9% (403/1,037) of all measles cases reported in the United States in the first 26 weeks of 1983. During the Ohio outbreak, younger siblings of undergraduates visited the campus for a special event; one incubation period later, at least six siblings—all high school students—were reported to have measles. One of them caused a school-based outbreak in Summit County, Ohio, that has resulted in 49 additional cases to date.

Of the 1,037 reported cases, 51 (4.9%) were international importations, and nine (0.9%) were out-of-state importations. The international importations were reported in travelers (30 U.S. citizens and 21 foreign nationals) who arrived from 23 countries. The number of international importations (51) was not substantially different from that reported in the first 26

*Chains of transmission are defined as consisting of two or more generations of infection (1).

FIGURE 1. Measles cases, by reporting week — United States, 1982, 1983



Source: MMWR provisional data.

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*Reprint from MMWR 32:28, 1983 pp 363–369.

Measles – Continued

weeks of 1982 (64) (4). Two of the international importations occurred in college students; one was the index case for a campus outbreak in Louisiana.

Overall, campus outbreaks, campus-associated cases, and international importations accounted for 61.6% (639/1,037) of reported measles cases in the first 26 weeks of 1983, leaving 398 indigenous, non-campus-associated cases, a 37.6% reduction from the same period in 1982.

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Editorial Note: Campus outbreaks, campus-associated cases, and imported cases have accounted for a greater proportion of reported measles cases in the first 26 weeks of 1983 than in previous years. Data continue to show that the impact of imported measles is limited when immunity levels are high (5,6). However, the increased morbidity on campuses is of special concern because measles is a more serious disease in adults than in schoolchildren; mortality rates from measles have been highest among adults in recent years (7).

Predictably, the most dramatic reductions in measles incidence rates have occurred among schoolchildren—a group easily targeted by school immunization laws. Provisional data indicate that 97% of children entering kindergarten and first grade in the fall of 1982 had documented immunization against measles. In contrast, immunization levels on campuses are difficult to assess because very few colleges and universities require immunization records. The susceptibility problem on campuses has two components—inadequate protection and inadequate documentation. The former allows outbreaks to occur, while the latter escalates the cost of control by necessitating expensive, rapid record reviews. In addition, many students who were previously vaccinated but who lack immunization records may have to be vaccinated unnecessarily. The Indiana University outbreak alone, excluding campus-associated outbreaks, cost over \$250,000 to control.

To avoid such problems, colleges and universities should ensure that students are protected before an outbreak occurs. A permanent immunization record should be maintained in each student's academic file. Information can be updated when appropriate (e.g., for foreign travel) and will be available in the event of an outbreak. Although there is no vaccination requirement for entering the United States, it is recommended that students who anticipate foreign travel (as well as foreign students planning to study in the United States) have documentation of immunity to measles[†] before they travel (5). Because there is no evidence of adverse reactions following vaccination of immune individuals, combined measles-mumps-rubella (MMR) vaccine should be used whenever a person is likely to be susceptible to more than one component (8).

Indigenous measles is now extremely rare in the United States, with no cases reported in week 28. The final challenge is to break the remaining chains of transmission, particularly on college and university campuses.

References:

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3. CDC. Measles in universities—Indiana, 1983. MMWR 1983;32:113-4.
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5. Amler RW, Bloch AB, Orenstein WA, Bart KJ, Turner PM, Hinman, AR. Imported measles in the United States. JAMA 1982;248:2129-33.
6. CDC. Measles importations—United States, 1982. MMWR 1983;32:178-9.
7. Amler RW, Kim-Farley RF, Orenstein WA, Doster SW, Bart KJ. Measles on campus. J Am College Health Assoc 1983 (in press).
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[†]For persons born after 1956, a written record certifying date of vaccination with live measles vaccine on or after the first birthday or physician-diagnosed measles illness.

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Measles — Continued

TABLE 1. Reported measles cases on college and university campuses — United States, 1980-1983

Year	Reported cases on campuses	Total reported cases	Percentage on campuses
1980	200	13,506	1.5
1981	101	3,124	3.2
1982*	115	1,697	6.8
1983†	282	1,037	27.2

*Provisional data.

†Provisional data, first 26 weeks.

INFLUENZA VACCINATION PROGRAM 1983-84 (continued from page 1)

Present influenza vaccines have been associated with few side effects. These include local reactions, infrequent systemic symptoms of toxicity attributed to the inactivated virus itself, and rarely, hypersensitivity reactions in persons with allergy to egg protein.

Influenza vaccine will be available, free of charge, to all eligible persons as outlined above through the Parish Health Units. Individuals may also be vaccinated through their private physicians. Any questions relating to the influenza vaccination program should be directed to the Division of Disease Control, Vaccine Preventable Disease Section (504-568-5007).

SELECTED REPORTABLE DISEASES (By Place of Residence)

STATE AND PARISH TOTALS Reported Morbidity July, 1983	VACCINE PREVENTABLE DISEASES					ASEPTIC MENINGITIS	HEPATITIS A ** AND UNSPECIFIED	HEPATITIS B	LEGIONNAIRES DISEASE	MALARIA***	MENINGOCOCCAL INFECTIONS	SHIGELLOSIS	TUBERCULOSIS, PULMONARY	TYPHOID FEVER	OTHER SALMONELLOSIS	UNDERNUTRITION SEVERE	GONORRHEA	SYPHILIS, PRIMARY AND SECONDARY	RABIES IN ANIMALS (PARISH TOTALS CUMULATIVE, 1983)
	MEASLES	RUBELLA*	MUMPS	PERTUSSIS	TETANUS														
TOTAL TO DATE 19 82	2	1	5	9	4	62	549	165	0	3	40	50	239	3	96	5	14058	1076	20
TOTAL TO DATE 19 83	25	9	0	5	3	44	485	206	4	4	38	34	246	3	121	14	12836	941	20
TOTAL THIS MONTH	0	0	0	3	0	18	36	18	1	0	1	3	29	0	18	2	2616	125	20
ACADIA						1	5	3									23	3	
ALLEN																	1		
ASCENSION													1				3	1	
ASSUMPTION																	5		
AVOUELLES																	4		
BEAUREGARD																	14	3	2
BIENVILLE						1											2		3
BOSSIER						3	1										32		
CADDO							1	1					2		1		198	10	
CALCASIEU													1				175	2	
CALDWELL																	5		
CAMERON																	4		
CATAHOULA																	1	1	
CLAIBORNE																	7		
CONCORDIA																1			
DESOTO																	2		
EAST BATON ROUGE							1						1				182	11	
EAST CARROLL							1										15	1	
EAST FELICIANA								1									4		
EVANGELINE																			
FRANKLIN																	4		
GRANT																	5		
IBERIA							1										7	3	
IBERVILLE																	6		
JACKSON																	1		
JEFFERSON						1	3	2	1		1		3			1	204	11	
JEFFERSON DAVIS																	21		
LAFAYETTE						1	3	1					1				61	6	
LAFOURCHE													1		2		21		
LASALLE																			
LINCOLN							1	2									20	1	2
LIVINGSTON																	3	1	
MADISON							1										17		
MOREHOUSE							1										37		
NATCHITOCHE								1								1	3	3	
ORLEANS				1			1	2				1	12		3		1020	49	
OUACHITA							1						2				144	4	
PLAQUEMINES							1										5		
POINTE COUPEE																	3		
RAPIDES												1	1		3		109	1	
RED RIVER																			1
RICHLAND								1									10		
SABINE																	3		2
ST. BERNARD								2									10		
ST. CHARLES																	10		
ST. HELENA																	3		
ST. JAMES															1		12		
ST. JOHN													2				15	2	
ST. LANDRY																	17		
ST. MARTIN						8							1				6		
ST. MARY																	7	2	
ST. TAMMANY						1		1									23	2	
TANGIPAHOA							3						1		2	1	19	3	
TENSAS																	1		
TERREBONNE				1			5									1	44		
UNION							1										11	1	3
VERMILION							1					1			1		9		
VERNON																	6	2	
WASHINGTON				1													15		
WEBSTER																1	1	2	7
WEST BATON ROUGE																	2		
WEST CARROLL							1	5	1								1		
WEST FELICIANA																	8		
WINN																	2		
OUT OF STATE																	13		

*Includes Rubella, Congenital Syndrome.

**Includes 23 cases of Hepatitis Non A and Non B.

***Acquired outside United States unless otherwise stated.

From January 1, 1983 - July 31, 1983, the following cases were also reported: 2-Amebiasis, 1-Cryptococcosis, 5-Leptospirosis, 2-Reye Syndrome, 3-Trichinosis, 2-Tularemia.



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