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CDC INFLUENZA SURVEILLANCE REPORT
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SPECIAL NOTE

Information contained in this report is a summary of data reported to CDC by State Health Departments, Epidemic Intelligence Service Officers, the influenza diagnostic laboratories collaborating with the International Influenza Center for the Americas, the National Office of Vital Statistics, and other pertinent sources. Much of it is preliminary in nature and is intended primarily for those involved in influenza control activities. Anyone desiring to quote this information is urged to contact the person or persons primarily responsible for the items reported in order that the exact interpretation of the report and the current status of the investigation be obtained. State Health Officers, of course, will judge the advisability of releasing any information from their own States.

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I. Summary of Information

Scattered, limited outbreaks of influenza-like disease have continued to be reported in the one-week interval since publication of CDC Influenza Surveillance Report No. 54, February 5, 1960. Most influenza reported this week was in the Southeastern United States; and although sporadic outbreaks continue to occur in the Midwest and Northeast, the incidence of influenza in general appears to be declining in these areas. No new major urban areas have been involved, and the outbreaks in Texas and California continue to wane.

An increased amount of febrile respiratory disease, or discrete outbreaks of clinical influenza have been reported in a total of 41 states including the District of Columbia. Type A_2 influenza virus has been isolated in a total of 26 states, including the District of Columbia; serologic confirmation of influenza A infection has been reported from four additional states. Type B influenza virus has been isolated in two states.

Mortality due to influenza and pneumonia reported from 108 cities for the week ending February 6th continued to rise, and for the fifth successive week exceeded the "epidemic threshold". Although this increase is noted in many regions, an abrupt decrease is noted in the Pacific region, particularly in Los Angeles.

II. Current Status of Influenza in the United States

A. Reports from States:

New England

1. Connecticut: Dr. James C. Hart, Director, Division of Preventable Diseases, Connecticut State Department of Health, reported that there has been a gradual increase in the incidence of febrile respiratory diseases in many areas throughout the State. A few elementary schools have reported moderately increased absenteeism because of respiratory illnesses but have not been forced to close. In the Hartford area several industries have reported an increase from 5% to 6½% in their absentee rates.

The State Department of Health Laboratory has identified four cases of Asian influenza by means of four-fold or greater increases in antibody titer. One additional patient showed a significant rise of antibody titer against the A_1 (Denver) strain.

Dr. R. H. Green, Yale University School of Medicine, reported the isolation of several viruses from patients in the New Haven area. Preliminary tests on one of these indicated the A_2 strain.

2. Massachusetts: Dr. F. R. Philbrook, Director, Division of Communicable Diseases, Massachusetts Department of Public Health, noted that influenza is subsiding throughout Massachusetts; and although sporadic cases continue to occur in many areas, there have been no further reports of abnormal school or industrial absenteeism.

3. Rhode Island: Dr. R. F. McAteer, Medical Director, Division of Communicable Diseases, Rhode Island Department of Health, noted that the reporting of influenza-like diseases remains above normal. Preliminary reports indicate that the disease has affected the young and middle-aged adults primarily, similar to the experience previously reported from Ohio in the CDC Influenza Surveillance Reports. In Rhode Island, several schools have reported 20-30% of teachers ill, although pupil absenteeism has not been elevated. At least one school was closed because of teacher illness alone. Slight increases in industrial absenteeism have also been noted. Most recent reports, however, indicate a gradual decline in overall incidence of influenza-like illnesses

4. Vermont: Dr. L. J. Leavens, Director, Division of Communicable Disease Control, Vermont Department of Health, reported that an outbreak of influenza-like disease has occurredin the town of Alburg, located in Grand Isle County, near the Canadian border. The outbreak is said to be severe, with a very high attack rate and an unusual number of secondary pneumonias. One physician reported seeing four cases of pneumonia in a single family.

Sporadic cases of influenza are reported throughout the State.

Middle Atlantic

5. New Jersey: Dr. W. J. Dougherty, Director, Division of Preventable Disease Control, New Jersey State Department of Health, stated that there have been three reports of unusual school absenteeism from scattered areas of the State. Although sporadic cases of influenza-like disease are continuing to occur, no community-wide outbreaks have been reported.

6. New York: According to Dr. R. M. Albrecht, Director, Bureau of Epidemiology and Communicable Disease Control, New York State Department of Health, no further evidence of influenza-like activity has been reported from upstate New York.

Dr. E. D. Kilbourne, Cornell University Medical College, New Your City, reported the isolation of an A_2 influenza virus from a 22 year old nurse with clinical influenza at the New York Hospital - Cornell Medical Center. Dr. Kilbourne had previously reported the isolation of the same type virus from a man who had just arrived in New York City from Cleveland, Ohio.

7. Pennsylvania: Dr. W. D. Schrack, Director, Division of Communicable Disease Control, Pennsylvania Department of Health, reported that the few scattered outbreaks which had occurred are now subsiding, and that there have been no further reports of increased absenteeism in schools or industry.

South Atlantic

8. Florida: Dr. J. Bond, Director, Bureau of Preventable Diseases, Florida State Board of Health, noted that the sharp outbreak of influenza-like disease that occurred in Flagler County (CDC Influenza Surveillance Report No. 53, January 29, 1960) has now subsided. An increased number of febrile respiratory illnesses have been reported, however, from other widely scattered areas in Florida.

9. Georgia: According to Dr. W. J. Murphy, Director, Division of Epidemiology Control, Georgia Department of Public Health, school absenteeism rates in the Greater Atlanta area have returned to normal seasonal levels. Several hospitals in the area, however, have reported seeing an unusual number of adults with influenza-like diseases. Absentee rates among the nursing staffs of several Atlanta hospitals has been unusually high.

Elsewhere in Georgia, moderate increases in influenza-like diseases have been reported from several rural counties.

A total of 7 A_2 influenza viruses have now been isolated from patients in the Atlanta area by the Laboratory of the Georgia Department of Public Health.

10. North Carolina: Dr. Jacob Koomen, Chief, Section of Communicable Diseases, North Carolina State Board of Health, stated that the occurrence of reported influenza remains markedly elevated above normal levels, although the outbreaks in most of the major urban areas of the State appear to be subsiding. The estimated number of cases of influenza in North Carolina to date in 1960 is approximately equal to the estimated number of cases that occurred during the "first wave" of the 1957-58 epidemic of Asian influenza.

Industiral absenteeism has not been elevated, although many areas still report school absenteeism rates of 15-25%.

11. South Carolina: In a report from the Division of Disease Control, South Carolina State Board of Health, Dr. G. E. McDanial, Director, noted that within the past two weeks there has been an increased incidence of influenza-like illness occurring in scattered outbreaks throughout most of the State. There have been a few schools with increased absenteeism; in some schools there has been a greater percentage of illness among the teachers than among the students, but school closures due to excessive absenteeism have been rare. In a few counties, it has been reported that the illness has apparently been more prevalent in the adult than in the childhood population.

12. Virginia: Dr. Mason Romaine, Director, Bureau of Communicable Disease Control, Virginia Department of Health, reported that there has been an increase in influenza-like disease during the past week, occurring primarily in scattered outbreaks throughout most of the State. No community-wide outbreaks have been reported; although within the City of Richmond, for example, several areas appear to be heavily involved, whereas other areas within the same City seem to be relatively free of influenza.

Dr. W. S. Jordan, University of Virginia School of Medicine, Charlottesville, reported the identification of A_2 influenza virus, isolated from a young adult male with clinical influenza. He noted that there have been several deaths following fulminating courses there, attributed to severe influenza pneumonia complicated by bacterial infections. Material from these cases are under study.

13. West Virginia: In a report from the Preventive Medical Service, West Virginia State Department of Health, Dr. L. A. Dickerson, Director, noted that the outbreak of influenza in Grant County, which had been associated with high school absenteeism (CDC Influenza Surveillance Report No. 53, January 29, 1960) has waned. Pneumonia has been noted to have become an unusually frequent complication, however, in older adults.

East North Central

14. Illinois: Dr. N. J. Rose, Chief, Bureau of Epidemiology, Illinois Department of Public Health, reported that there is evidence of influenza-like activity in many parts of the State, with a mild concentration noted in Lawrence County. Scattered clusters of cases have also been observed within the Chicago area, but no community wave of influenza has been reported there.

The isolation of a type B influenza virus was reported from an individual in Champaign County. A number of isolations of A_2 influenza virus have been previously reported from the Chicago area.

15. Ohio: Dr. Winslow Bashe, Chief, Division of Communicable Diseases, Ohio Department of Health, noted that although many sporadic cases of influenzal illness are continuing to occur, there is a gradual decline in the amount of disease throughout the State.

Dr. Robert Oseasohn, Western Reserve University School of Medicine, Cleveland, reported the isolation of an A_2 influenza virus from the lung of a previously healthy 63 year old female, who died of an abrupt, fulminant influenzal pneumonitis.

16. Wisconsin: Dr. Josef Preizler, Epidemiologist, Wisconsin State Board of Health, reported that there has been widely distributed evidence of influenza activity in the State, particularly in La Crosse County. A few schools in the County have reported sudden increases in absenteeism to 20%. Industrial absenteeism has also risen slightly above normal levels. Many cases have been noted in Madison, although school absenteeism has not been significantly affected there.

Dr. E. R. Krumbiegel, Commissioner of Health, City of Milwaukee, reported serologic evidence, by HI tests, of type A_2 influenza infections having occurred there recently. School attendance has been approximately normal, however, and no community-wide outbreak has been reported.

East South Central

17. Kentucky: J. C. Todd, State Epidemiologist, Kentucky Department of Health, stated that the amount of reported influenza has continued to increase, and that a number of schools have been closed for 3-4 days in some parts of the State as a result of excessive absenteeism. He noted further that the counties most extensively involved are the ones which reported few cases in the 1957 epidemic.

The Laboratory of the Kentucky Department of Health has reported the isolation of A_2 influenza virus from clinical cases.

West North Central

18. Iowa: Dr. E. G. Zimmerer, Commissioner of Health, Iowa State Department of Health, reported that limited outbreaks of influenza-like disease are continuing to occur in scattered areas throughout the State. Increased school absenteeism rates have been noted in a few areas, but no school closures have been reported.

19. Kansas: Dr. D. E. Wilcox, State Epidemiologist, Kansas State Board of Health, noted that there is a continued occurrence of limited outbreaks of influenza, with increases in school absenteeism, in widely distributed areas throughout the State. No major urban areas have been significantly involved.

Dr. C. A. Hunter, Director of Laboratories, Kansas State Board of Health, reported that A_2 influenza virus has been isolated from clinical cases in a total of 8 counties.

20. Minnesota: In a report from the Division of Disease Prevention and Control, Minnesota Department of Health, Dr. D. S. Fleming, Director, stated that an outbreak of clinical influenza had occurred in the State prison, Bayport, with an estimated 300 cases among 1,800 inmates. Cases alsoappeared among the staff, but the attack rate for the staff appeared to be less than that for the inmates. Influenza virus, type A_2, was isolated from one of the inmates.

Physicians throughout the State have reported an increased incidence of clinical influenza, but no additional sharp, localized outbreaks have occurred.

21. Missouri: According to Dr. E. A. Belden, Director, Bureau of Communicable Disease Control, Missouri Department of Public Health and Welfare, clusters of cases of clinical influenza have occurred throughout the State, including the St. Louis area. Only one school closure has been reported, however, and the St. Louis area has not been extensively affected.

West South Central

22. Arkansas: Dr. A. M. Washburn, Director, Division of Communicable Disease Control, Arkansas State Board of Health, reported that the outbreaks of clinical influenza previously noted in several counties (CDC Influenza Surveillance Report No. 54, February 5, 1960) have subsided. A sharp outbreak has been reported from the Pine Bluff area, however, although school absenteeism rates have not been elevated. Young adults are said to be most prominently involved in that area.

23. Texas: According to Dr. Howard Smith, Director, Division of Communicable Disease Control, Texas State Department of Health, reports of increased occurrence of influenza-like disease have been received from a total of 78 counties to date. The urban outbreaks which had been reported in Houston, Dallas, San Antonio, and Fort Worth are all subsiding, as is the incidence throughout most of the remainder of the State. Many physicians, however, continue to note an unusually high incidence of secondary pneumonia. Abnormally high school absenteeism rates are no longer prominent.

Pacific

24. California: Dr. Philip Condit, Chief, Bureau of Acute Communicable Diseases, California State Department of Public Health, noted that the peak of the outbreaks in California occurred during the week ending January 23rd; there has been a steady decline in influenza since that time. With the exception of a few schools in the Los Angeles area, schools in the State report absenteeism at normal seasonal levels.

Mortality due to influenza and pneumonia in 8 California cities, after reaching a high peak, dropped abruptly during the week ending February 6th. Los Angeles, which had contributed most to the increase, showed the most marked decline. An intensive analysis of this excess influenza and pneumonia mortality in Los Angeles is in progress. As had been noted previously, the majority of deaths occurred in the age group 65 years and older, particularly among debilitated individuals in homes for the aged. Physicians in the area have been impressed with the unusual frequency and severity of complicating pneumonia.

B. Other Reports:

A report received from Col. Cooch, M.C., U.S.A., through Dr. C. C. Dauer, National Office of Vital Statistics, indicates that there have been isolations of A_2 influenza virus from individuals at Fort Leavenworth and Fort Carsons, Kansas. Serologic confirmation of group A influenza infection has been obtained from individuals at Fort MacPherson, Georgia, and Fort Jackson, South Carolina. A sharp outbreak of influenza is reported to have occurred at Fort Leonard Wood, Missouri from which an A_2 influenza virus had been isolated, as reported previously.

Dr. W. J. Mogabgab, Tulane University School of Medicine, New Orleans, reported through Dr. R. Q. Robinson, WHO International Influenza Center for the Americas, the isolation of an A_2 influenza virus from a student at Tulane University.

Dr. L. V. Scott, University of Oklahoma Medical Center, reported three isolations of influenza virus, type A_2, from individuals with clinical disease in Oklahoma City.

Dr. W. E. Clapper, Head, Department of Bacteriology, The Lovelace Foundation, Albuquerque, New Mexico, reported serologic confirmation of group A influenza infection by CF test in 4 of 7 individuals with clinical disease from whom acute and convalescent sera were obtained.

C. Summary:

Influenza in the United States is maintaining its predicted pattern of widespread distribution, with frequent local, limited, although occasionally severe outbreaks. The principal exceptions to this pattern, as have been noted, are Texas and Southern California, both of which have experienced widespread, severe outbreaks. The extent of the excess influenza and pneumonia mortality which has been reported from these areas, particularly Los Angeles, is quite out of keeping with the experience thus far in the rest of the nation. This tends to support the impressions reported from physicians in these areas of the unusual frequency and severity of associated pneumonia; and the results of the investigations of the mortality in Los Angeles currently being conducted will be of great interest.

Of the outbreaks reported this week, a slight concentration may be noted in the Southeastern United States. Most of the major urban outbreaks which had been reported, including those in Texas and California as well as those in Michigan, Ohio, Massachusetts, and elsewhere, have subsided.

An impression reported from an increasing number of states has been the relatively increased prominence of the disease among young and middle-aged adults, and the relatively decreased prominence among school-aged children, as compared to the expreience of 1957.

A summary of states in which clinical influenza and/or isolations of influenza virus have been reported this season follows.

Area	State	Reported Outbreak	Virus Isolation
New England			
	Connecticutt	x	A_2
	Massachusetts	x	-
	Rhode Island	x	-
	Vermont	x	-
Middle Atlantic			
	New Jersey	x	A_2
	New York	x	A_2
	Pennsylvania	x	A_2
South Atlantic			
	D. C.	x	A_2
	Florida	x	-
	Georgia	x	A_2
	Maryland	x	A_2
	North Carolina	x	-
	South Carolina	x	A (serologic confirmation)
	Virginia	x	A_2
	West Virginia	x	-
East North Central			
	Illinois	x	A_2 & B
	Michigan	x	A_2
	Ohio	x	A_2
	Wisconsin	x	A (serologic confirmation)
East South Central			
	Alabama	x	A_2
	Kentucky	x	A_2
	Mississippi	x	A_2
	Tennessee	x	-
West North Central			
	Iowa	x	A_2
	Kansas	x	A_2
	Minnesota	x	A_2
	Missouri	x	A_2
	North Dakota	x	A (serologic confirmation)
West South Central			
	Arkansas	x	-
	Louisiana	x	B & A_2
	Oklahoma	x	A_2
	Texas	x	A_2 (A_1 Lab. Infection)
Mountain			
	Arizona	x	-
	Colorado	x	A_2
	Nevada	x	-
	New Mexico	x	A (serologic confirmation)
	Utah	x	A_2
Pacific			
	California	x	A_2
	Washington	x	A_2
	Alaska	x	-
	Hawaii	x	A_2
	Totals	41 States	A_1-1 State (lab. inf.) A_2-26 States A (serologic confirmation) - 4 States B -2 States

Table 2. Current Influenza and Pneumonia Deaths in 108 United States Cities by Geographic Divisions

Division	Deaths (including estimates*) during Weeks Ending: 1/2 108 Cities	1/9 108 Cities	1/16 108 Cities	1/23 108 Cities	1/30 108 Cities	2/6 106 Cities	No. Cities Reporting this week
U.S.	499	625	662	756	886	959	106
NE	47	49	41	41	78	104	14
MA	128	164	153	188	184	169	17
ENC	126	140	154	166	193	200	18
WNC	23	34	35	41	44	59	9
SA	42	54	47	41	62	83	9
ESC	23	47	39	51	28	41	7
WSC	45	69	73	83	88	126	13
Mt.	13	19	27	22	24	44	7
Pac.	52	49	93	123	185	133	12

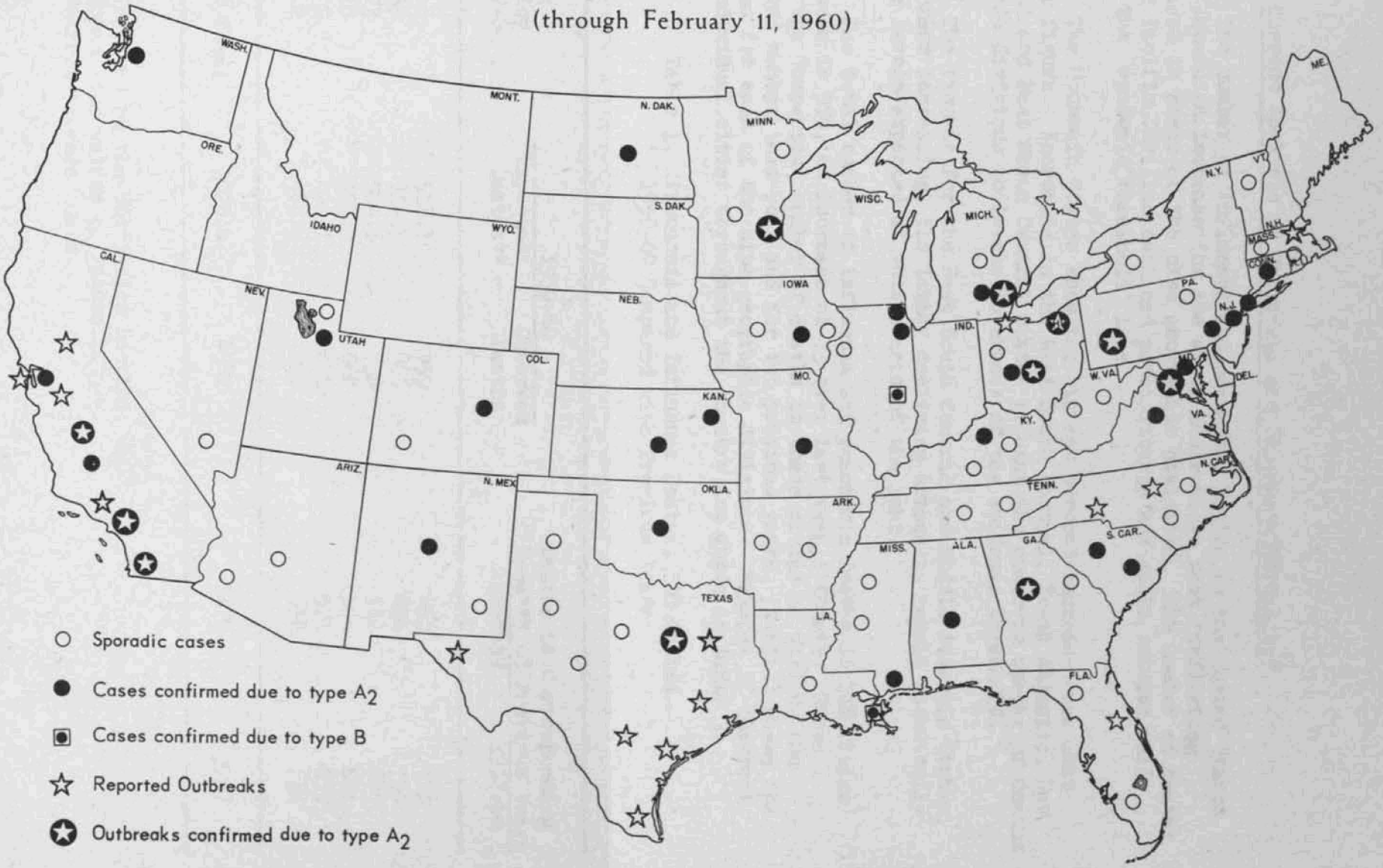
* The number of deaths given includes estimates for cities not reporting in a given week. The table is corrected for preceding weeks after receipt of late reports.

Table 3. Six Week Totals for Selected Cities in Various Areas

	1/2/60	1/9	1/16	1/23	1/30	2/6
New England						
Boston	15	12	9	11	25	43
Middle Atlantic						
New York	69	83	74	86	78	84
East North Central						
Chicago	63	63	69	64	68	66
Detroit	16	27	24	49	40	30
West North Central						
Kansas City, Mo.	4	3	8	3	10	15
St. Louis	2	8	8	16	10	14
South Atlantic						
Atlanta	8	13	8	3	9	17
Baltimore	9	7	15	13	21	20
Washington	10	13	12	9	15	24
West South Central						
Dallas	4	2	7	7	10	18
Houston	2	5	10	11	15	23
San Antonio	7	18	20	19	9	17
Mountain						
Denver	5	10	10	9	10	22
Pacific						
Los Angeles	21	14	49	64	107	83

REPORTED INFLUENZA — 1959-60

(through February 11, 1960)



III. Current Analysis of Influenza and Pneumonia Mortality*

The number of influenza and pneumonia deaths in the United States again showed an increase for the sixth consecutive week, reflecting increases in seven of the nine geographic divisions. The number of deaths in the Pacific Division declined precipitously but still remains well above the "epidemic threshold" line.

The Mountain States show the highest percent increase over last week's figure. Increases in the West South Central, South Atlantic, New England and East North Central States brought the observed number of deaths in these divisions to levels in excess of the epidemic threshold.

The figures for the East South Central and Middle Atlantic States, the former increasing, the latter declining somewhat, remain essentially at the levels expected at this season of the year.

The total number of influenza and pneumonia deaths in 108 cities this week is 959, an increase of 73 over last week's figure. Table 1 shows the "expected" number of deaths in these cities as well as the observed number this year and for two previous years. Table 2 shows the figures for each of the nine geographic divisions. Figures of interest for individual cities throughout the country are shown in Table 3.

Table 1. Pneumonia and Influenza Deaths, 108 Cities
1959-60 Compared with Previous Years

Week Ending 1959-60	1959-60 "Expected" Deaths**	1959-60 Observed Deaths	Deaths in Corresponding Week*** of Previous Years 1958-59	1957-58
Feb. 6	518.1	959	463	712
Jan. 30	514.5	886	494	750
23	509.6	756	546	675
16	503.5	662	564	651
9	496.1	625	591	633
2	487.6	499	516	532
6-Week Total	3029.4	4387	3174	3953

* Prepared by the Statistics Section, CDC
** Trend line values of Figure 1.
*** Nearest calendar date.

FIG. 1 WEEKLY PNEUMONIA AND INFLUENZA DEATHS

EPIDEMIC THRESHOLD

NORMAL INCIDENCE

NUMBER OF DEATHS

United States, 108 cities

WEST NORTH CENTRAL, 9 cities

EAST NORTH CENTRAL, 18 cities

NEW ENGLAND, 14 cities

MOUNTAIN, 8 cities

EAST SOUTH CENTRAL, 8 cities

MIDDLE ATLANTIC, 17 cities

PACIFIC, 12 cities

WEST SOUTH CENTRAL, 13 cities

SOUTH ATLANTIC, 9 cities

IV. International Notes:

The World Health Organization, in the Weekly Epidemiological Record, No. 3, 1960, reported that outbreaks of influenza had occurred in Italy during December 1959. Clinically, the disease was said to be mild, and school absenteeism in Genoa did not rise over 10%. Both A_2 and B influenza viruses were isolated from patients in Genoa.

Type A_2 influenza virus was also isolated from military personnel in Bremerhaven, Germany.

The Foreign Epidemiologic Summary, No. 5, February 5, 1960, Division of Foreign Quarantine, Public Health Service, reports that from unofficial information, influenza was widespread throughout Europe, with the epidemic worse in France than in other countries of Western Europe. In addition to the isolations noted above, A_2 influenza virus has also been isolated from other areas in West Germany and from a small outbreak among military personnel in Elsinore, Denmark.

The Ministry of Health, London, reported in the Weekly Influenza Statement for England and Wales, No. 2, January 30, 1960, that "there is no evidence that influenza is prevalent in this country and there have been no laboratory isolations of influenza virus, either A or B".

(This report was prepared by Theodore C. Eickhoff, M.D., Epidemic Intelligence Service Officer, Surveillance Section, Communicable Disease Center.)