

FOR ADMINISTRATIVE USE

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

In the one-week interval since the publication of CDC Influenza Surveillance Report No. 51, January 15, 1960, reports have been received both of the continuation and extension of known outbreaks of clinical influenza, and of the appearance of such outbreaks in new areas of the country. The outbreaks in Southern California and Texas are continuing; other states reporting sharp rises in the occurrence of febrile respiratory disease include Arizona, Massachusetts, Mississippi, Ohio, Pennsylvania, West Virginia, and the District of Columbia. Significant urban epidemics appear to be occurring in Boston and Pittsburgh, continuing in Los Angeles and the major cities of Texas, and declining in Detroit and Columbus.

Virus isolations continue to be reported with increasing frequency. Not unexpectedly, the Los Angeles outbreak was confirmed as due to A₂ influenza virus. Other states in which A₂ influenza virus has been isolated, not previously reported, are Illinois, Missouri, Pennsylvania, and the District of Columbia. This virus thus far has been isolated in 10 states during the current influenza season. The isolation of type B influenza virus is reported in Louisiana.

The analysis of weekly influenza and pneumonia mortality reveals that the total for 108 cities for the week ending January 16th has again increased, and exceeds the "epidemic threshold" for the second consecutive week. The excess mortality reported is most pronounced in the Pacific region, but is also contributed to by the East North Central, West South Central, and Mountain regions.

II. Current Status of Influenza in the United States

A. Reports from States.

1. Arizona: Dr. C. G. Salsbury, Commissioner of Public Health, Arizona State Department of Public Health, reports that the incidence of febrile respiratory disease (in several counties) is approximately double that of one year ago. About half of the reported cases are from Maricopa County (Phoenix), and half of the remainder are from Yuma County, which borders directly on Southern California. No sharp, localized outbreaks have been reported, however, and school absenteeism is not marked.
2. California: According to Dr. Henry Renteln, Influenza Surveillance Unit, Bureau of Acute Communicable Diseases, California State Department of Public Health, the outbreak there remains most marked in the southern half of the State. Clinical influenza is continuing to occur in Los Angeles in epidemic proportions, and absenteeism in several schools there is about 15%. Increased absenteeism was also reported from several industrial concerns in the Los Angeles area. More limited outbreaks of clinical influenza continue to occur throughout the Southern California area, particularly in Fresno, Merced, Kern, San Bernardino, San Diego, and Santa Barbara Counties.

Sacramento, as previously reported, remains the northernmost extension of reported influenza in California. A mild increase in the amount of febrile respiratory disease has been noted in the San Francisco Bay area, but as yet there has been no generalized community wave there.

The Los Angeles "Q virus", referred to in the public press in recent weeks, has been identified in eight specimens as A₂ influenza virus. A₂ virus has also been identified in individuals from Fresno and Orange Counties.

3. Illinois: Dr. N. J. Rose, Chief, Bureau of Epidemiology, Illinois Department of Public Health, states that there have as yet been no reports of epidemic influenza within the resident population of that State. In Chicago, in particular, there has been no report of increased respiratory disease or school absenteeism, except for the University of Chicago. A limited outbreak of febrile respiratory disease is reported there among the students, and virologic studies are in progress.

Dr. Carl Dauer, National Office of Vital Statistics, notes that there have been 18 isolations of A₂ influenza virus reported from personnel at the Great Lakes Naval Training Station.

4. Louisiana: Dr. W. J. Mogabgab, Tulane University School of Medicine, New Orleans, reports the isolation of influenza B virus from students there. No obvious outbreak of clinical influenza has occurred, however. This is the first reported isolation of type B virus during the current influenza season.

5. Massachusetts: According to Dr. F. R. Philbrook, Director, Division of Communicable Diseases, Massachusetts Department of Public Health, there is evidence of an outbreak of influenzal illness in the Greater Boston area. Several schools in South Boston have reported absenteeism up to 18%, and three suburban high schools have reported absenteeism of 17%, 27%, and 32%.

An extensive outbreak of clinical influenza has occurred among workers at the Charlestown Navy Yard; this population was reported to have been well immunized during October and November, 1959. Laboratory studies are in progress to isolate the etiologic agent.

The death of a previously healthy pregnant female due to clinical influenza was recorded in a Boston hospital. Virologic studies are being made on specimens from this case.

Elsewhere in Massachusetts, an outbreak of influenza-like illness is current in Pittsfield, and school absenteeism there is reported to be high.

6. Michigan: Dr. F. S. Leeder, State Epidemiologist, Michigan Department of Health, states that although the epidemic in Detroit was severe, it was remarkably short-lived. Measured by parameters of school and industrial absenteeism and hospital reporting, that city has returned virtually to normal. Similarly, the outbreaks previously noted in Flint and Saginaw have decreased.

A total of 13 isolations of A₂ influenza virus have been made from individuals in the Detroit area.

7. Ohio: Dr. Winslow Pashe, Chief, Division of Communicable Diseases, Ohio Department of Health, has stated that cases of clinical influenza are continuing to occur in the Columbus area, although no longer in epidemic proportion. School absenteeism there has returned to normal.

A limited outbreak is in progress in Toledo, and one school there has reported 15% absenteeism. A number of sporadic outbreaks have been reported from widely scattered areas of Ohio.

Several more isolations of A₂ influenza virus have been made from individuals in the Columbus area. In addition, complement fixation tests were done on routine Wasserman sera sent to the State Laboratory in Columbus, from the city and outlying areas over a 60-mile radius. The number of sera showing titers of 1:16 or greater against influenza A, by week, is as follows:

<u>Week Ending</u>	<u>No. Tested</u>	<u>No. Positive</u>	<u>% Positive</u>
Jan. 2	35	0	0
Jan. 9	29	2	7%
Jan. 16	25	12	48%

8. Pennsylvania: According to Dr. W. D. Schrack, Director, Division of Communicable Disease Control, Pennsylvania Department of Health, there is widespread evidence of influenza-like illness in that State. Pittsburgh is experiencing a sharp outbreak, and hospitals there are reported to be crowded with patients having typical clinical influenza.

The death of a previously healthy 35-year-old woman due to clinical influenza, with widespread interstitial pneumonia, was recorded in a Pittsburgh hospital. Two sputa, obtained on the third day of illness, both yielded A₂ influenza virus, according to Dr. J. S. Younger, University of Pittsburgh School of Medicine.

A₂ influenza virus was also isolated from two nurses with clinical illness at a Philadelphia hospital. There is no reported community outbreak in progress there as yet.

It is of interest to note that so far there has been no report of epidemic influenza in neighboring New York City or State.

9. Texas: Dr. J. E. Peavy, Commissioner of Health, Texas State Department of Health, reports that outbreaks of influenza-like disease are continuing to occur with a state-wide distribution. In Dallas,

although hospitals are crowded, school absenteeism was said to be only slightly elevated. In El Paso, however, school absenteeism was reported at about 15%. A school near Houston reported 19% absenteeism. Virtually all major cities in Texas have reported outbreaks of influenza-like illness, most of which are now gradually waning.

Further information was received concerning the single isolation of A₁/Denver/1/57 influenza virus in Fort Worth, which was previously reported. This isolation was made from a laboratory worker with clinical influenza, who had been exposed to that strain during the preparation of reagents and was felt to be clearly a laboratory-acquired infection. For purposes of influenza surveillance during the 1959-60 season, therefore, no further consideration will be given to this isolation.

B. Other Reports

Dr. Carl Dauer, National Office of Vital Statistics, reported that there has been an increase in the amount of febrile respiratory disease in Washington, D. C. during the past week, especially in children. Absenteeism is not marked, however. One isolation of A₂ influenza virus was reported from a patient in a Washington hospital.

A sharp increase in clinical influenza was reported in two counties in Mississippi. Dr. W. J. Mogabgab, Tulane University School of Medicine also reports a single isolation of A₂ virus from an airman of Keesler Air Force Base, Mississippi on January 4th.

Similarly, in West Virginia, Wayne and Cabell Counties have reported an increased number of febrile respiratory illnesses, with unusually high school absenteeism.

One isolation of A₂ influenza virus is reported from Fort Leonard Wood, Missouri.

C. International Note

An explosive outbreak of febrile respiratory disease in a small town in British Honduras was reported to the Pan American Health Organization. Up to 90% of the population was said to be affected, with symptoms of headache and myalgia, and some pneumonic complications in the very young and very old.

In summary, the pattern to date of reported influenza in the United States remains essentially constant, with predominately localized scattered outbreaks, and wide involvement of only a few states. Several major urban epidemics have occurred, however, and others are in progress.

Geographically, this week marked the extension of reported influenza to the Eastern states and the Atlantic Coast. Except for isolated instances of holiday travel, however, it has been impossible to trace the spread of these outbreaks across the nation.

As had been expected, laboratory evidence indicates that the vast majority of influenza this year is due to A₂ influenza virus. In a preliminary report of studies done with strains received thus far, Dr. Roslyn Q. Robinson, WHO International Influenza Center for the Americas, states that strains isolated this year appear to be identical to those isolated during the 1957-58 pandemic. With few exceptions, most states report that, as a clinical impression of physicians, the disease in individuals is of essentially the same severity as was observed two years ago.

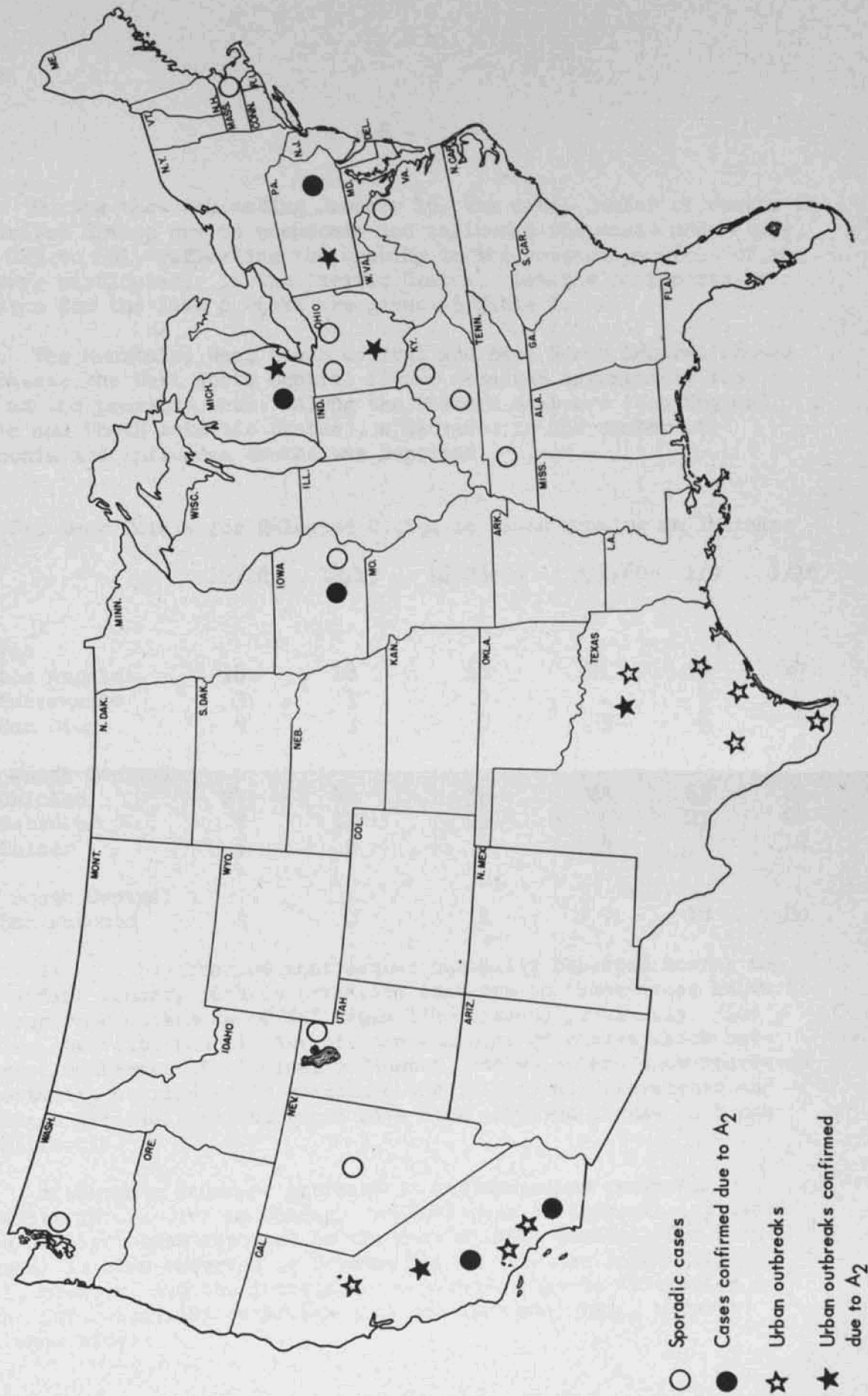
A summary of states reporting outbreaks of clinical influenza this season and/or isolations of influenza virus follows.

<u>State</u>	<u>Reported Outbreaks of clinical influenza</u>	<u>Isolation of influenza virus</u>
Arizona	x	-
California	x	A ₂
D. C.	x	A ₂
Florida	x	-
Hawaii	x	A ₂
Illinois	-	A ₂
Iowa	x	A ₂
Kentucky	x	-
Louisiana	-	B
Massachusetts	x	-
Michigan	x	A ₂
Mississippi	x	A ₂
Missouri	-	A ₂
Nevada	x	-
Ohio	x	A ₂
Pennsylvania	x	A ₂
Tennessee	x	-
Texas	x	A ₂
Utah	x	-
Washington	x	-
West Virginia	x	-
Totals	18 states	A ₂ - 11 states B - 1 state

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

REPORTED INFLUENZA — 1959-60

(through January 20, 1960)



During the week ending January 16, the total number of deaths in the United States due to pneumonia and influenza increased moderately, from 625 to 661, reflecting the upswing in the western portion of the country, particularly in the Pacific States. Details of reports by division for the last 6 weeks are given in Table I.

The Mountain, West South Central and East North Central showed increases; the West North Central figure remained essentially the same as the previous week. Along the Eastern seaboard (New England, Middle and South Atlantic States), a decrease in the number of pneumonia and influenza deaths was reported.

Six Week Totals for Selected Cities in Areas Showing an Increase

	12/12	12/19	12/26/59	1/2/60	1/9	1/16
Pacific						
Los Angeles	16	18	14	21	14	49
Sacramento	3	3	5	1	4	9
San Diego	3	3	0	3	8	8
East North Central						
Chicago	27	40	33	63	63	69
Detroit	7	13	9	16	27	24
Toledo	5	5	1	4	3	12
West South Central						
San Antonio	3	8	1	7	18	20

It will be observed that excess mortality observed during the week ending January 16th is primarily centered in those areas known to have reported outbreaks of influenza-like disease previously. Los Angeles, Detroit, and San Antonio are examples of cities which have reported outbreaks of clinical influenza, and which now show increases in mortality attributed to pneumonia and influenza. Sacramento and San Diego are similarly known to have been involved in the outbreak in California.

Although a moderate increase in influenza and pneumonia mortality is observed in Chicago, no outbreaks of clinical influenza there have yet been reported to the Surveillance Section, CDC. An increase is also observed in Toledo; the numbers are relatively small, however, and the increase cannot reasonably be attributed to the influenza-like outbreaks that are currently being reported from that city.

Table I. Current Influenza and Pneumonia Deaths
in 108 United States Cities

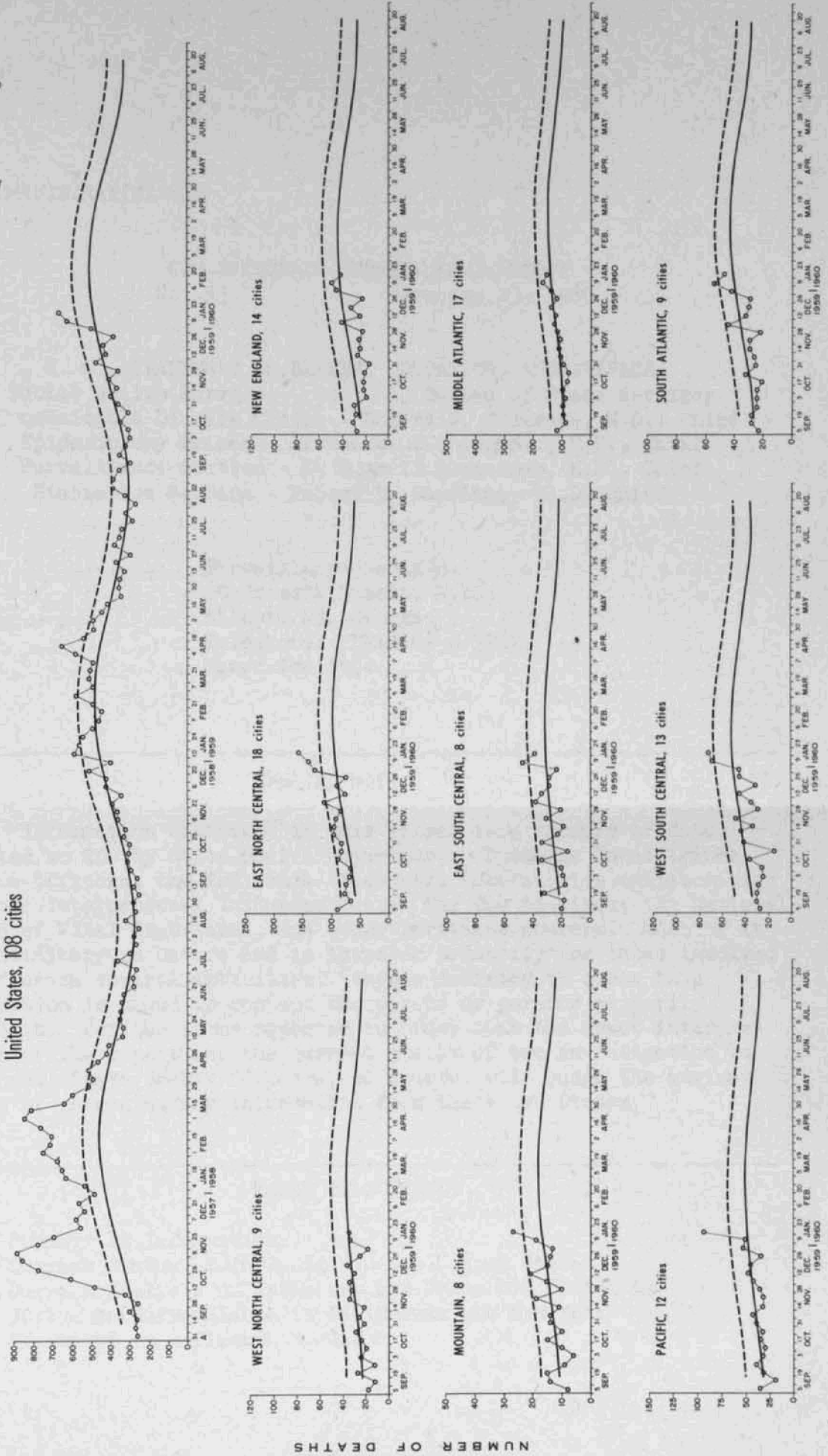
Division	Number of Cities in Study Reporting this week	Deaths (including estimates*) during weeks ending:					
		12-12-59 (108 Cities)	12-19-59 (108 Cities)	12-26-59 (105 Cities)	1-2-60 (108 Cities)	1-9-60 (108 Cities)	1-16-60 (104 Cities)
All Divisions	104	430	445	389	499	625	661
New England	14	25	33	22	47	49	41
Mid. Atlantic	16	123	138	118	128	164	151
E. North Central	17	74	89	75	126	140	156
W. North Central	9	30	36	25	23	34	35
S. Atlantic	9	32	30	29	42	54	47
E. South Central	8	34	29	28	23	47	39
W. South Central	11	45	31	45	45	69	72
Mountain	8	21	15	14	13	19	27
Pacific	12	46	44	33	52	49	93

* 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.

FIG. 1 WEEKLY PNEUMONIA AND INFLUENZA DEATHS



--- EPIDEMIC THRESHOLD
 — NORMAL INCIDENCE



NUMBER OF DEATHS