

FOR ADMINISTRATIVE USE

CDC INFLUENZA SURVEILLANCE REPORT
No. 54 February 5, 1960

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Public Health Service Bureau of State Services
Communicable Disease Center - Robert J. Anderson, M.D., Chief
Epidemiology Branch - Alexander D. Langmuir, M.D., Chief
Surveillance Section - E. Russell Alexander, M.D., Chief
Statistics Section - Robert E. Serfling, Ph.D., Chief

Surveillance Section
50 Seventh Street, N.E.
Atlanta 23, Georgia
Telephone: TRinity 6-3311
Extension 5454

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.

TABLE OF CONTENTS

- I. Summary of Information
- II. Current Status of Influenza in the United States
- III. Current Analysis of Influenza and Pneumonia Mortality
- IV. International Notes
- V. Influenza Surveillance in New York City

I. Summary of Information:

Scattered, limited outbreaks of influenza-like disease have continued to be reported in the one-week interval since the publication of CDC Influenza Surveillance Report No. 53, January 29, 1960. Many of the outbreaks reported this week are in states in the southeastern United States, and the number of outbreaks reported from other areas is declining. Many of the previously reported outbreaks, particularly in the Northeast and Midwest, are subsiding, although sporadic cases continue to occur in those areas. Clinical influenza remains widespread in Texas, but appears to be subsiding gradually in Southern California.

An increased incidence of febrile respiratory disease, or local outbreaks of clinical influenza have been reported in a total of 35 states, including the District of Columbia. Type A₂ influenza virus has been isolated in a total of 22 states, including the District of Columbia.

Mortality due to influenza and pneumonia, as reported from 108 cities for the week ending January 30th, continued to rise, and for the fourth successive week exceeded the "epidemic threshold". This increase is noted in several regions, but, as was true last week, is particularly marked in the Pacific region. Among 8 California cities, the increase is most marked in Los Angeles.

II. Current Status of Influenza in the United States

A. Reports from States:

New England:

1. Massachusetts: Dr. F. R. Philbrook, Director, Division of Communicable Diseases, Massachusetts Department of Public Health, reported that the outbreak in the Greater Boston area has virtually subsided, and school absenteeism has returned to normal seasonal levels. Moderate increases in school absenteeism have been noted in scattered areas throughout the rest of the State, with New Bedford, Framingham, and Worcester reporting 10-15% absenteeism. The Worcester City Hospital recently reported absenteeism among its staff of 15%.

A total of about 50 cases have been reported in the Charlestown Navy Yard, and sporadic cases are continuing to occur. A viral agent has been identified, but not yet typed, in a specimen from this outbreak.

2. Rhode Island: According to Dr. R. F. McAteer, Medical Director, Division of Communicable Diseases, Rhode Island Department of Health, there has been a slight increase in reporting of febrile respiratory disease from all over the State. School absentee levels have been normal to slightly increased, as have industrial absentee levels. However, there have been no reported localizing outbreaks or community epidemics.

3. Vermont: Dr. L. J. Leavens, Director, Division of Communicable Disease Control, Vermont Department of Health, described an outbreak of clinical influenza which occurred in the town of Woodstock. A private school in that town reported 15 of 90 pupils ill, although the public school students experi-

enced very little illness. Sporadic cases have been reported in widely scattered areas of Vermont.

Middle Atlantic:

4. New Jersey: Dr. W. J. Dougherty, Director, Division of Preventable Disease Control, New Jersey State Department of Health, reported that one isolation of A₂ influenza virus was made from an individual with clinical illness in the family of a Health Department employee, in Trenton. Although sporadic cases of clinical influenza have occurred, there have been no reported outbreaks or instances of community involvement.

5. New York: Dr. R. M. Albrecht, Director, Bureau of Epidemiology and Communicable Disease Control, New York State Department of Health, stated that no further evidence of influenza activity has been reported, either from Wyoming and Genesee Counties, previously reported to have had mild outbreaks of influenza-like disease, or from the rest of the State.

Dr. Morris Greenberg, Director, Bureau of Preventable Diseases, New York City Department of Health, stated, similarly, that there has been no evidence of unusual amounts of influenza-like diseases in New York City.

Dr. E. D. Kilbourne, Cornell University Medical College, reported the isolation of A₂ influenza virus from a 46-year-old man admitted to The New York Hospital on January 18, 1960. The onset of this patient's illness had been the preceding day, January 17, while en route to New York from Cleveland, Ohio, where influenza was known to be occurring.

6. Pennsylvania: Dr. W. D. Schrack, Director, Division of Communicable Disease Control, Pennsylvania Department of Health, described an illness resembling influenza which had occurred among members of a family in Johnstown. Two children, both pre-school age, became ill, had a rapidly downhill course, and died; the 30-year old father shortly afterward experienced a similar, though milder illness. The isolation of A₂ influenza virus from the father was reported by Dr. Klaus Hummeler, University of Pennsylvania School of Medicine, through Dr. R. Q. Robinson, International Influenza Center for the Americas. It was not possible to obtain laboratory specimens from the two children.

South Atlantic:

7. Georgia: Dr. W. J. Murphy, Director, Division of Epidemiology Control, Georgia Department of Public Health, reported that school absenteeism in Fulton County (Atlanta), which had been elevated last week as reported in CDC Influenza Surveillance Report No. 53, January 29, 1960, has now returned to normal seasonal levels. No further outbreaks of influenza-like disease have been reported from the State.

One isolation of A₂ influenza virus was made from an individual with clinical influenza in the Atlanta area.

8. Maryland: Dr. Charlotte Silverman, Chief, Division of Epidemiology and Communicable Disease Control, Maryland State Department of Health stated that increases in influenza-like illnesses have been noted in Anne Arundel, Cecil,

Harford, Baltimore, and Washington Counties. In these areas, sharp increases of respiratory illnesses were localized to individual schools or sections. On a state-wide basis, however, school absenteeism was not increased; and there was no evidence to indicate a community outbreak in the City of Baltimore.

A₂ influenza virus was isolated from 6 of 24 civilian employees with clinical influenza at Camp Detrick in Frederick County. One additional isolation was made from a child in Baltimore County.

9. North Carolina: According to Dr. Jacob Kocmen, Chief, Section of Communicable Diseases, North Carolina State Board of Health, sharp, local outbreaks of influenza-like disease have been reported in a total of 11 counties. Schools in Orange County are reporting absenteeism up to 15%, and in Gaston County, 20%. Certain schools in the latter County have reported up to 33% absenteeism. The City of Raleigh has reported school absenteeism of 20-25%, as also has Lenoir County. Sporadic cases have also been reported in Nash, Forsyth, Guilford, and Alamance Counties.

Laboratory studies are in progress to determine the etiology of these outbreaks.

East North Central:

10. Ohio: Dr. Winslow Bashe, Chief, Division of Communicable Diseases, Ohio Department of Health, reported that outbreaks of influenza-like diseases have been noted in a total of 19 counties to date, and A₂ influenza virus has been isolated from patients in 4 counties. The most recent area from which this virus has been isolated is Trumbull County.

Sporadic cases of clinical influenza are continuing to occur in Cleveland and Toledo, but school absenteeism rates have returned to normal levels.

A questionnaire survey of all employees of the Ohio Department of Health was conducted by the Division of Communicable Diseases, designed to obtain information on the occurrence of influenza within families living in the Columbus area. The results of the preliminary analysis of this survey are reported with the kind permission of Dr. Bashe.

A total of 280 questionnaires were returned, yielding a population of 834 individuals; the vast majority of completed questionnaires were from individuals primarily involved with public health work, with little or no hospital exposure.

The epidemic curve in the group thus defined extended from December 13, 1959, to January 17, 1960, with a peak on December 23-26. A lesser secondary peak, only about half as high, occurred on January 7-8. Attack Rates for age groups are presented in the table below.

<u>Age Group</u>	<u>No. Ill</u>	<u>No. At Risk</u>	<u>Attack Rate Per 100 Persons</u>
0-9	73	189	39
10-19	15	117	13
20-29	77	158	49
30-39	34	131	26
40 /	60	239	25
All Ages	<u>259</u>	<u>834</u>	<u>31</u>

The attack rate in the 0-9 - age group is noted to be relatively high, and is the more surprising when considered in the light of the extensive morbidity of the Asian influenza epidemic in 1957-58. The most striking finding, however, is the markedly low rate in the 10-19 - year age group. This is in sharp contrast to the common experiences in 1957, in which that age group frequently had the highest attack rates. The low rate noted this year may perhaps be due to the relatively high level of residual immunity in that age group as a result of the 1957 experience. It is further possible that school vacations over the holiday period, thus reducing risk of exposure, contributed to the low rate. The rate in the 20-29 - year age group rose abruptly again, lending some support to the impressions reported previously from Ohio, as well as other states, that influenza this year was more prevalent in adults than was noted in 1957. Rates for the 30-39 and 40 age groups are comparable to those reported in 1957.

The Laboratory of the Ohio Department of Health has continued testing routine Wasserman sera from individuals in the Franklin County area for influenza antibody. During the week ending January 30, 118 sera were thus examined, and the per cent of those showing titers of 1:16 or greater against several antigens by CF test is as follows: 47% - Influenza A, 20% - Influenza B, and 10% - Hemadsorption Virus, Type I.

West North Central:

11. Kansas: Dr. D. E. Wilcox, State Epidemiologist, Kansas State Board of Health, reported that limited outbreaks of influenza-like disease have occurred in widely scattered areas throughout the State.

Dr. C. A. Hunter, Director of Laboratories, Kansas State Board of Health, confirmed 6 isolations of influenza virus, type A₂, all from individuals with clinical illness from Shawnee (Topeka) and adjacent Douglas Counties.

12. North Dakota: Kenneth Mosser, Director, Division of Preventable Diseases, North Dakota State Department of Health, noted that a gradual increase of influenza-like diseases has been noted in 10 counties throughout the State. One southeastern county, in particular, has reported a limited outbreak,

with 40-50 cases in one small town. Serologic confirmation of influenza A infection has been obtained from 3 of these cases.

West South Central:

13. Arkansas: Dr. A. M. Washburn, Director, Division of Communicable Disease Control, Arkansas State Department of Health, stated that scattered outbreaks of clinical influenza have occurred in the last several weeks in several counties throughout the State, particularly Crawford, Sebastian, Conway, Perry, and Yell Counties.

14. Oklahoma: Dr. F. R. Hassler, Director of Laboratories, Oklahoma State Department of Health, reported through Dr. Roslyn Q. Robinson, WHO International Influenza Center for the Americas, Montgomery, Alabama, that a marked increase in influenza-like illnesses has been noted in the Oklahoma City area. There have, however, been no reported widespread outbreaks or school closures. A₂ influenza virus was isolated from 4 of 7 individuals with clinical illness in Oklahoma City.

15. Texas: According to Dr. Howard Smith, Director, Division of Communicable Disease Control, Texas State Department of Health, reports of increased incidence of influenza-like disease have been received from 69 counties. In general, the outbreaks have subsided in the southern areas of the State, but remain active in central Texas. In Houston, absenteeism in many schools has remained at 10% levels or higher. A sharp outbreak is reported to be continuing in Dallas, and several schools have reported absenteeism of 22 to 26%.

Mountain:

16. Colorado: Dr. C. S. Mollohan, Chief, Section of Epidemiology, Colorado State Department of Public Health, reported that the incidence of influenzal disease has decreased in the metropolitan Denver area. School or industrial absenteeism rates have not been noted to be elevated in Denver.

Elsewhere in the State, a limited outbreak of clinical influenza has been noted at Lowry Air Force Base, but subsided this week. A limited outbreak has also been reported in the Durango area, in the southwest part of the State. The increased incidence of influenza-like disease previously reported from Pueblo, Boulder, and Grand Counties has subsided.

Dr. Gordon Meiklejohn, University of Colorado Medical School, reported 3 additional isolations of influenza virus, type A₂.

17. New Mexico: Dr. John Mason, Director, Division of Communicable Disease Control, New Mexico Department of Public Health, stated that scattered, limited outbreaks of influenza-like disease have occurred, primarily in the southeastern part of the State. No sharp, community outbreaks have been reported, however.

18. Utah: Dr. A. A. Jenkins, State Epidemiologist, Utah State Department of Health, reported that limited outbreaks of clinical influenza had been noted in January in Ogden and Salt Lake City. These have subsided, and no significant absenteeism is known to be occurring at this time. A₂ influenza virus was isolated from a patient in the Salt Lake City area.

Pacific:

19. California: Dr. Henry Renteln, Influenza Surveillance Unit, Bureau of Acute Communicable Diseases, California State Department of Public Health, stated that, in general, influenza appears to be subsiding throughout California. The outbreak in Los Angeles is definitely waning, although absenteeism in many schools is still elevated over normal seasonal levels. Northern California and the San Francisco Bay area was not affected as extensively as was the southern half of the State. Scattered areas around the San Francisco Bay area, however, still report moderately increased absenteeism.

Mortality due to influenza and pneumonia has again risen sharply in California, for the third successive week. This is again most marked in the Los Angeles area. This is the second consecutive week in which weekly influenza and pneumonia mortality in California exceeded that recorded during any single week in 1957-58. A preliminary investigation of these deaths in Los Angeles indicates that the majority occurred in the age group 65 years and older. An intensive analysis of this excess mortality, particularly in Los Angeles is underway.

B. Other Reports:

Information received from Dr. C. C. Dauer, National Office of Vital Statistics, indicates that 2 isolations of A₂ influenza virus have been made from students at Northwestern University, Evanston, Illinois. An increased incidence of influenzal disease has been reported at that student health service.

A report received from Dr. D. Hamre, University of Chicago School of Medicine, through Dr. R. Q. Robinson, WHO International Influenza Center for the Americas, confirms 7 additional isolations of A₂ influenza virus, 2 from staff members, 2 from the emergency room, and 3 from the student health service. The incidence of influenza-like illness seen in the emergency room is reported to be remaining higher than normal.

Dr. R. Q. Robinson, WHO International Influenza Center for the Americas, reported the isolation of A₂ influenza virus from a school child with clinical influenza in Montgomery, Alabama.

Dr. A. P. McKee, State University of Iowa Medical School, Iowa City has reported additional isolations of influenza virus, type A₂ in individuals from the Iowa City area; he notes that the incidence of clinical influenza has remained high in that city.

C. Summary:

No change is detected in the pattern of reported influenza in the United States. With two continuing exceptions, reported outbreaks remain scattered, limited in distribution, and not notably severe. The continuing exceptions are Texas, where influenza remains widespread, although starting to subside, and California. Although the outbreaks in Southern California are

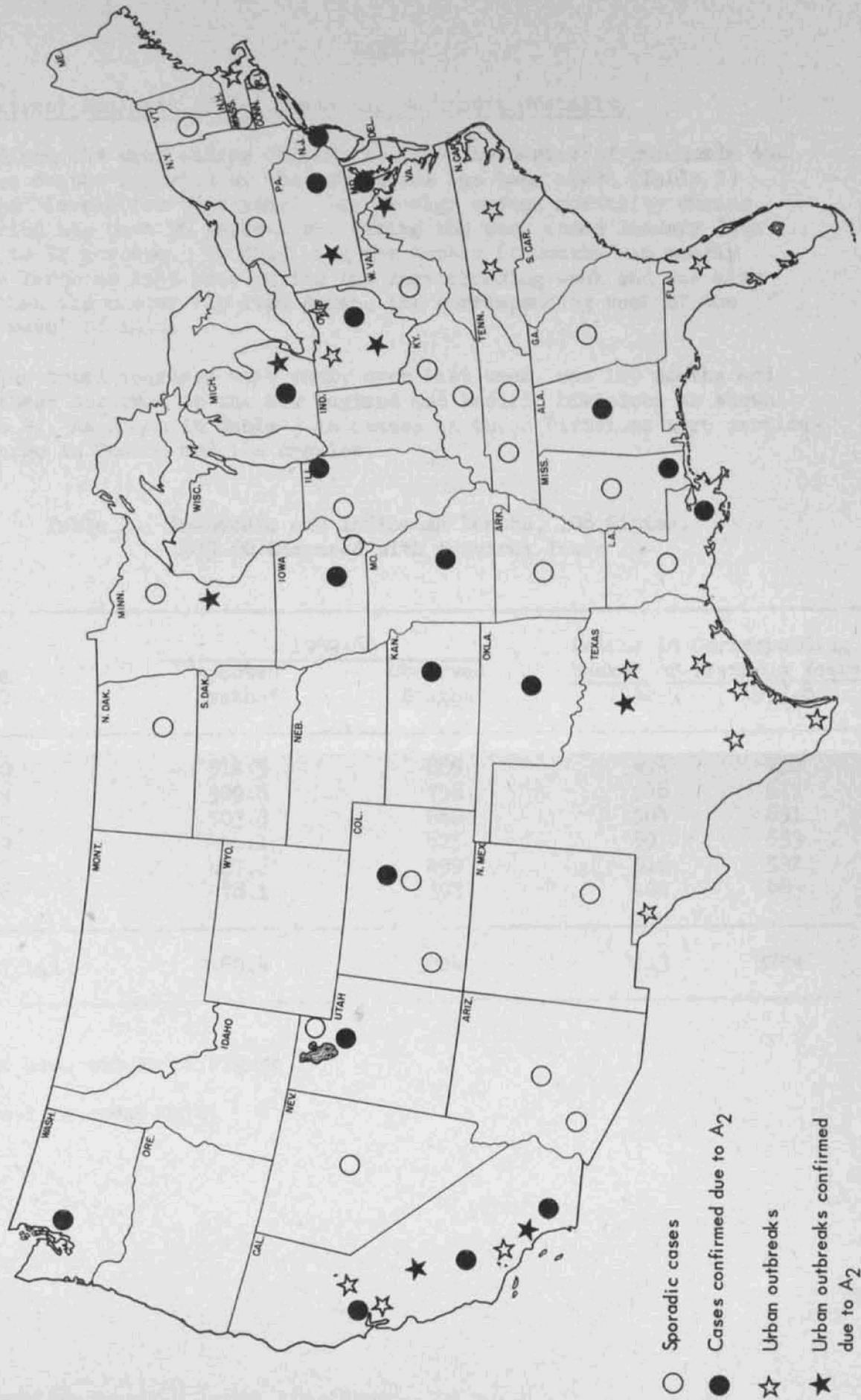
similarly beginning to subside, the steadily climbing mortality from influenza and pneumonia, particularly in Los Angeles, indicate that city to have had an unusually severe outbreak. Although widespread outbreaks are now being reported from the southeastern United States, the disease in general seems to be subsiding throughout the Northeast.

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

<u>Area</u>	<u>State</u>	<u>Reported Outbreak</u>	<u>Virus Isolation</u>	<u>Area</u>	<u>State</u>	<u>Reported Outbreak</u>	<u>Virus Isolation</u>
<u>New England</u>	Massachusetts	x	-	<u>West North Central</u>	Iowa	x	A ₂
	Rhode Island	x	-		Kansas	x	A ₂
	Vermont	x	-		Minnesota	x	A ₂
			Missouri		-	A ₂	
<u>Middle Atlantic</u>	New Jersey	-	A ₂	North Dakota	x	-	
	New York	x	A ₂				
<u>South Atlantic</u>	Pennsylvania	x	(Case from Ohio)	<u>West South Central</u>	Arkansas	x	-
					Louisiana	x	B
					Oklahoma	x	A ₂
					Texas	x	A ₂
<u>South Atlantic</u>	D. C.	x	A ₂	<u>Mountain</u>	Arizona	x	-
	Florida	x	-		Colorado	x	A ₂
	Georgia	x	A ₂		Nevada	x	-
	Maryland	x	A ₂		New Mexico	x	-
	North Carolina	x	-		Utah	x	A ₂
	West Virginia	x	-				
<u>East North Central</u>	Illinois	x	A ₂	<u>Pacific</u>	California	x	A ₂
	Michigan	x	A ₂		Washington	x	A ₂
	Ohio	x	A ₂		Alaska	x	-
			Hawaii		x	A ₂	
<u>East South Central</u>	Alabama	x	A ₂	Totals	35 States	A ₁ -1 State (lab.inf.)	
	Kentucky	x	-			A ₂ -22 States	
	Mississippi	x	A ₂			B -1 State	
	Tennessee	x	-				

REPORTED INFLUENZA — 1959-60

(through February 4, 1960)



- Sporadic cases
- Cases confirmed due to A2
- ☆ Urban outbreaks
- ★ Urban outbreaks confirmed due to A2

III. Current Analysis of Influenza and Pneumonia Mortality

Since the week ending January 2, 1960 the number of pneumonia and influenza deaths reported by the 108 cities has been above (Table 1) "expected" levels for this year. The average excess mortality during this period has been 36 percent but during the week ended January 30th it rose to 72 percent. In this week the number of deaths was nearly twice as large as last year during the corresponding week and was also larger than the number reported during the corresponding week of the "second wave" of 1958.

The total increase this week, over last week, was 129 deaths and 104 of these occurred in the New England and Pacific Divisions as shown in Table 2. As shown in Table 3 increases in these Divisions were particularly large in Boston and Los Angeles.

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

Week Ending 1959-60	1959-60		Deaths in Corresponding Week** of Previous Years	
	"Expected" Deaths*	Observed Deaths	1958-9	1957-8
Jan. 30	514.5	885	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
Dec. 26	478.1	397	402	483
6-Week Total	2989.4	3824	3113	3724

* Trend line values of Figure 1.

** Nearest calendar date.

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

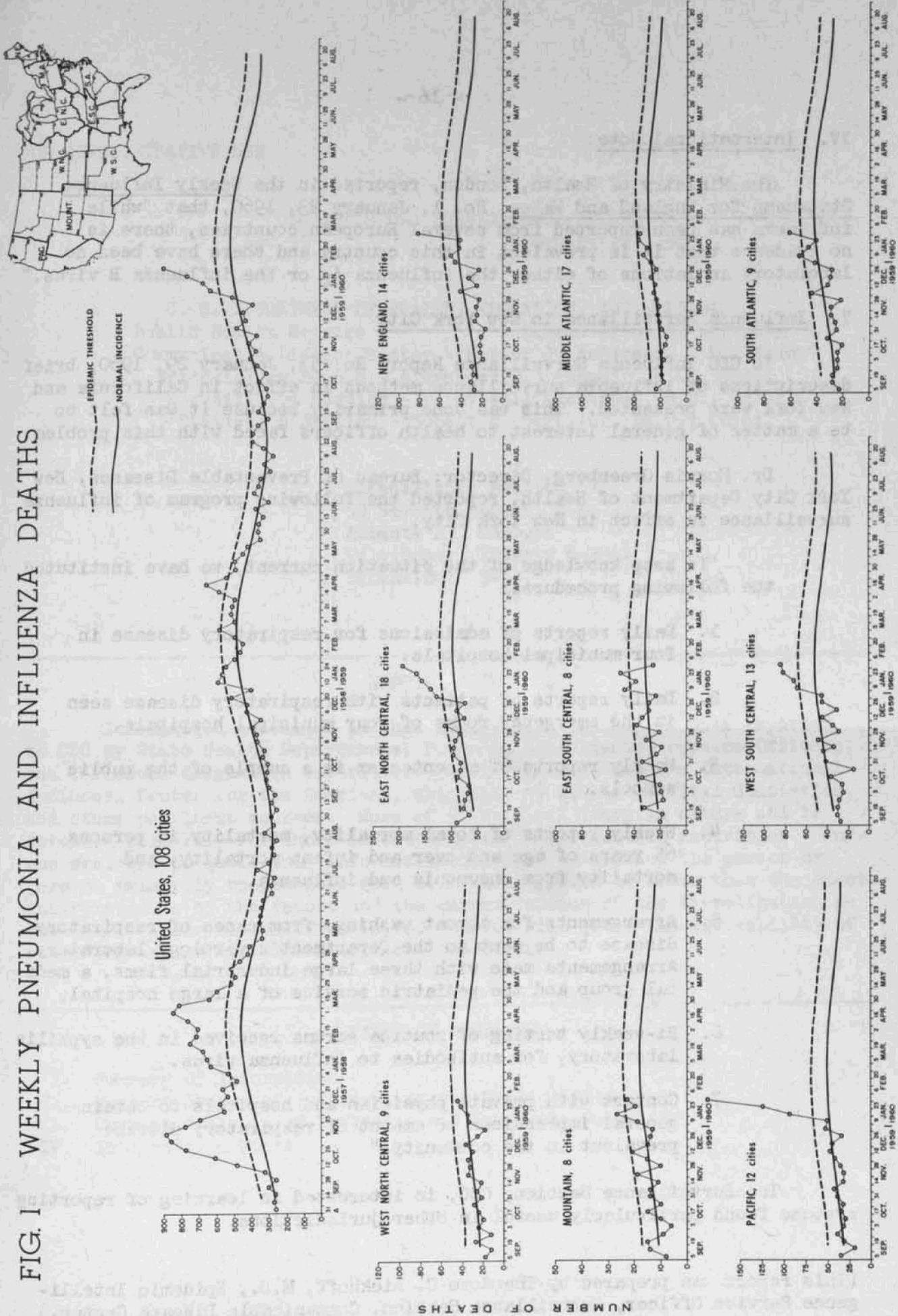
Division	Deaths (including estimates*) during Weeks Ending:						
	12/26	1/2	1/9	1/16	1/23	1/30	No Cities Reporting this week
	108 Cities	108 Cities	108 Cities	108 Cities	108 Cities	102 Cities	
U.S.	397	499	625	662	756	885	102
NE	24	47	49	41	41	81	13
MA	118	128	164	153	188	184	17
ENC	73	126	140	154	166	193	18
WNC	33	23	34	35	41	44	9
SA	29	42	54	47	41	62	9
ESC	28	23	47	39	51	26	6
WSC	45	45	69	73	83	85	12
Mt.	14	13	19	27	22	23	7
Pac.	33	52	49	93	123	187	11

* 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 Areas Showing an Increase

	12/26	1/2/60	1/9	1/16	1/23	1/30
New England						
Boston	9	15	12	9	11	25
Pacific						
Los Angeles	14	21	14	49	64	107
San Diego	0	3	8	8	17	11
East North Central						
Chicago	33	63	63	69	64	68
Detroit	9	16	27	24	49	40
West South Central						
San Antonio	1	7	18	20	19	9
Little Rock	5	1	12	5	14	5
Middle Atlantic						
Pittsburgh	8	7	7	17	28	31
New York	59	69	83	74	86	78

FIG. 1 WEEKLY PNEUMONIA AND INFLUENZA DEATHS



NUMBER OF DEATHS

IV. International Note:

The Ministry of Health, London, reported in the Weekly Influenza Statement for England and Wales, No. 1, January 23, 1960, that "while influenza has been reported from several European countries, there is no evidence that it is prevalent in this country and there have been no laboratory isolations of either the influenza A₂ or the influenza B virus."

V. Influenza Surveillance in New York City

In CDC Influenza Surveillance Report No. 53, January 29, 1960, brief descriptions of influenza surveillance methods in effect in California and New York were presented. This was done primarily because it was felt to be a matter of general interest to health officers faced with this problem.

Dr. Morris Greenberg, Director, Bureau of Preventable Diseases, New York City Department of Health, reported the following program of influenza surveillance in effect in New York City.

"To keep knowledge of the situation current, we have instituted the following procedures:

1. Daily reports of admissions for respiratory disease in four municipal hospitals.
2. Daily reports of patients with respiratory disease seen in the emergency rooms of four municipal hospitals.
3. Weekly reports of absenteeism in a sample of the public schools.
4. Weekly reports of total mortality, mortality in persons 65 years of age and over and infant mortality, and mortality from pneumonia and influenza.
5. Arrangements for throat washings from cases of respiratory disease to be sent to the Department's virology laboratory. Arrangements made with three large industrial firms, a medical group and the pediatric service of a large hospital.
6. Bi-weekly testing of routine serums received in the syphilis laboratory, for antibodies to influenza virus.
7. Contact with private physician and hospitals to obtain general impressions of amount of respiratory disease prevalent in the community."

The Surveillance Section, CDC, is interested in learning of reporting systems found particularly useful in other jurisdictions.

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