

CDC INFLUENZA SURVEILLANCE REPORT

NO. 33

JANUARY 30, 1958

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
Public Health Service                      Bureau of State Services  
Communicable Disease Center - Robert J. Anderson, M. D., Chief  
Surveillance Section - Mario Pizzi, M. D., Chief

Keith E. Jensen, Ph. D.  
CDC Virus and Rickettsia Section\*  
P. O. Box 61  
Montgomery 1, Alabama  
Telephone No. AMherst 3-4468

Yates Trotter, Jr., M. D.  
Frederick L. Dunn, M. D.  
Influenza Surveillance Unit  
50 Seventh Street, N. E.  
Atlanta 23, Georgia  
Telephone No. TRinity 6-3311  
Extension 5455

\*Serving as WHO International  
Influenza Center for the Americas

---

SPECIAL NOTE

Information contained in this report is a summary of data reported to CDC by State Health Departments, Epidemic Intelligence Service Officers, collaborating influenza diagnostic laboratories, and other pertinent sources. Much of it is preliminary in nature and is intended 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 Analysis of Influenza and Pneumonia Mortality
- III. Discussion of Mortality
- IV. Industrial Absentee Data

I. Summary of Information

Influenza and pneumonia mortality continues to increase for the fourth straight week, despite the absence of widespread influenza outbreaks. Although Asian influenza is still occurring sporadically, this does not sufficiently explain the rising mortality. Clinicians report no apparent change in the virulence of influenza. Extensive efforts are being made to gather supplementary information regarding the nature of the reported deaths. Preliminary examination of mortality data in large cities suggests that most of the deaths are concentrated in the 65 plus age group. Such an age distribution might explain why schools and industries have not been affected. This conclusion is far from certain, however, and much more information is needed.

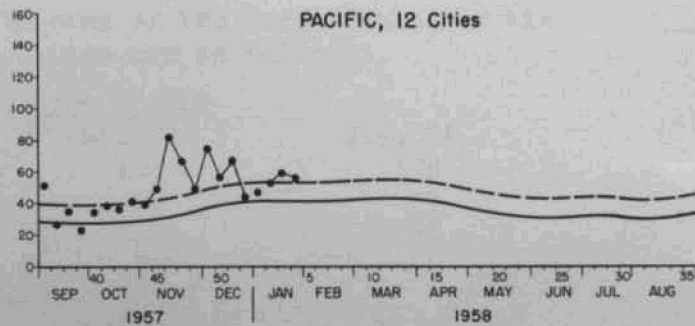
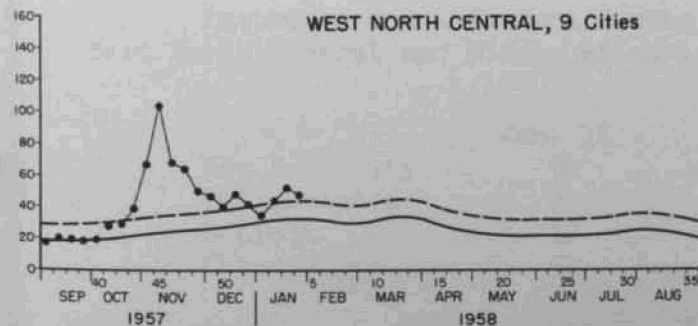
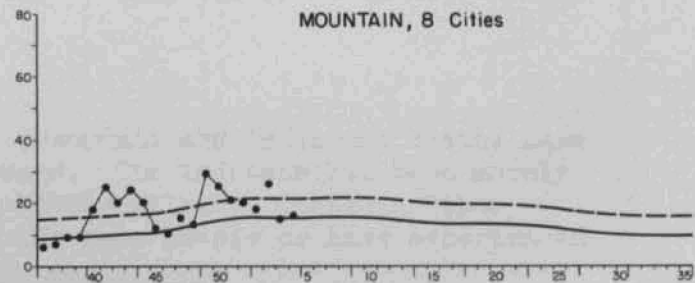
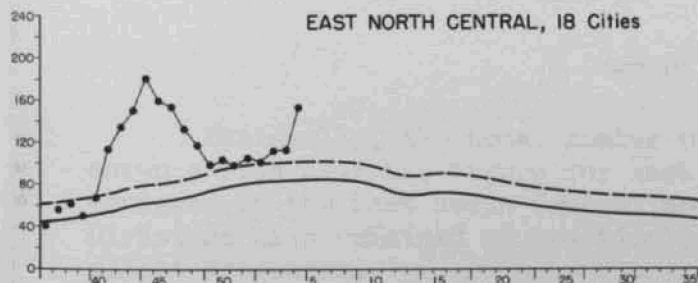
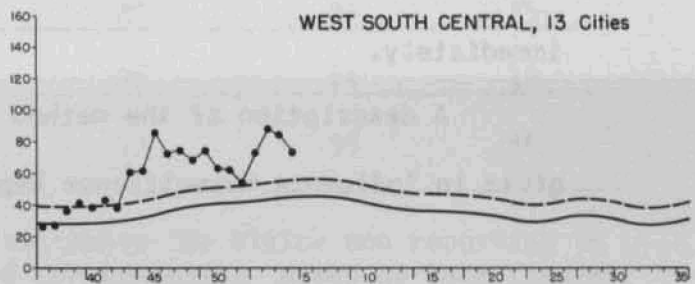
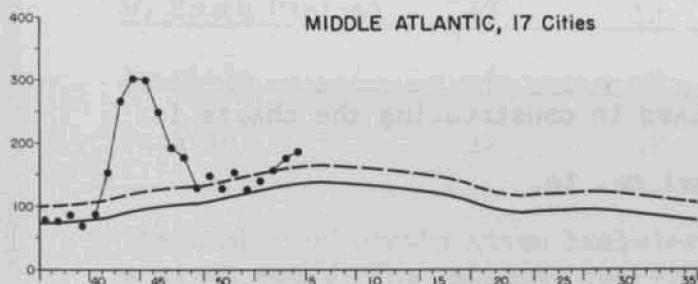
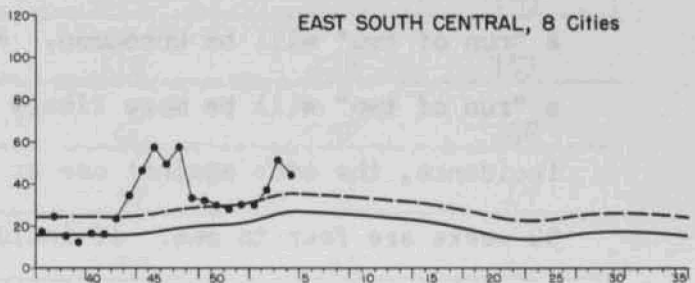
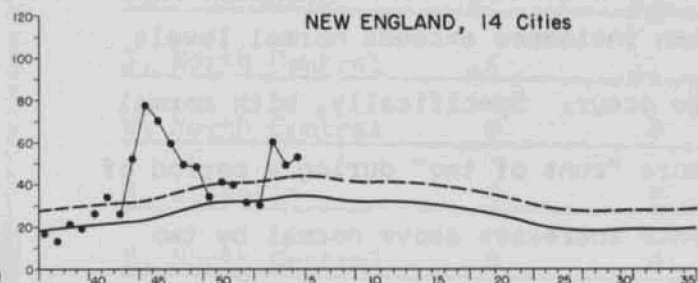
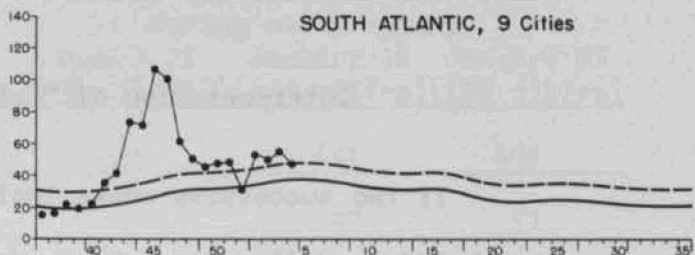
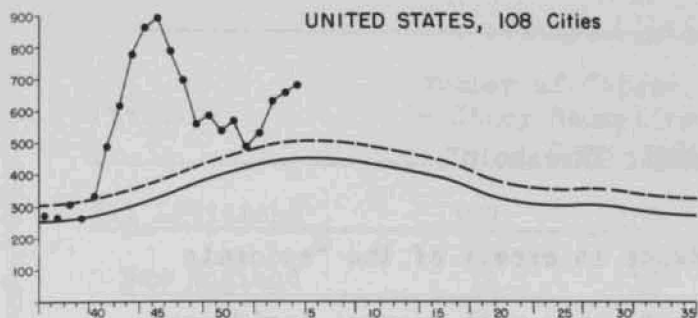
We urgently request your help in finding the cause of this increased mortality. Please send us a summary of any recent investigations which may bear on this problem. Health officials in particular are asked to report the nature and extent of recurrent outbreaks. Good clinical data on severe or fatal cases is also needed.

# WEEKLY PNEUMONIA AND INFLUENZA DEATHS

--- "EPIDEMIC THRESHOLD"

— "NORMAL INCIDENCE"

(SEE EXPLANATION ON BACK OF SHEET)



NUMBER OF DEATH

## Interpretation of "Epidemic Threshold"

If two successive weeks incidence in excess of the "epidemic threshold" is defined as a "run of two", then with "normal incidence" a "run of two" will be uncommon. When incidence exceeds normal levels a "run of two" will be more likely to occur. Specifically, with normal incidence, the odds against one or more "runs of two" during a period of 52 weeks are four to one. If incidence increases above normal by two standard deviations the odds are even that a "run of two" will follow immediately.

A description of the method used in constructing the charts is given in Influenza Surveillance Report No. 16.

## II. Current Analysis of Influenza and Pneumonia Mortality\*

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

| Division         | Number of Cities |                     | Deaths (including estimates**) during weeks ending |                         |                         |
|------------------|------------------|---------------------|--|-------------------------|-------------------------|
|                  | In Study         | Reporting this week | January 11 (108 cities)                            | January 18 (108 cities) | January 25 (102 cities) |
| All Divisions    | 108              | 102                 | 633  | 651                     | 675                     |
| New England      | 14               | 12                  | 49   | 50                      | 53                      |
| Mid. Atlantic    | 17               | 17                  | 173  | 175                     | 185                     |
| E. North Central | 18               | 17                  | 112  | 112                     | 153                     |
| W. North Central | 9                | 8                   | 44   | 52                      | 48                      |
| S. Atlantic      | 9                | 8                   | 50   | 53                      | 47                      |
| E. South Central | 8                | 8                   | 37   | 51                      | 44                      |
| W. South Central | 13               | 12                  | 89   | 84                      | 73                      |
| Mountain         | 8                | 8                   | 26   | 15                      | 16                      |
| Pacific          | 12               | 12                  | 53   | 59                      | 56                      |

\*\*The number of deaths given includes estimates for cities not reporting in a given week. The table is corrected for preceding weeks as late figures are received. The chart will be corrected only for gross discrepancies.

### Comment

Nationally, the total number of pneumonia and influenza deaths have shown a rise over the figure for last week. The increase has been mainly centered in the East North Central and Middle Atlantic States. Other Divisions have remained at practically the same levels or have experienced slight decreases.

Pneumonia and influenza deaths in some of the large cities of the East North Central and Middle Atlantic States are as follows:

|               | Week Ending |         |         |
|---------------|-------------|---------|---------|
|               | Jan. 11     | Jan. 18 | Jan. 25 |
| New York City | 91          | 108     | 128     |
| Philadelphia  | 27          | 19      | 13      |
| Detroit       | 12          | 20      | 33      |
| Chicago       | 51          | 57      | 67      |

### III. Discussion of Mortality

The excess influenza-pneumonia mortality during January 1958 is substantial. It has been increasing for the past four weeks and is now approximately one-third the excess of the fall Asian influenza epidemic peak week. There is no clear evidence of community-wide spread of influenza or other virus respiratory disease, despite repeated inquiries to health officials. The situation is unprecedented in the past 49 years. No explanation is now available, but intensive study continues.

State reports continue to describe a low general prevalence of influenza, although there are some localized outbreaks of influenza-like disease. These have had no effect on industrial absenteeism and no schools have been closed. Inquiries at large city hospitals fail to reveal a marked increase in pneumonia. Severe or fulminating influenza has not been observed.

It is in no way certain that the recent increase in mortality is due to Asian influenza; however, there is clear evidence that small outbreaks of Asian influenza are still occurring. The following outbreaks during the past 3 weeks have been confirmed by laboratory as Asian influenza:

University of Michigan--Reported by Dr. Fred Davenport  
University of Chicago---Reported by Dr. Clayton Loosli  
University of Iowa-----Reported by Dr. A.P. McKee  
Upstate New York-----Reported by Dr. Eleanor Whitney  
Fort Dix, N.J.-----Reported by Dr. Harry Rose

None of these outbreaks involved large numbers of persons. Specimens from other suspected cases throughout the country are being run, but the total number is not large.

Our influenza indicators such as state reports, industrial absenteeism, school closing, and the National Health Survey would be expected to make a sharp rise about three weeks prior to increase in influenza mortality. This suggests that either mortality is not due to influenza, or that the population being affected is not adequately sampled by the indicators. To determine this, we have begun analyzing the recent mortality data, with the help of several large cities, particularly in regard to age distribution. Results are far from complete, but the data presented below suggests that most of the deaths are in the extremely old and debilitated.

Data supplied by Dr. Herman Bundesen, President, Chicago Board of Health, through Dr. Harald Graning, Regional Medical Director.

(Compares a period of approximately 3 weeks in January 1957 with an equal period of January 1958.)

| Age            | 1957                       | 1958                       |
|----------------|----------------------------|----------------------------|
|                | Influenza-Pneumonia Deaths | Influenza-Pneumonia Deaths |
| -1             | 59                         | 34                         |
| 1-4            | 7                          | 12                         |
| 5-14           | 2                          | 4                          |
| 15-24          | 4                          | 1                          |
| 25-34          | 1                          | 7                          |
| 35-44          | 2                          | 10                         |
| 45-54          | 9                          | 13                         |
| 55-64          | 10                         | 21                         |
| 65-74          | 10                         | 44                         |
| 75+            | 14                         | 35                         |
| Unknown Totals | 118                        | 181                        |

Dr. Donald Carey, EIS Officer, obtained the following data from New Orleans:

During the first 23 days of January, approximately 57 influenza-pneumonia deaths have been reported. Only eight were found to be reported as influenza, all over 43 years of age. Forty-nine were reported as pneumonia, and 26 of these died at Charity Hospital. Age distribution was as follows:

infants---6  
 age 7-----1  
 age 50-----1  
 age 60/-----18

Most of these older persons were extremely debilitated with other illnesses.

IV. Industrial Absentee Rates for 36 Cities of the United States

| City           | % of Total Absent           |                            |
|----------------|-----------------------------|----------------------------|
|                | Average for<br>January 1957 | Week ending Jan.18<br>1958 |
| Boston         | 9.6                         | 9.4                        |
| Manhattan      | 4.5                         | 5.0                        |
| Buffalo        | 6.9                         | 6.0                        |
| Syracuse       | 6.5                         | 6.6                        |
| Philadelphia   | 6.3                         | 7.0                        |
| Pittsburgh     | 4.9                         | 5.6                        |
| Washington     | 7.1                         | 5.5                        |
| Baltimore      | 7.1                         | 5.9                        |
| Richmond       | 4.9                         | 5.9                        |
| Atlanta        | 5.8                         | 4.5                        |
| Miami          | 6.7                         | 7.5                        |
| Memphis        | 4.7                         | 4.5                        |
| Birmingham     | 5.9                         | 3.6                        |
| Nashville      | 4.7                         | 4.6                        |
| Jacksonville   | 7.8                         | 7.0                        |
| New Orleans    | 7.0                         | 7.0                        |
| Cleveland      | 3.7                         | 4.0                        |
| Columbus       | 5.1                         | 3.6                        |
| Cincinnati     | 4.9                         | 4.5                        |
| Detroit        | 7.1                         | 7.9                        |
| Indianapolis   | 5.4                         | 3.5                        |
| Milwaukee      | 6.6                         | 7.6                        |
| Chicago        | 6.5                         | 6.7                        |
| Minneapolis    | 5.4                         | 5.1                        |
| Omaha          | 6.2                         | 6.5                        |
| St. Louis      | 4.5                         | 3.9                        |
| Kansas City    | 4.0                         | 4.3                        |
| Houston        | 4.0                         | 10.3                       |
| Dallas         | 4.7                         | 5.3                        |
| Oklahoma City  | 4.6                         | 4.0                        |
| Denver         | 7.4                         | 6.0                        |
| Phoenix        | 7.8                         | 7.0                        |
| Salt Lake City | 4.1                         | 7.3                        |
| San Francisco  | 9.4                         | 7.8                        |
| Seattle        | 4.8                         | 6.1                        |
| Los Angeles    | 5.1                         | 3.7                        |