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CDC INFLUENZA 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, collaborating influenza diagnostic laboratories, and other pertinent sources. Much of it is preliminary in nature and is primarily intended for those involved in influenza control activities. It is understood that the contents of these reports will not be released to the press, except by the Office of the Surgeon General, Public Health Service, U. S. Department of Health, Education, and Welfare. 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

The first instance of a sporadic civilian Far East strain influenza infection is contained in this report. Reported by Dr. William Jordan, Western Reserve University, College of Medicine, the patient was a 27-year-old hospital orderly. Several other isolations of Far East strains from civilian population groups are noted below.

No laboratory diagnosis of the Grinnell, Iowa, outbreak is yet available. Influenza-like illnesses have occurred in some of the homeward-bound delegates in several other states. These include Kentucky, Indiana, Illinois, and Colorado. Dr. S. S. Chapman, Director, Public Health Laboratories, Kentucky State Health Department, has reported a Far East strain influenza virus isolated from a Grinnell delegate who lives in Kentucky. As reported in CDC Influenza Report No. 1, the outbreak at a conference in Davis, California, has also been demonstrated to be due to the Far East strain influenza virus.

An additional outbreak of febrile respiratory disease is reported from California. At Camp Pendleton, near Oceanside, over 300 cases have occurred among 40,000 men stationed at the camp. Highest attack rates are among recently recruited troops. At present, California remains the most active state in terms of influenza and influenza-like illness outbreaks.

Included in this report are clinical and epidemiological studies from Newport, Rhode Island, Naval Station (CDC Influenza Report 1-B), which serve to emphasize several points: Clinical illness is mild; about 1/3 of an exposed population is affected; cramped living quarters appear to serve as a "provoking factor". While outbreaks progressed on shipboard, only sporadic cases of febrile respiratory disease occurred on shore.

To date infection with Far East strain influenza virus has been reported in San Diego, Monterey, Davis, and San Francisco, California; Cleveland, Ohio; Lexington, Kentucky; and Newport, Rhode Island. Both military and civilian personnel are presently involved.

II. Epidemic and Case Reports

2-A. OHIO, Cleveland

(Reported by Dr. William Jordan, Western Reserve University School of Medicine.)

Throat washings collected on June 24 from an isolated case of febrile respiratory disease revealed a Far East strain of influenza virus. The patient was a 27-year-old hospital orderly with no known contact with influenza cases, including the previously reported case in Cleveland (CDC Influenza Report 1-D). This is the first instance of a sporadic civilian case with Far East strain influenza virus. No recent increase in influenza-like illness has been noted at this hospital.

2-B. KENTUCKY, Lexington

(Reported by Dr. S. Stephen Chapman, Director, Public Health Laboratories, Kentucky State Department of Health.)

Twenty-nine students returned to various cities in Kentucky from the Church Conference at Grinnell, Iowa, early in July (CDC Influenza Report 1-J). At least 7 of these were suffering from an influenza-like illness upon arrival home. Throat washings from one revealed a Far East strain of influenza virus. Several similar illnesses have occurred in family contacts.

2-C. INDIANA, Indianapolis and Evansville

(Reported by Dr. A. L. Marshall, Jr., Director, Division of Communicable Disease Control, Indiana State Department of Health.)

An influenza-like illness has been reported from several students who returned to Indianapolis and Evansville from Iowa about July 2. They had attended the Church Conference at Grinnell (CDC Influenza Report 1-J). Throat washings are presently under laboratory study.

2-D. CALIFORNIA, Oceanside

(Reported through Capt. Robert W. Babione, Executive Secretary, Armed Forces Epidemiological Board.)

Preliminary reports of an influenza-like illness among recruits at Camp Pendleton have been received. Over 300 cases were reported during late June and early July. An Associated Press dispatch of July 11 reports an attack rate of 10% among trainees in an infantry training unit and an over-all attack rate of 3% among the 40,000 men stationed at the camp. Illnesses are reported to be mild, not requiring hospitalization. Laboratory studies are in progress.

III. Progress Reports

2-E. UTAH, Salt Lake City (see also CDC Influenza Report 1-K)

(Reported by Dr. Alton Jenkins, Utah State Department of Health, and Dr. Luther Giddings, Epidemic Intelligence Service, CDC.)

Students on a bus tour, who developed an influenza-like illness while in Salt Lake City, were housed with 15 different families. Thirteen of these exposed families, comprising 64 family members, were contacted regarding subsequent illness. To date, 8 of those exposed have developed febrile respiratory illness. Specimens from cases are still under study.

2-F. CALIFORNIA, Monterey (see also CDC Influenza Report 1-H)

(Reported by Dr. James Culver through Dr. F. M. Davenport, Director, Commission on Influenza, AFEB.)

Twelve of 26 blood specimens from convalescent influenza cases at Fort Ord Army Base have revealed diagnostic titer rises to Far East strain virus. Complement-fixation tests were carried out with Jap 307 antigen.

2-G. RHODE ISLAND, Newport (see also CDC Influenza Report 1-B)

(Reported by Capt. John Seal, Head, Communicable Disease Branch, U. S. Navy.)

Beginning June 2, a series of influenza outbreaks were reported among 112 ships which had been berthed in Narragansett Bay, Newport, Rhode Island. The first outbreak commenced aboard the USS Barry, which had been at Newport since May 22. The means of introduction of the virus to this ship could not be ascertained. Spread of the epidemic appeared to be erratic, not in an orderly progression through ships having contact with each other. Following the outbreaks of influenza on the ships, some cases of febrile respiratory disease were noted among some shore-based units.

Ships experiencing outbreaks are listed below:

<u>Ship</u>	<u>Date of Outbreak</u>	<u>Total Persons Affected</u>	<u>Attack Rate (%)</u>	<u>Outbreak Status at Time of Report (June 18)</u>
1. USS Barry	June 2	99	35%	Recovered
2. USS Fessenden	June 10	39	21	Recovered
3. USS Greenwood	June 10	64	45	Subsiding
4. USS S. B. Roberts	June 12	94	36	Subsiding
5. USS M. J. Manuel	June 14	29	16	Subsiding
6. USS Vandiver	June 16	15	8	Developing
7. USS Yosemite	June 17	33	3	(Report of June 30)

Interestingly, as of June 20, but 3 of 54 officers and men in the Medical Department had developed febrile respiratory illness. There had been no unusual incidence of disease in the hospital staff or among patients (census, approximately 400) despite the fact that the initial ten patients from the USS Barry had been admitted in early June to open contagious disease wards at the hospital. There had been an increase in respiratory illness among dependents or civilian employees as of June 20. No increase in febrile respiratory disease in Rhode Island has been reported as of this date.

Two ships leaving Newport have since developed epidemics of influenza. The USS Vandiver arrived at Guantanamo Bay, Cuba, while an outbreak was in progress. The USS S. B. Roberts commenced to have cases shortly after arriving in Norfolk, Virginia, four days after departure from Newport. Spread of infection from these foci has not been reported.

A detailed clinical study carried out by Lt. W. T. Paul, MC, USN, reports as follows:

The outbreak aboard the USS Barry began with five cases among the Negro mess cooks. The number included on the sick list daily was as follows:

June 2	5	June 8	5
June 3	25	June 9	6
June 4	20	June 10	1
June 5	9	June 11	1
June 6	23		
June 7	4	Total	<u>99</u>

Through nonselective questioning of 86 of the ship's company, it was found that 36 or 42% admitted to common cold symptoms, such as cough, malaise, rhinitis, during the period June 2 to June 12. From this it was estimated that 162 of the total ship's company of 249 had been symptomatic.

The disease was characterized by a sudden onset of fever from 100° to 104°, with chills, diaphoresis, and weakness. The patients complained of severe frontal headaches; generalized muscle aches; substernal, low back, and flank pain; sore throat; cough; and rhinorrhea. Epistaxis and abdominal pain were noted occasionally.

Duration of fever was from 1 to 6 days, 2 to 3 days average. Most personnel were able to return to duty after 3 days' illness. Fourteen developed an afebrile residual bronchitis; characterized by coarse rales and wheezing in the lung bases, not cleared by coughing. A fair percentage experienced varying degrees of post-influenzal malaise.

Physical findings were not outstanding. Mild adenoidal hypertrophy and a slightly reddened throat were occasionally noted. Fourteen cases were noted to have musical wheezes and coarse rales in the lung bases without consolidation. These findings were persistent after 6 days in 5 of the cases. Treatment of these cases with Terramycin was without remarkable effect.

Six of 8 white blood counts were normal (6000 to 9000 per mm³) with a normal differential. Two revealed 13000 to 14000 W.B.C. per mm³ with some polymorphonuclear predominance. Of seven chest X-rays, six were normal, one showed increased bronchial markings.

A tabular analysis of findings among the initially noted 99 cases follows:

<u>Highest Temperature Elevation</u>	<u>No.</u>	<u>Duration of Fever (days)</u>	<u>No.</u>
104	4	6	1
103	12	5	1
102	29	4	12
101	28	3	24
100	18	2	40
Under 100	8	1	21

<u>Symptoms</u>	<u>% of Cases</u>
Shaking chills	45
Severe headache	43
Profuse diaphoresis	41
Generalized myalgia	35
Sore throat with painful swallowing	22
Abdominal pain	4
Epistaxis	4

IV. Influenza Virus Studies

Where local facilities are not available for influenza virus diagnostic studies, specimens should be sent to the nearest collaborating influenza laboratory. These are listed in a previous memorandum from Dr. Keith Jensen. A more complete list will be circularized in the near future. When this is not feasible, frozen throat washings and paired blood specimens may be air expressed to Dr. Seymour Kalter, Communicable Disease Center, Virus and Rickettsia Section, Diagnostic Unit, Box 185, Chamblee, Georgia. Final isolates should be sent to Dr. Keith Jensen at the Montgomery, Alabama, laboratory for reference purposes.

V. Summary Tables - Cases and Outbreaks

TABLE I

Confirmed Outbreaks and Cases of Influenza Due to Far East Strains, United States
June 1--July 12, 1957

Dates of Outbreaks	Location	Type of Population	Population at Risk	No. with Influenza-like Illnesses	Deaths	Laboratory Diagnosis by Virus Isolation	Laboratory Serology	CDC Influenza Report Number
May 20-- June 18	CALIFORNIA San Francisco	Naval and passenger ships in harbor recently arrived from Far East	c. 9500	800+	1 pneumonia		Yes CF Test	1-A
Early June	RHODE ISLAND Newport	Crews of several Naval vessels	?	Attack rates by ships 18 - 45%	0	Yes		1-B 2-G
Mid June	CALIFORNIA San Diego	Naval Training Station Recruits Station Personnel	c. 2890 c. 5000	2251 Attack rate 7%	0 0	Yes (6-21-57)		1-C
Early June	CALIFORNIA San Diego	Crew members of a Naval vessel	130	78	0	Yes		1-C
Mid June	OHIO Cleveland	Military man recently returned from Far East	Single Case		0	Yes		1-D
June	HAWAII	Military personnel Military dependents Civilians	?	527/ 103/ 300/	0 0 0		Yes	1-E
June 21-30	CALIFORNIA Davis	Teen age girls and adult leaders	391	225	1 ? cause	Yes		1-G
Late June	CALIFORNIA Monterey	Fort Ord Army Base	?	400+	0		Yes	1-H 2-F
June 24	OHIO Cleveland	Hospital orderly	Single Case		0	Yes (6-24-57)		2-A
Early July	KENTUCKY Lexington	Students returning from Grinnell, Iowa	29	7	0	Yes		2-B

TABLE II

Unconfirmed Influenza-like Illness, Outbreaks - United States
June 1--July 12, 1957

Dates of Outbreaks	Location	Type of Population	Population at Risk	No. with Influenza-like Illness	Deaths	Specimens Obtained		CDC Influenza Report Number
						Throat Washings	Blood	
June 20-25	CALIFORNIA San Mateo Co.	Boys camp 15-17 year olds	53	36	0	Yes	Yes	1-F
Late June	CALIFORNIA Solano Co.	Mare Island Naval Base	?	200 ⁺	1 from bacterial pneumonia	Yes	Yes	1-I
June 26-- July 2	IOWA Grinnell	College students and adult leaders	1688	200 ⁺	0	Yes	Yes	1-J
July 1--5	UTAH Salt Lake City	High school students Exposed residents	37 64	30 8	0	Yes	Yes	1-K 2-E
Early July	MISSOURI Columbia	Townpeople	?	200 ⁺	0	Yes	Yes	1-L
Early July	INDIANA Indianapolis Evansville	College students who attended Grinnell, Iowa, Conference	?	?	0	Yes		2-C
Early July	CALIFORNIA Oceanside	Camp Pendleton	40,000	Attack rate 3 ¹ / ₂	0	Yes	Yes	2-D

TABLE III

Outbreaks of Febrile Respiratory Disease - Etiology Other Than Influenza or No Specimens Obtainable
June 1--July 12, 1957

Dates of Outbreak	Location	Type of Population	Population at Risk	No. with Influenza- Like Ill- ness	Deaths	Specimens Obtained		CDC Influenza Report Number
						Throat Washings	Blood	
Late June	CALIFORNIA San Mateo, Santa Cruz, Sonoma, and Tuolumne Counties	Seven summer chil- dren's camps	505 7	123 7	0	0	0	1-M

ADDENDUM:

PENNSYLVANIA, Valley Forge

(Reported by Dr. W. D. Schrack, Jr., Director, Communicable Disease Control, Pennsylvania State Department of Health; Dr. Eugene Green, PHS, Medical Officer in Charge, International Boy Scout Jamboree; Dr. James Mosley, CDC Epidemic Intelligence Service)

Fifty-three thousand Boy Scouts are expected to attend the International Jamboree at Valley Forge from July 12 through July 18. About 35,000 had arrived by July 11. At this time approximately 180 influenza-like illnesses had occurred among the 971 California delegates. These groups came from San Francisco, Los Angeles, and Sacramento. Five boys in the first group had recently come from a Boy Scout camp in northern California where an influenza-like illness had attacked 250 of the 500 campers present.

Illnesses had developed in all three groups while en route to the Jamboree. Upon arrival they were carefully screened and those with symptoms were hospitalized while the others remained confined to their own camping areas. No similar illnesses were noted in any other groups at the Jamboree.

Throat washings and blood specimens have been collected from 18 acute cases and are presently under study.

In addition to field hospitals provided by the Army 600 beds are available at the Valley Forge Army hospital in the event of a major outbreak. At the Jamboree, two Scouts each share a pup tent. The crowding of large groups in closed quarters such as has been instrumental in spread of the disease in the previous outbreaks in the United States would appear to be largely eliminated. Careful surveillance is being maintained at the site.