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Development of Calcification in Pulmonary Lesions Associated with Sensitivity to Histoplasmin

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As a result of intensive studies during the past few years, evidence has accumulated which suggests that histoplasmosis—formerly believed to be a rare and usually fatal disease—also exists as a mild asymptomatic syndrome which is very prevalent in certain parts of the world (*1, 2*). Although quite typical cases of clinical histoplasmosis are probably much more frequent than previously thought, the principal significance of the asymptomatic form is that in certain respects the disease so closely resembles tuberculosis as to be frequently confused with it.

The most striking similarity between the two diseases lies in the fact that in both there are pulmonary calcifications which are so alike in appearance as to be indistinguishable except that some occur in people who are hypersensitive to tuberculin and others in people hypersensitive to histoplasmin (*3*). With respect to tuberculosis, it has been well established that the antecedent lesion is a "soft" type of infiltrate in a tuberculin positive individual from whom it is often possible to recover tubercle bacilli by careful examination. Rather similar soft lesions have been found in histoplasmin positive, tuberculin negative persons, and the fungus *Histoplasma capsulatum* has been recovered in some of these cases. Although this type of evidence leaves little doubt that healing by calcification does take place in histoplasmosis as it does in tuberculosis, the actual demonstration of calcification developing in pulmonary infiltrates in histoplasmin positive individuals has not yet been presented convincingly.

By doing periodic routine school X-ray and skin testing surveys in Kansas City, several hundred histoplasmin positive, tuberculin negative children with pulmonary infiltrates were found, the different types of lesions having been described in an earlier paper by Furcolow,

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Mantz and Lewis (*4*). These children have now been followed for varying periods up to 4 years, during which time some of the infiltrates disappeared completely, some apparently became fibrotic, but the majority gradually developed calcification.

Seventeen children whose lesions calcified have been selected for presentation in this paper. The group includes 9 white males, 6 white females, 1 colored male and 1 colored female, ranging in age from 4 to 15 years. Most of these children had lived all of their lives in or near Kansas City. All of the children were completely asymptomatic at the time of the survey and throughout the period of observation, with no history of any type of illness which could be related to the development of the infiltrate. Two patients (cases 1 and 2) with respiratory symptoms were referred for diagnosis and have been added to the series obtained from the survey.

In addition to skin tests and chest films at regular intervals on all cases, the periodic observation included serological studies and search for the etiological agent. Because all but two of the children appeared to be in normal good health during the follow-up period, it was difficult to obtain permission for some of the most desirable examinations. Therefore, although the results of such tests are included in the case summaries, coverage of the total group is too inadequate to permit discussion.

Repeated skin testing throughout the period of observation, using the same antigens, dosages and techniques described previously (*5*), showed that all of the children remained sensitive to histoplasmin and negative to tuberculin.

In the entire original group of several hundred children with infiltrates which has been studied, there was no evidence of new lesions appearing, nor was there progression of the initial lesion. One possible exception, illustrated in case 17, shows a contralateral infiltration which, because it completely disappeared within 3 weeks, was most probably a virus or nonspecific type of pneumonia.

In the following pages, two films are reproduced from the series for each of the 17 children, the earlier film showing the lesion and the later calcification. Twenty-one enlargements of the lesions under study are also included to give a better picture of the developing calcification. In general the precalcific lesions may be classified as disseminated infiltrates, pneumonic infiltrations or nodular foci, although in some cases the classification is difficult as the lesion appears to be intermediate between two of the groups.

The disseminated infiltrates consist of multiple lesions scattered throughout both lung fields. The individual infiltrates may be uniformly millet-seed in size or may range from a few millimeters in diameter to large conglomerate patchy areas (figs. 1, 3, 7). In some of the infiltrates (fig. 5) a central core of calcification may be seen.

Marked enlargement of the hilar nodes is frequently associated with this type of disease, as demonstrated in three of the four cases included in this group. Calcifications resulting from disseminated infiltrates are distributed throughout the parenchyma with variation in size and shape corresponding to the distribution and extent of the infiltrates. In the miliary type of lesions, the calcifications are small, fairly round and equally distributed throughout the lung fields, presenting a picture once thought to represent healed miliary tuberculosis.

Pneumonic infiltration usually consists of a small area of infiltration, poorly circumscribed and irregular in shape (figs. 21, 49), although in one case there is a rather diffuse type of pneumonitis (fig. 9). Development of calcification may appear in the infiltrates as scattered small foci throughout the lesion (figs. 23, 24, 51, 52) or as a single lesion in the midst of a clearing area (fig. 10).

Nodular lesions are demonstrated in 8 of the 17 cases presented. These lesions consist of well-defined, nodular shadows ranging in size from ½ to 4 centimeters in diameter (figs. 13, 17, 33, 37, 41). A calcified central core developing in the nodule is a characteristic finding (figs. 19, 39, 53) although in many cases the calcification appears to replace the entire lesion (figs. 15, 19) or develops in multiple small areas within the infiltrate (figs. 27, 35, 43).

Hilar adenopathy is marked in more than half of the cases illustrated. Raspberry-like calcification may be seen developing gradually throughout some of the nodes and in others there is a fairly homogeneous deposition of the calcium salts. Figure 29 shows a case of unilateral enlarged hilar nodes without any parenchymal lesion; figure 47 shows an enormous calcified node in the lower right hilum.

Brief case summaries are presented with each series of films giving pertinent data for the individual case. Since all of the children were tuberculin negative and histoplasmin positive throughout the observation period, this information is omitted in the legends accompanying the figures.

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(1) Palmer, C. E.: Nontuberculous pulmonary calcification and sensitivity to histoplasmin. Pub. Health Rep. **60:** 513–520 (1945).

(2) Christie, Amos, and Peterson, J. C.: Pulmonary calcification in negative reactors to tuberculin. Am. J. Pub. Health **35:** 1131–1147 (1945).

(3) Edwards, Lydia, Lewis, Ira, and Palmer, C. E.: Studies of pulmonary findings and antigen sensitivity among student nurses. Pub. Health Rep. **63:** 1569–1591 (1948).

(4) Furcolow, M. L., Mantz, H. L., and Lewis, Ira: The roentgenographic appearance of persistent pulmonary infiltrates associated with sensitivity to histoplasmin. Pub. Health Rep. **62:** 1711–1718 (1947).

(5) Furcolow, M. L., High, R. H., and Allen, M. F.: Some epidemiological aspects of sensitivity to histoplasmin and tuberculin. Pub. Health Rep. **61:** 1132–1144 (1946).

(6) Bunnell, I. L., and Furcolow, M. L.: A report on ten proved cases of histoplasmosis. Pub. Health Rep. **63:** 299–316 (1948).

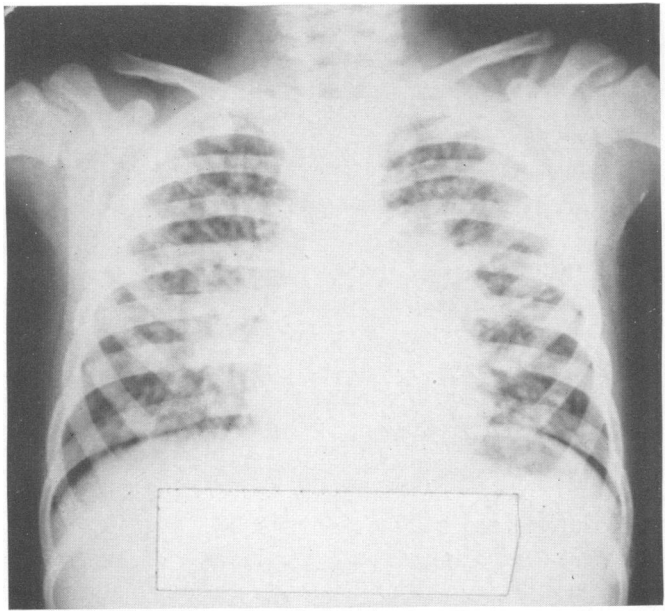

Figure 1. Case 1, 9–3–46, white male, age 4. Miliary lesions in a proved case of histoplasmosis.

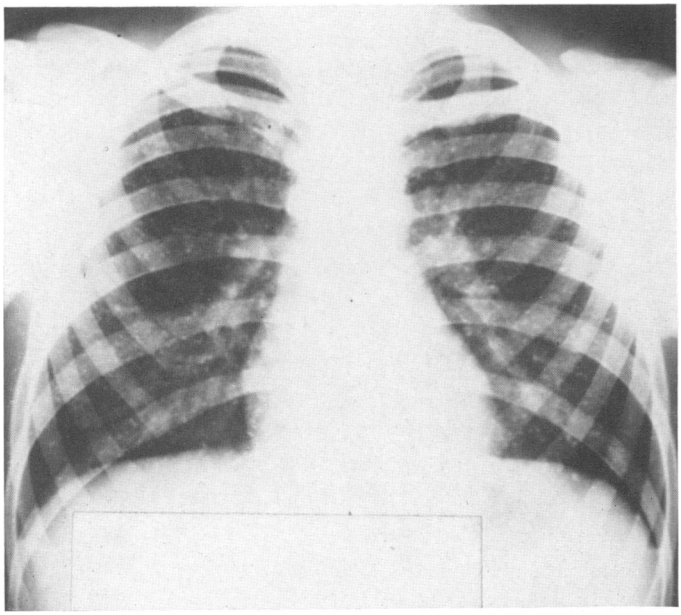

Figure 2. Same case as above, 4–29–49. *H. capsulatum* recovered by culture from tonsils January 1948. 10 gastric and 1 bone marrow culture negative for fungi. 5 gastrics negative by culture and hamster inoculation for tuberculosis. 5 complement fixation tests for histoplasmosis positive (1947–1949).

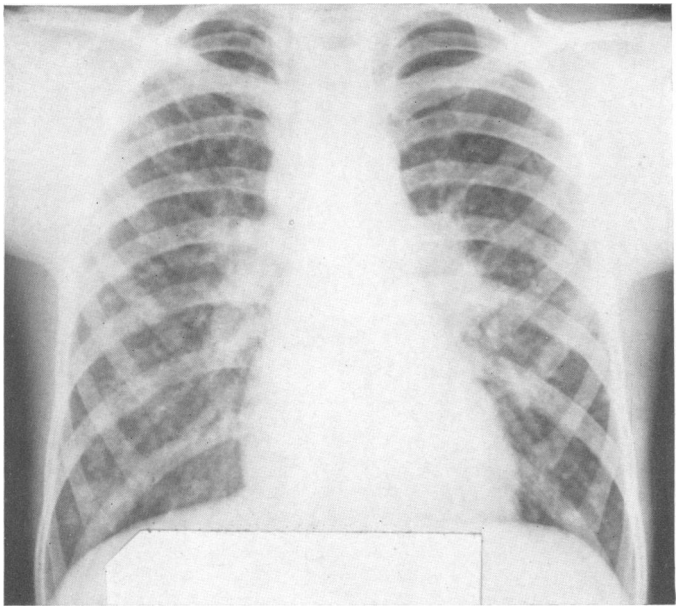

Figure 3. Case 2, 4–10–45, white male, age 13. Miliary lesions in a proved case of histoplasmosis (*6*).

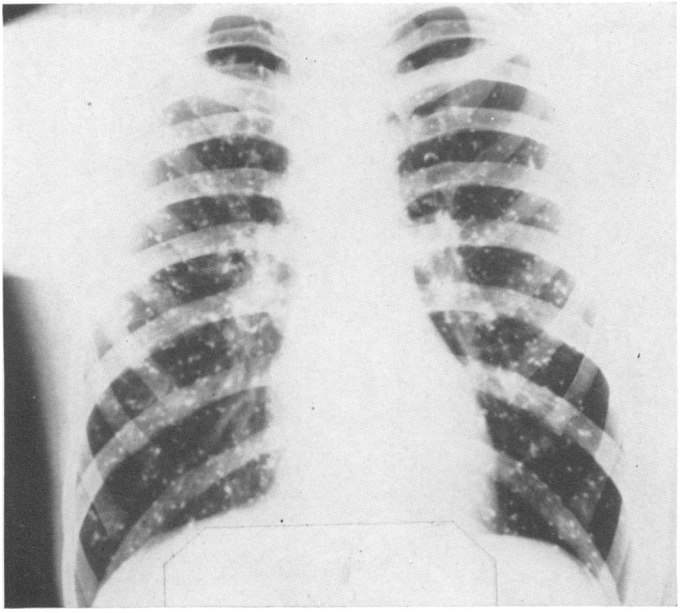

Figure 4. Same case as above, 6–22–49. Cultures of gastric aspiration positive for *H. capsulatum*. 8 complement fixation tests for histoplasmosis; 2 were positive, 3 suspicious, and 3 negative.

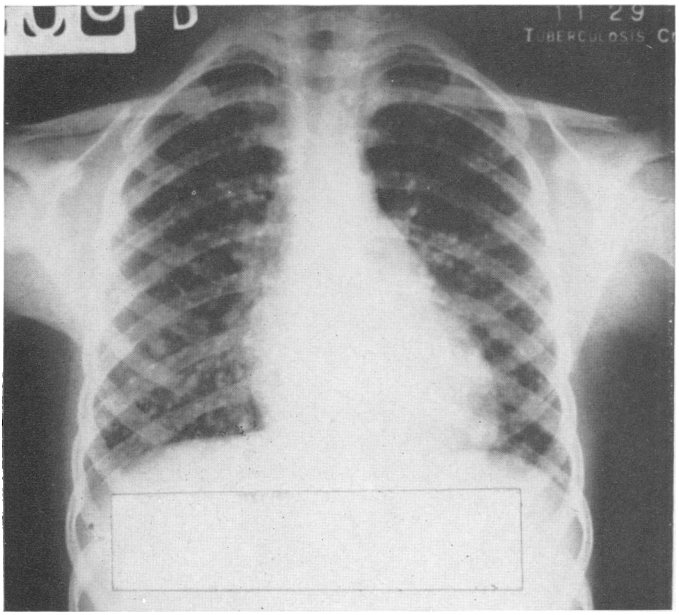

Figure 5. Case 3, 11–29–45, white female, age 6. Miliary lesions.

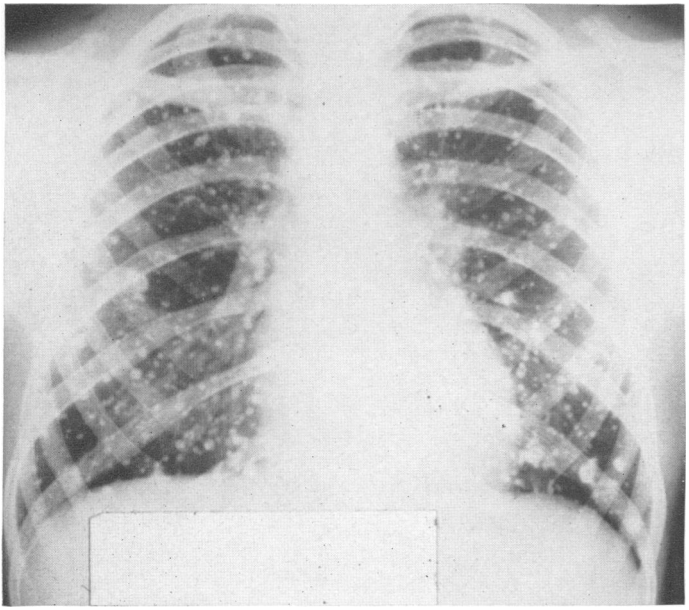

Figure 6. Same case as above, 7–11–49. 3 gastrics negative for tuberculosis and fungi. Blood culture negative. Complement fixation tests suspicious (1947), negative (1949).

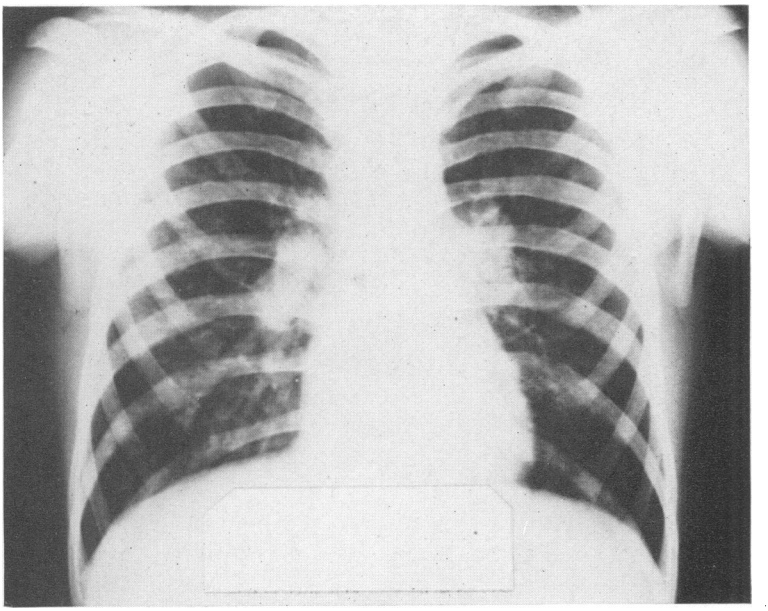

Figure 7. Case 4, 1–2–47, white male, age 8. Miliary lesions.

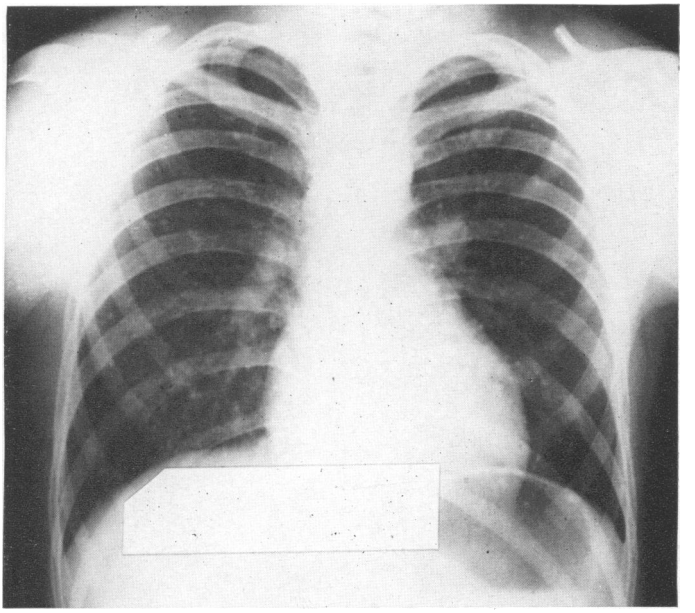

Figure 8. Same case as above, 4–13–49. 2 gastrics, skin biopsy, blood and bone marrow cultures negative for tuberculosis and fungi. Lymph node biopsy showed granulation tissue. 2 negative complement fixation tests for histoplasmosis (1947–1949).

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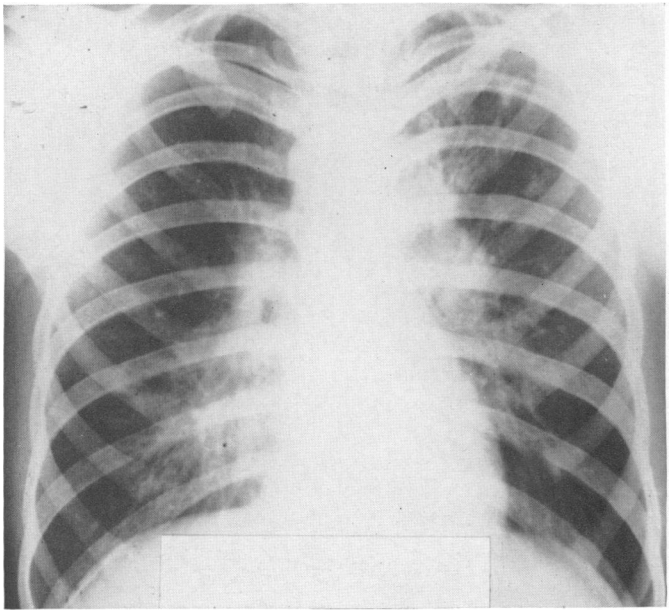

Figure 9. Case 5, 10–12–46, white male, age 13. Diffuse pneumonic lesions with enlarged nodes.

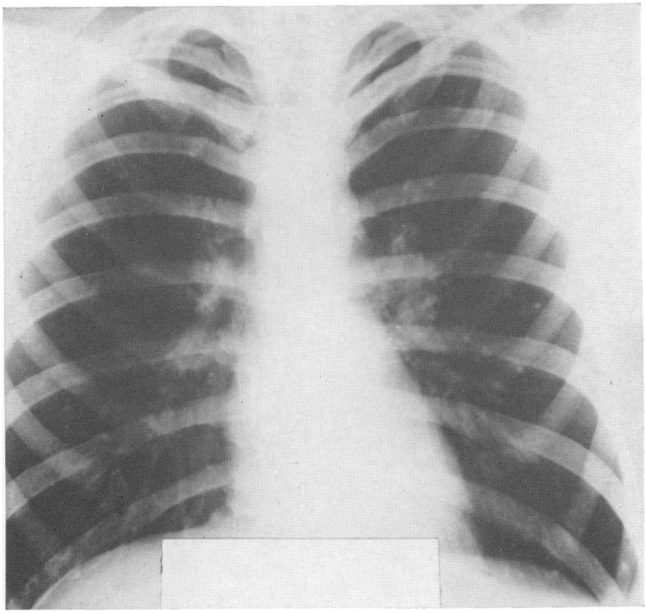

Figure 10. Same case as above, 3–10–49. Sputum and 3 gastrics negative for tuberculosis by culture and hamster inoculation. Bronchoscopy, 6 gastrics, bone marrow and lung puncture negative for fungi. 5 complement fixation tests for histoplasmosis: 1 positive, 2 suspicious, 2 negative.

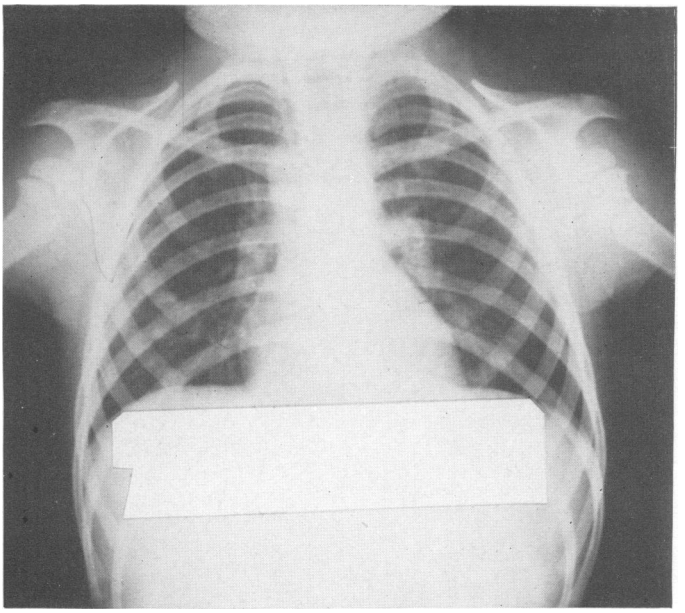

Figure 11. Case 6, 7–24–45, white female, age 4. Multiple nodular lesions with enlarged nodes.

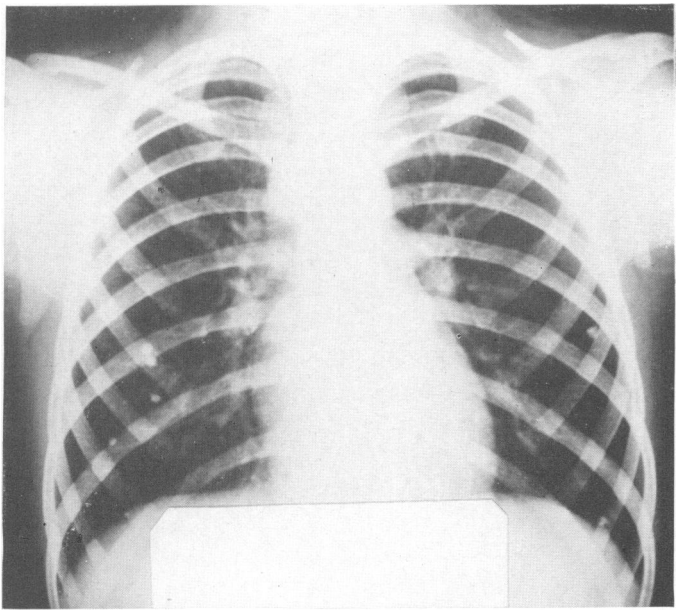

Figure 12. Same case as above, 2–3–49. No cultural studies. 3 complement fixation tests for histoplasmosis: 1 suspicious and 2 negative.

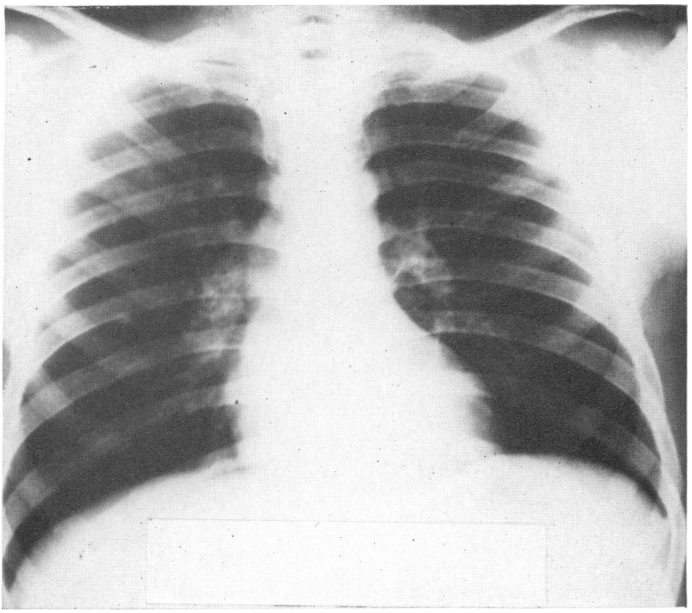

Figure 13. Case 7, 10–26–45, colored male, age 15. Nodular lesion right fourth inter space with enlarged nodes.

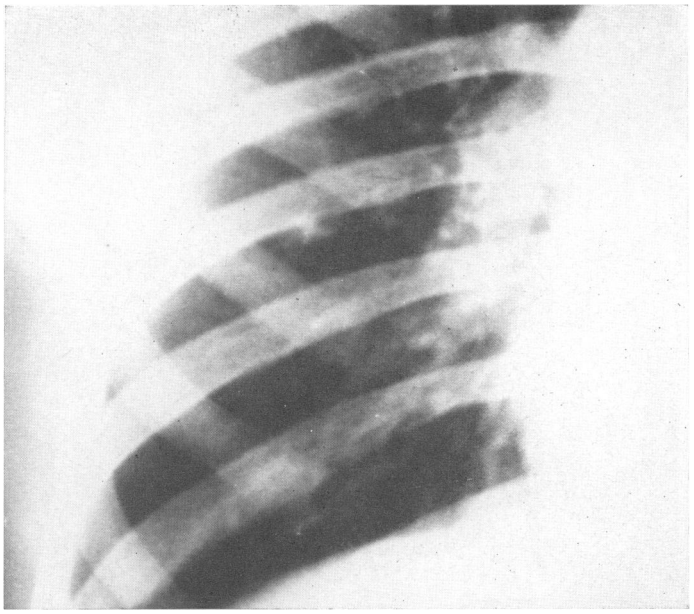

Figure 14. Same film as above. Lesion ⅔ actual size.

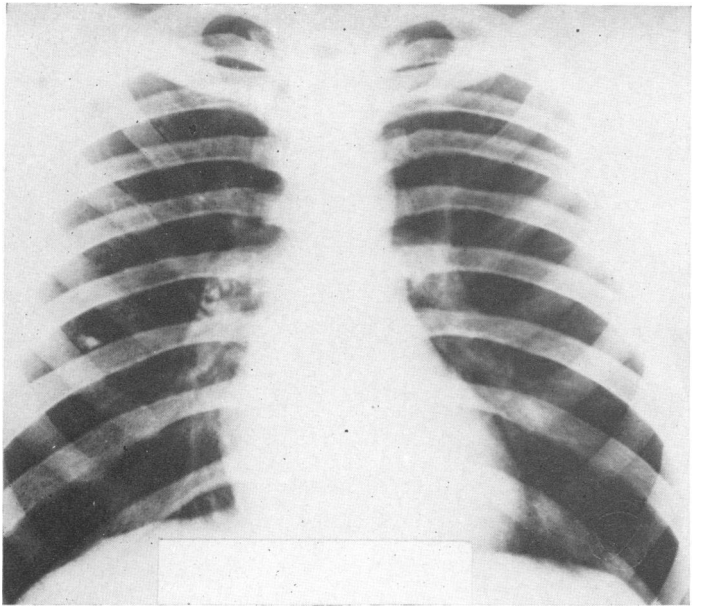

Figure 15. Case 7, 7–11–49.

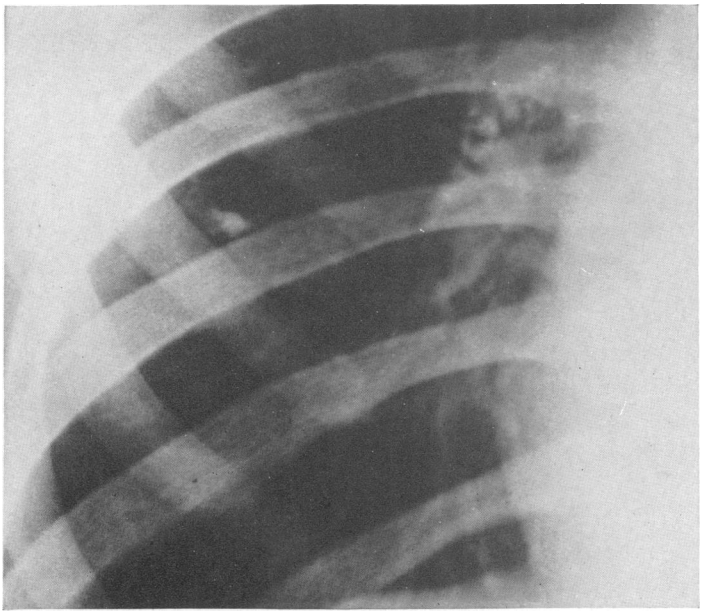

Figure 16. Same film as above. Lesion ⅔ actual size. No cultural studies. Complement fixation tests for histoplasmosis positive twice (1948, 1949).

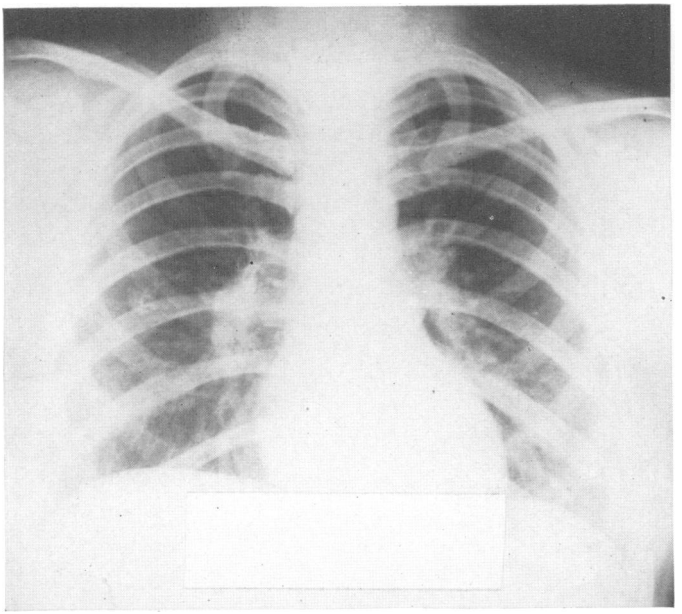

Figure 17. Case 8, 3–20–46, white female, age 12. Nodular lesion right third interspace with enlarged nodes.

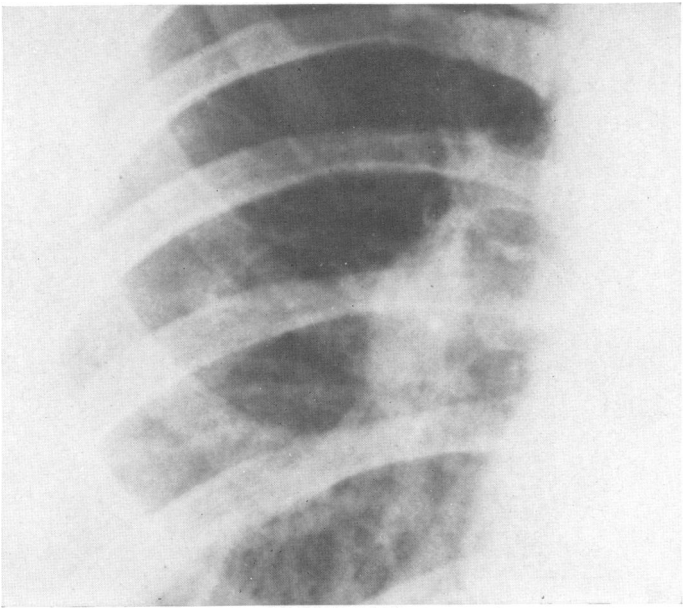

Figure 18. Same film as above. Lesion ⅔ actual size.

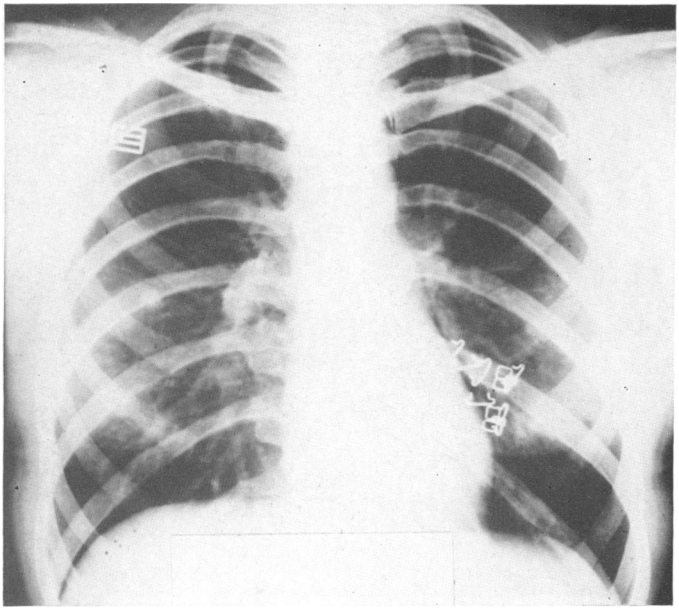

Figure 19. Case 8, 2–2–49.

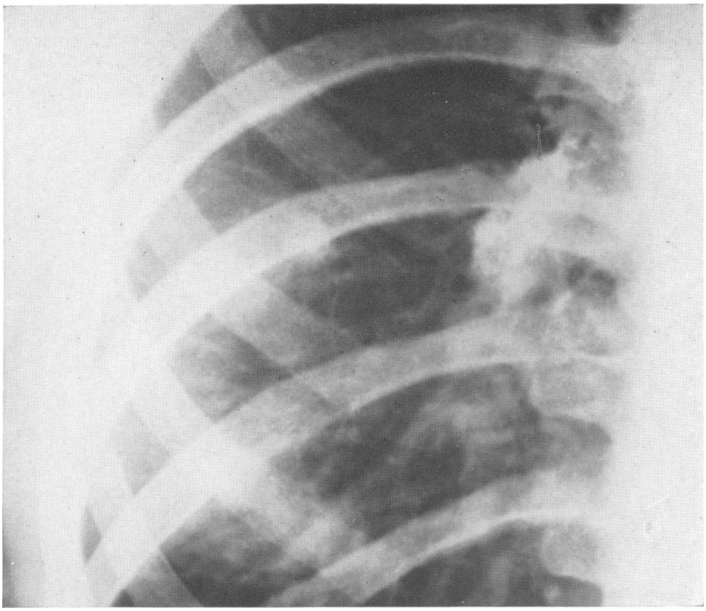

Figure 20. Same film as above. Lesion ⅔ actual size. No cultural studies. 5 complement fixation tests for histoplasmosis: 2 suspicious and 3 negative.

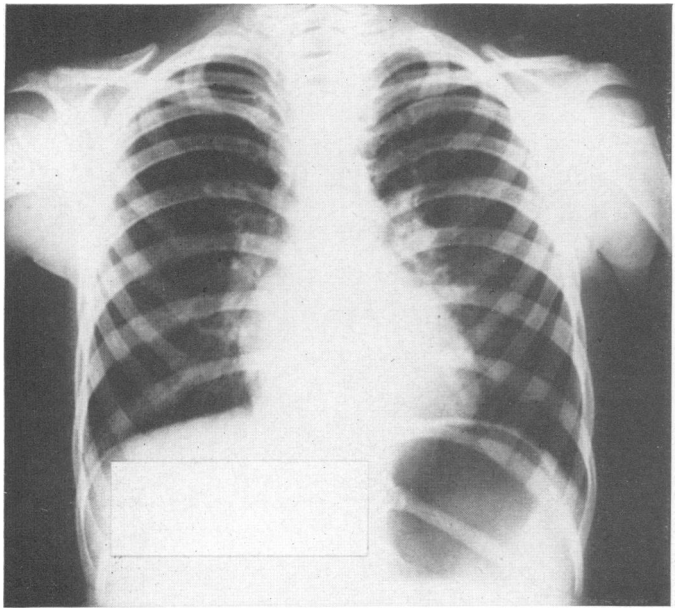

Figure 21. Case 9, 1–7–46, white male, age 6. Pneumonic lesion left second interspace with enlarged nodes.

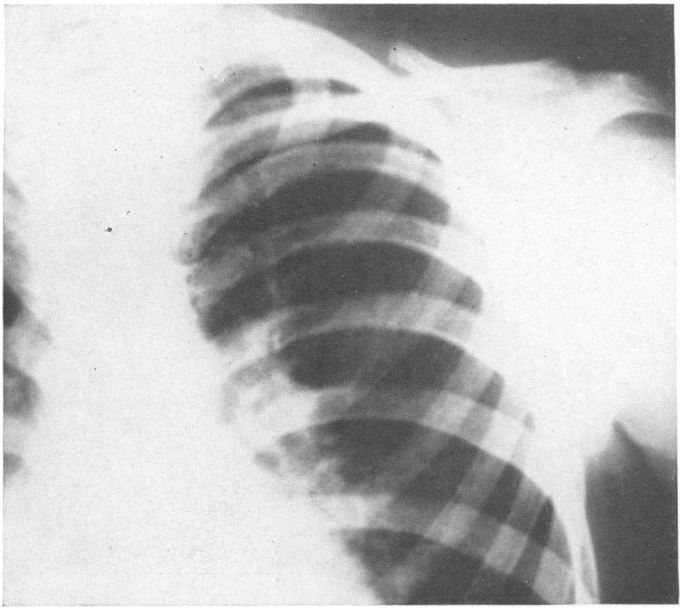

Figure 22. Same film as above. Lesion ⅔ actual size.

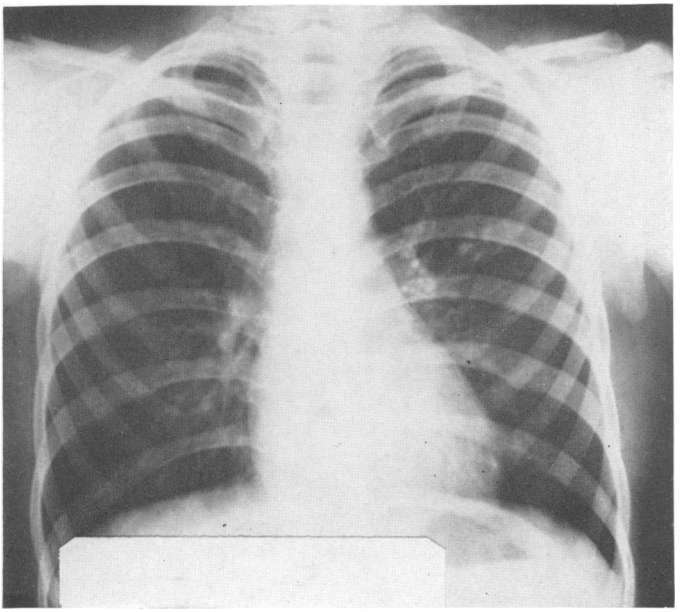

Figure 23. Case 9, 3–24–49.

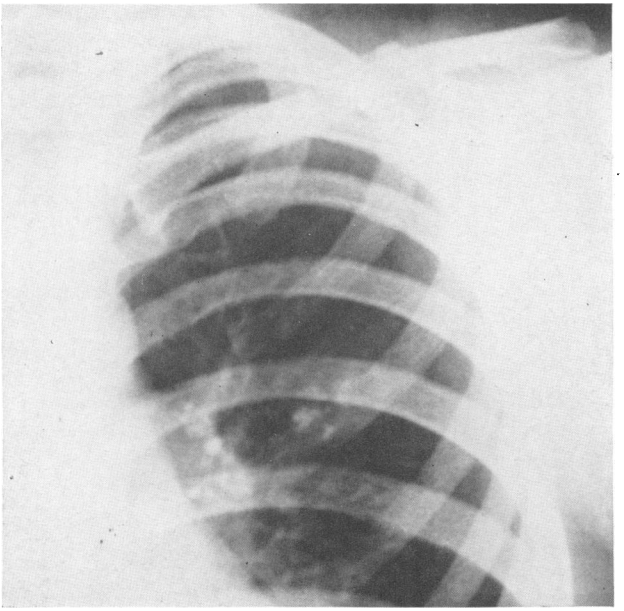

Figure 24. Same film as above. Lesion ⅔ actual size. No cultural studies. 7 complement fixation tests: 1 positive, 4 suspicious, 2 negative.

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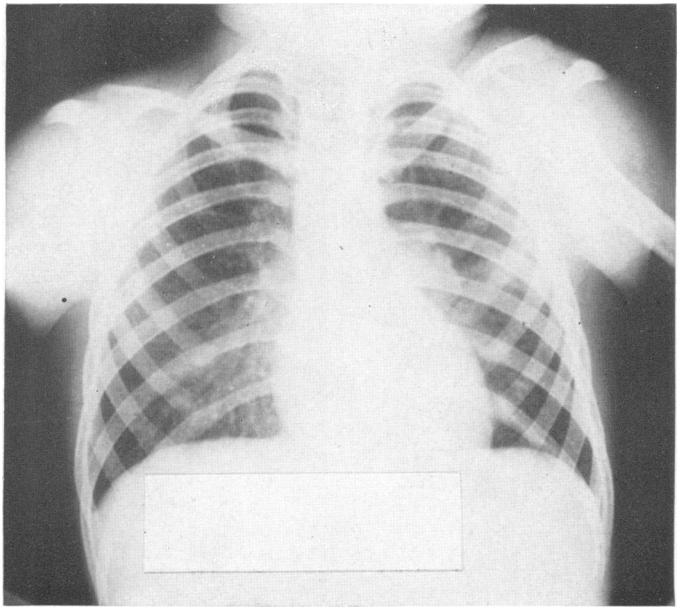


Figure 25. Case 10, 3–9–45, white male, age 6. Nodular lesion left third interspace with enlarged nodes.

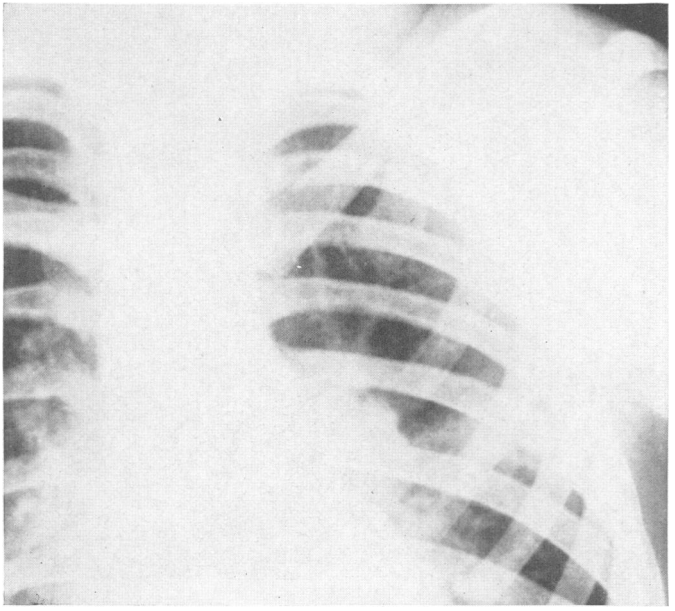


Figure 26. Same film as above. Lesion ⅔ actual size.

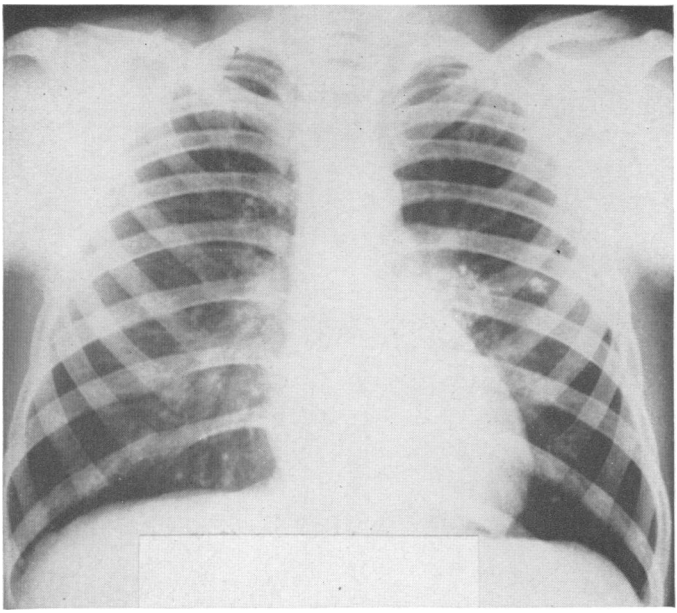


Figure 27. Case 10, 6–2–49.

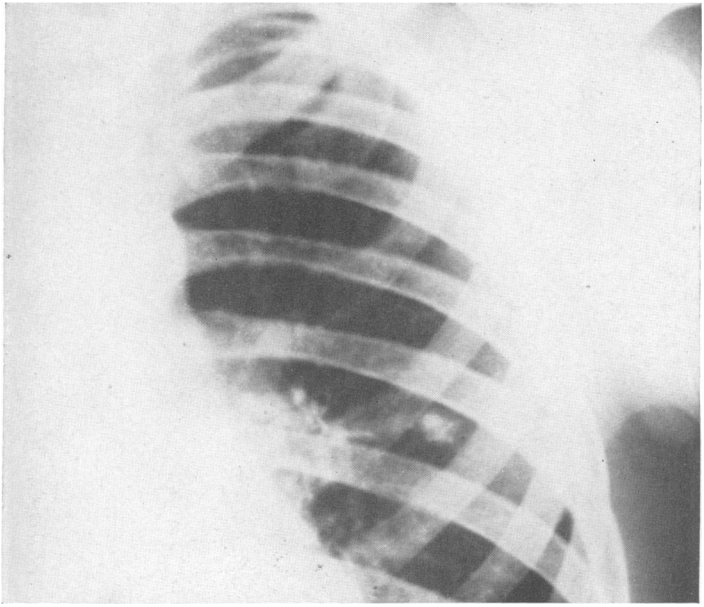


Figure 28. Same film as above. Lesion ⅔ actual size. No cultural studies. Complement fixation test negative, July 1949.

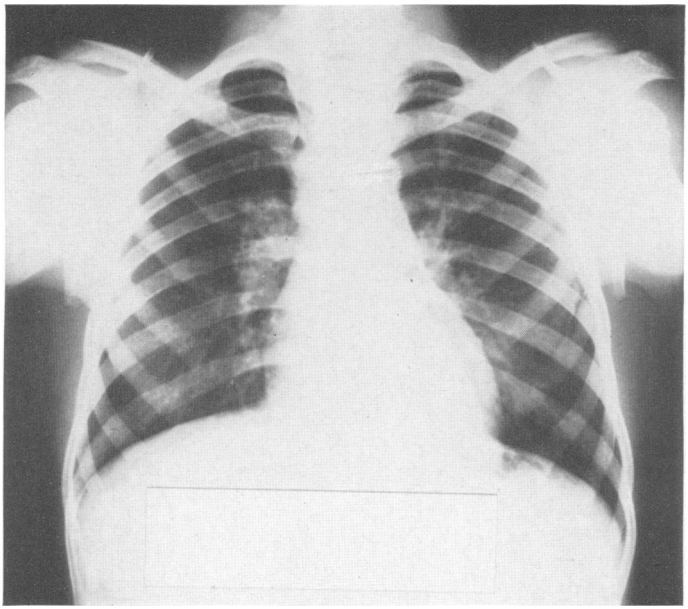


Figure 29. Case 11, 12-6-45, white male, age 10. Enlarged right hilar and mediastinal nodes.

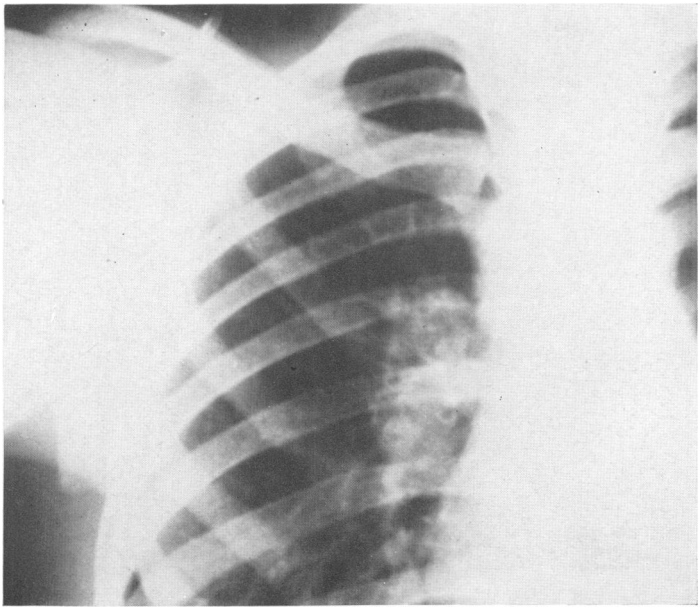


Figure 30. Same film as above. Lesion ⅔ actual size.

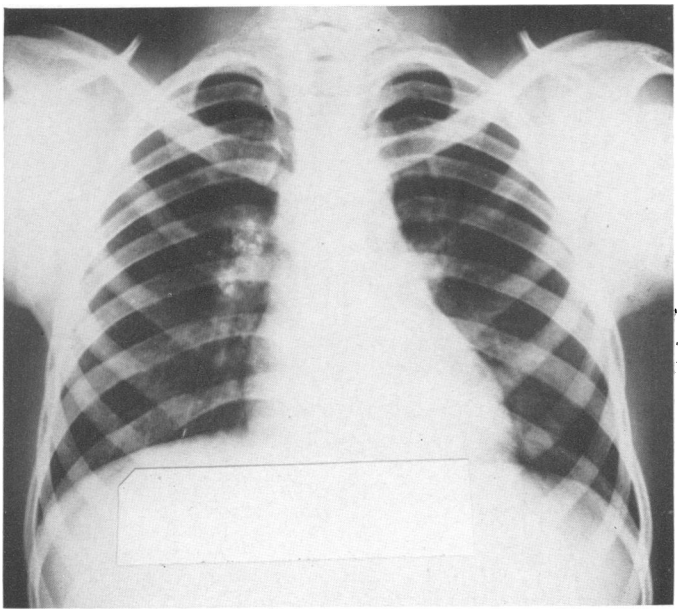


Figure 31. Case 11, 2–16–49.

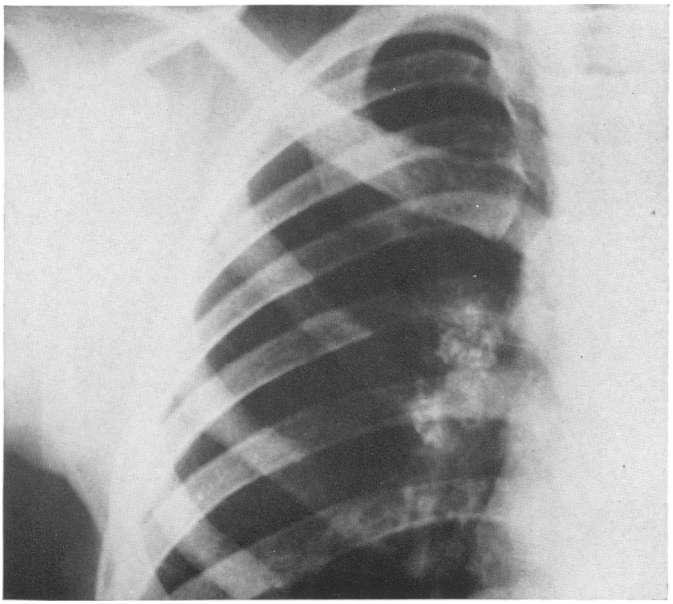


Figure 32. Same film as above. Lesion ⅔ actual size. No cultural studies. 2 complement fixation tests negative, 1948 and 1949.

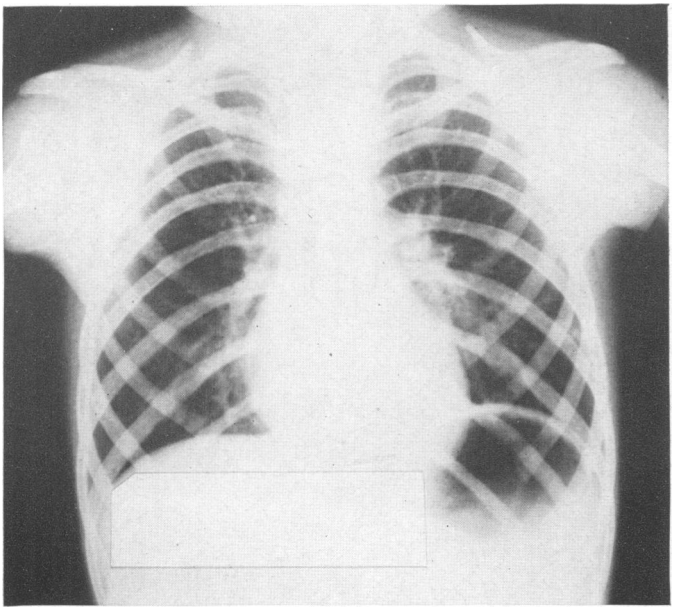


Figure 33. Case 12, 3–2–45, white male, age 7. Nodular lesion left fifth interspace with enlarged nodes.

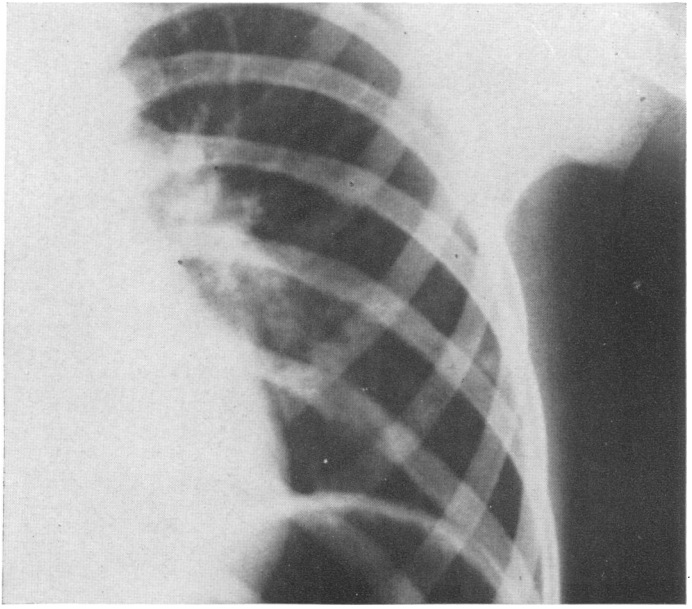


Figure 34. Same film as above. Lesion ⅔ actual size.

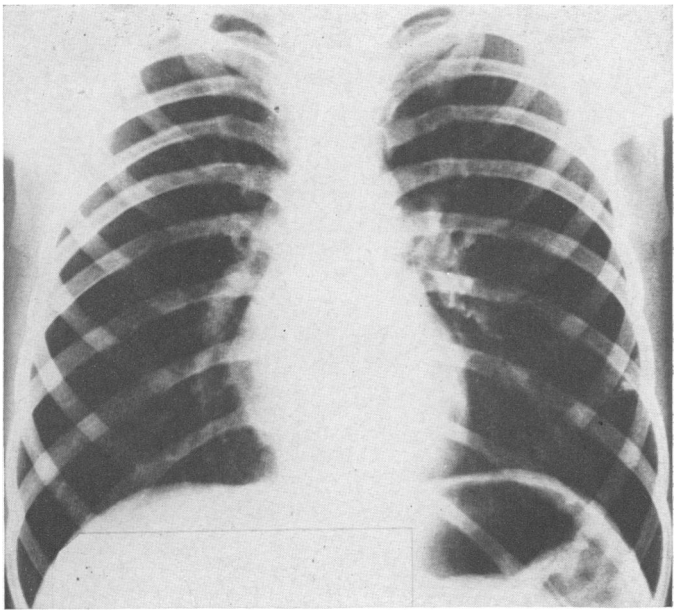


Figure 35. Case 12, 6–15–49.

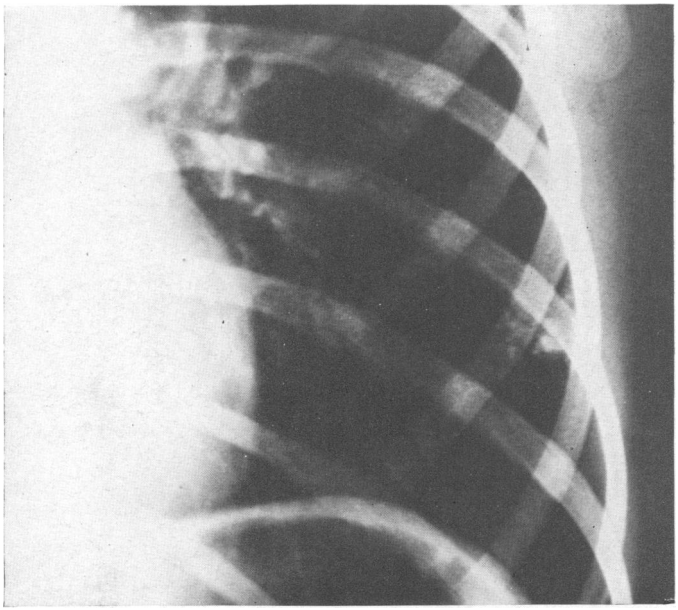


Figure 36. Same film as above. Lesion ⅔ actual size. No cultural studies. 5 complement fixation tests for histoplasmosis: 1 suspicious and 4 negative.

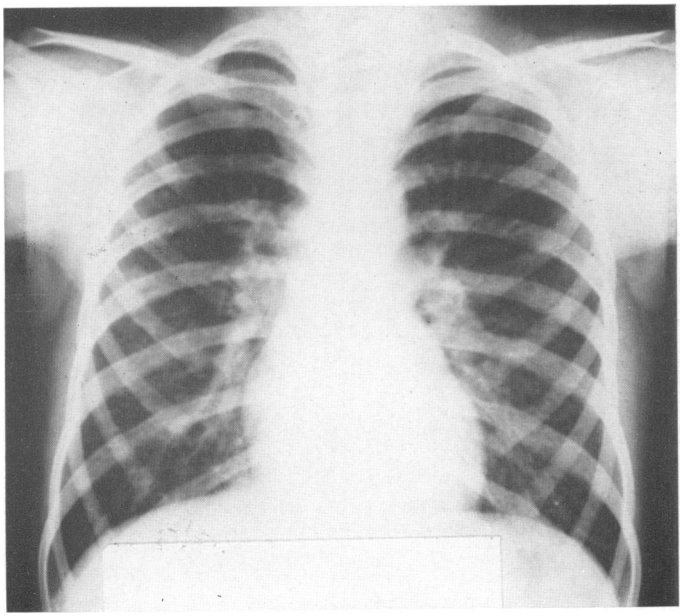


Figure 37. Case 13, 10–23–45, white male, age 10. Nodular lesion right third interspace with enlarged nodes.

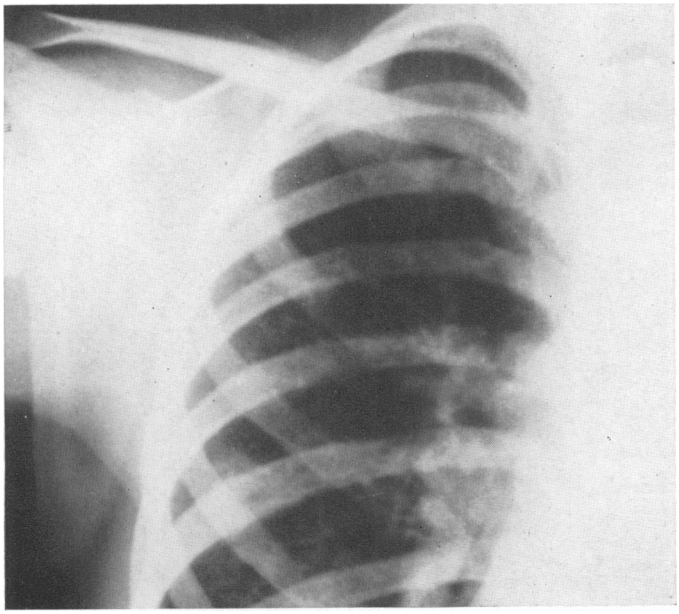


Figure 38. Same film as above. Lesion ⅔ actual size.

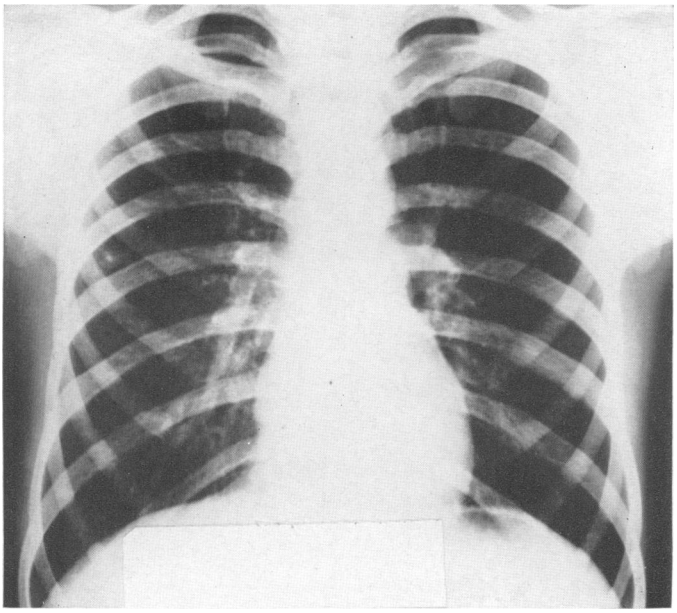


Figure 39. Case 13, 6–14–49.

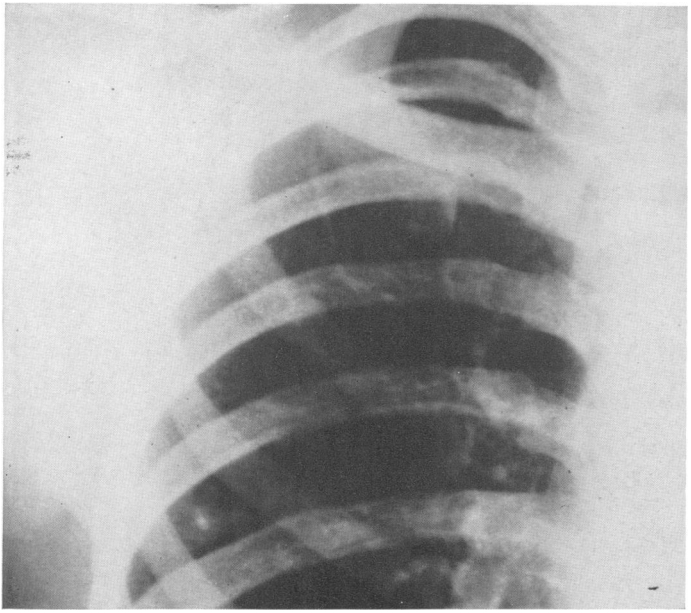


Figure 40. Same film as above. Lesion ⅔ actual size. No cultural studies. Complement fixation test for histoplasmosis negative, 1947.

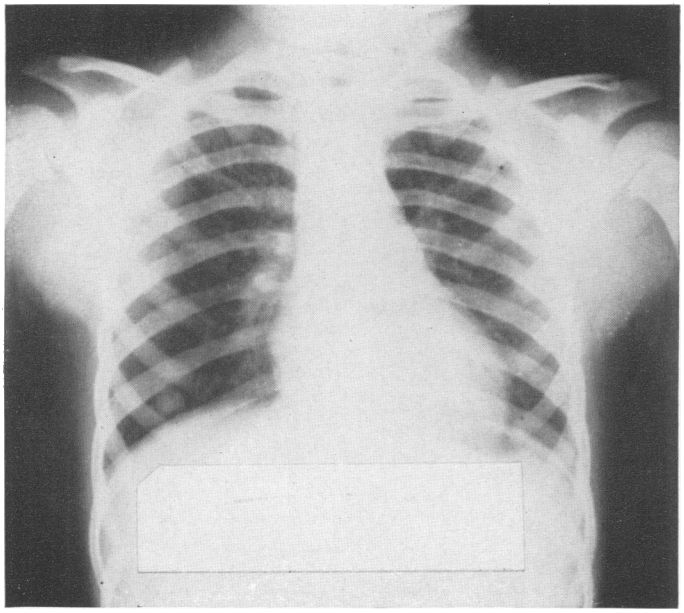


Figure 41. Case 14, 10–4–45, colored female, age 5. Nodular lesion right fifth interspace with enlarged nodes.

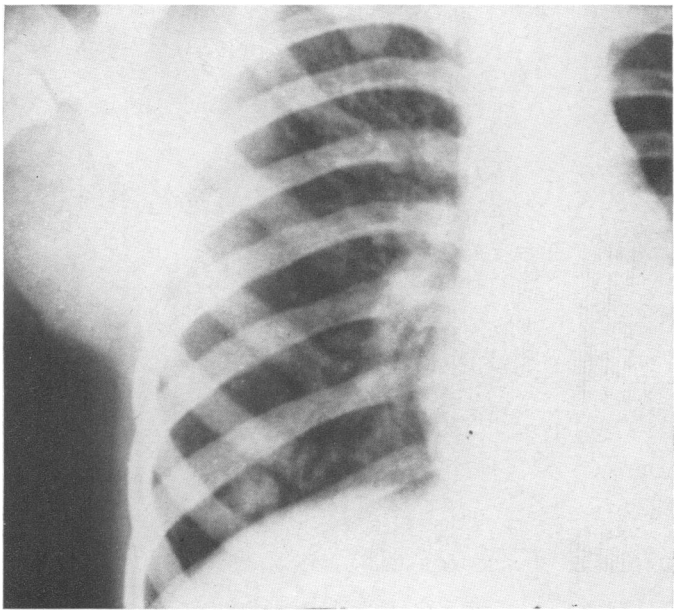


Figure 42. Same film as above. Lesion ⅔ actual size.

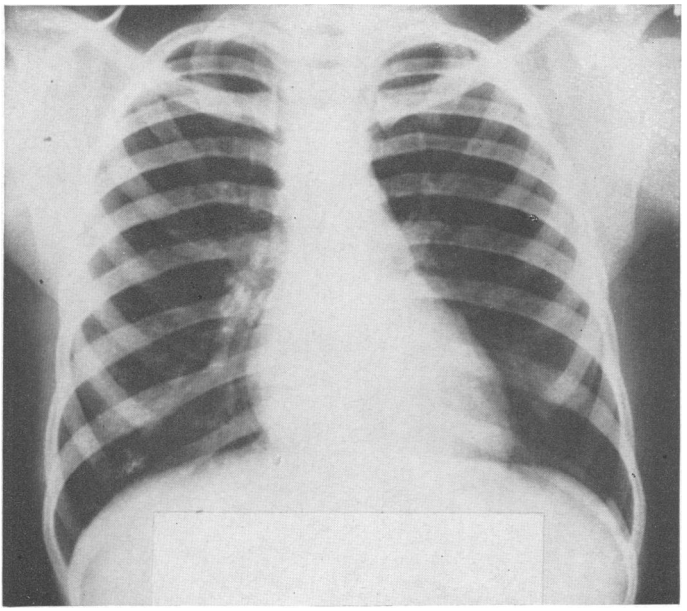


Figure 43. Case 14, 11–16–48.

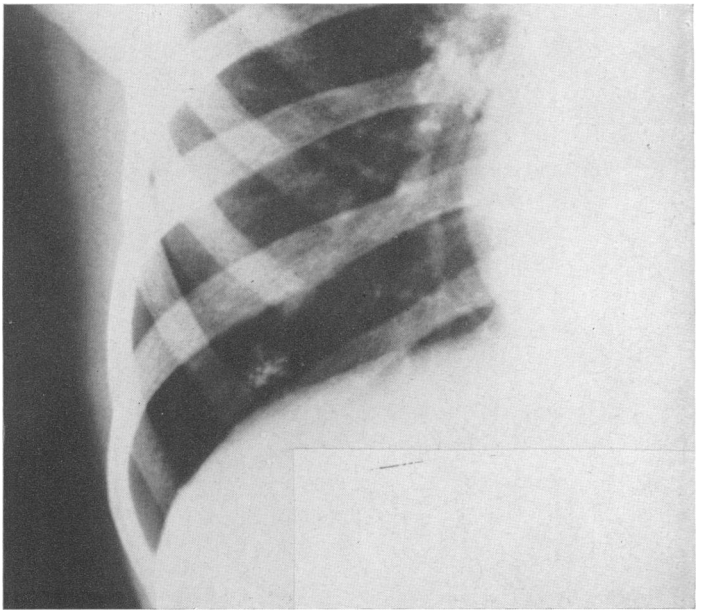


Figure 44. Same film as above. Lesion ⅔ actual size. No cultural studies. 2 negative complement fixation tests, 1948.

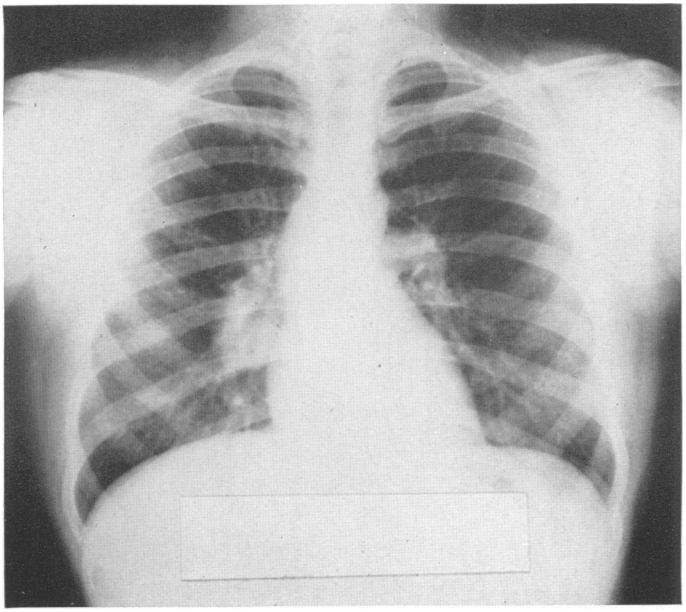


Figure 45. Case 15, 10–22–45, white female, age 11. Nodular lesion right fifth interspace with enlarged nodes.

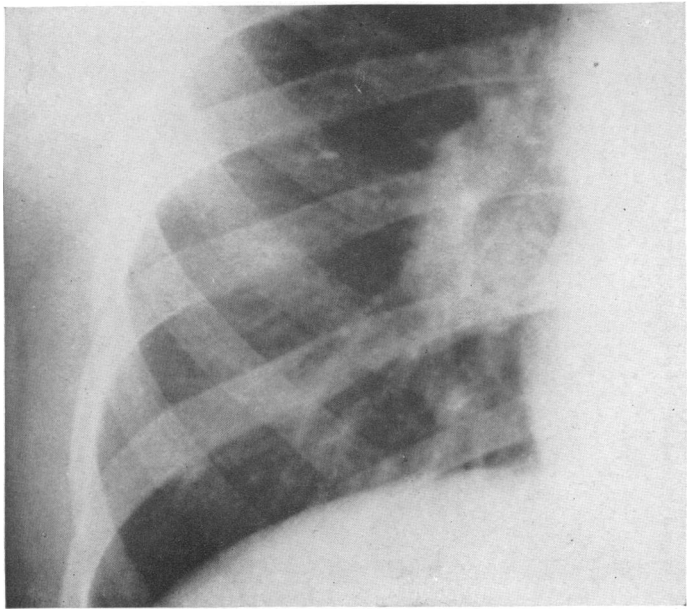


Figure 46. Same film as above. Lesion ⅔ actual size.

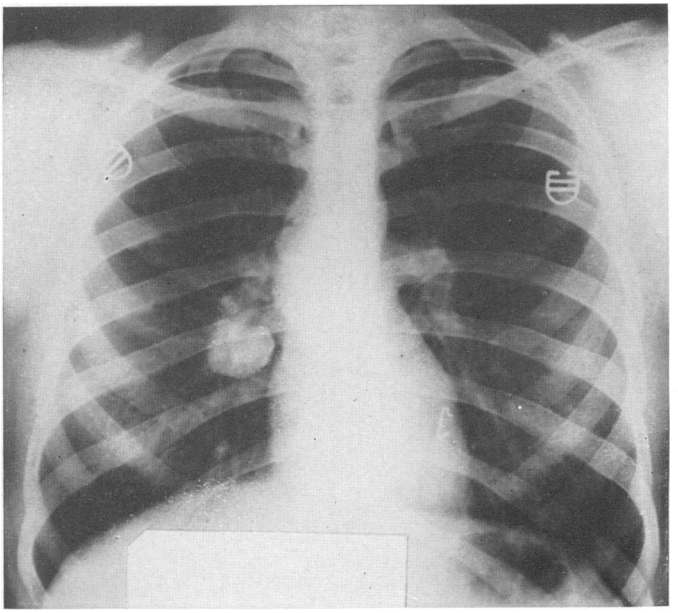


Figure 47. Case 15, 3–15–49.

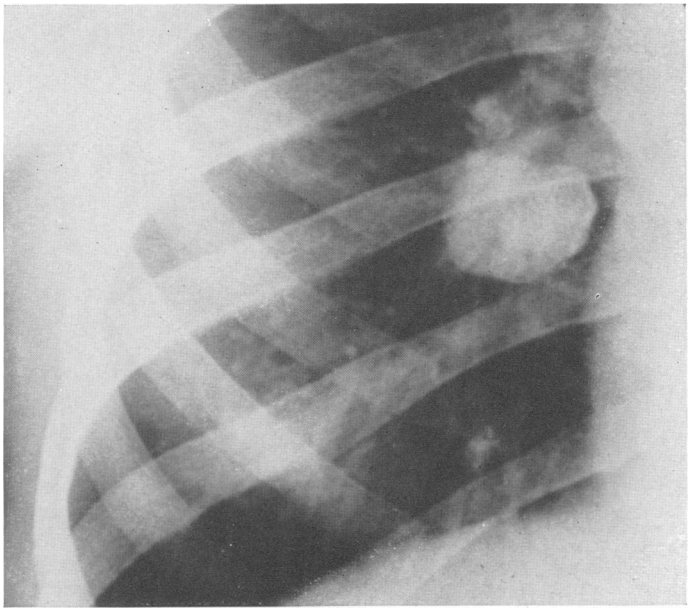


Figure 48. Same film as above. Lesion ⅔ actual size. 4 complement fixation tests for histoplasmosis: 1 suspicious, 3 negative.

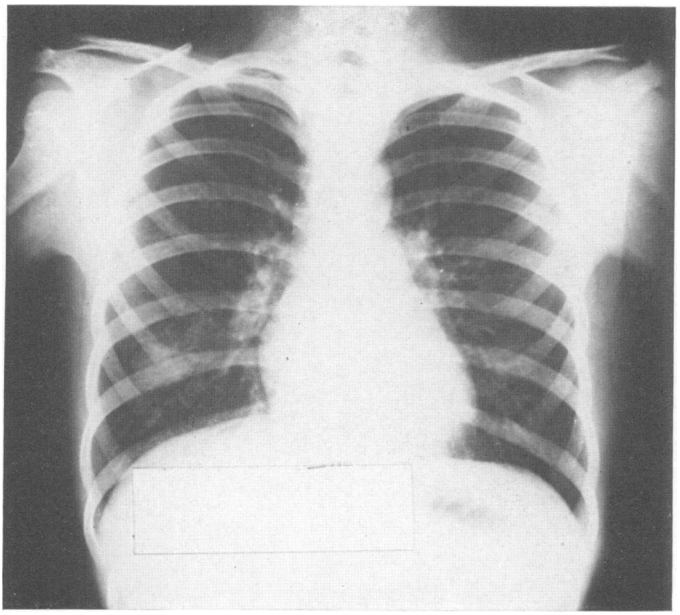


Figure 49. Case 16, 11–8–45, white female, age 11. Pneumonic lesion right fourth and fifth interspaces with enlarged nodes.

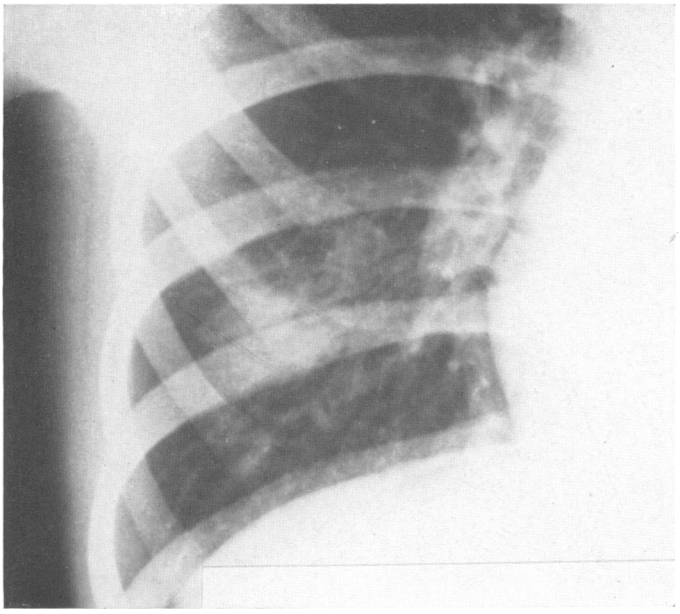


Figure 50. Same film as above. Lesion ⅔ actual size.

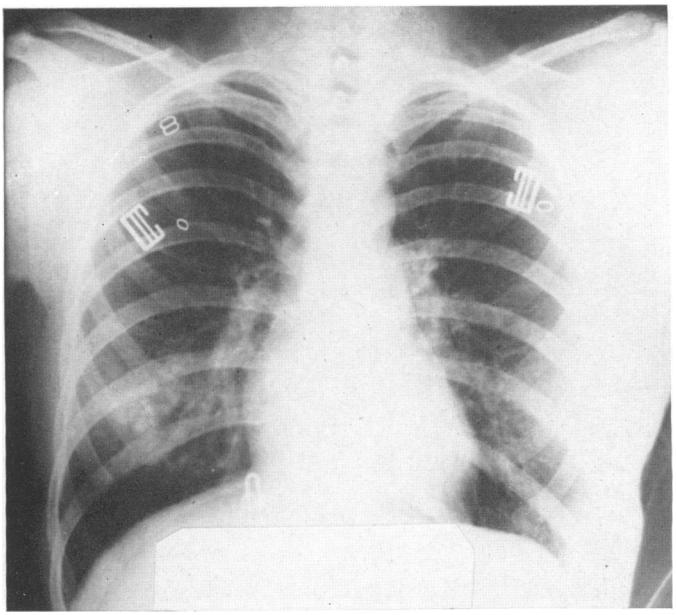


Figure 51. Case 16, 4–29–49.

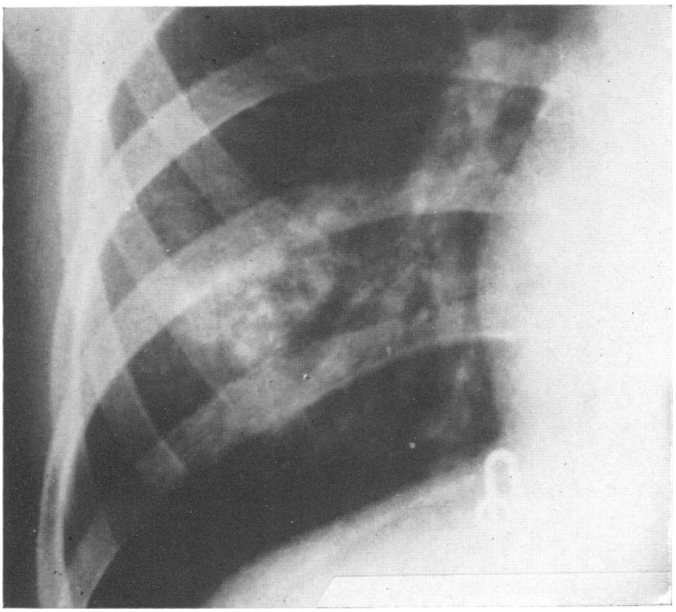


Figure 52. Same film as above. Lesion ⅔ actual size. No cultural studies. 1 suspicious complement fixation test for histoplasmosis, December 1947.

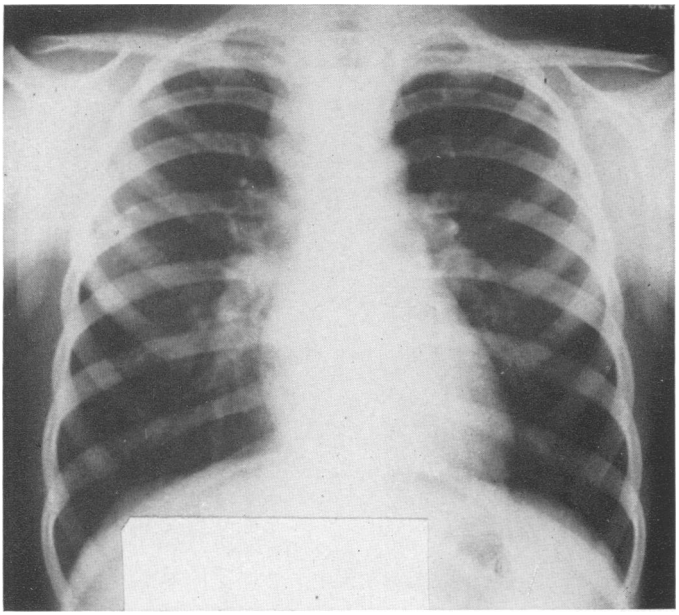


Figure 53. Case 17, 11–5–45, white female, age 7. Nodular lesion right second interspace with enlarged nodes.

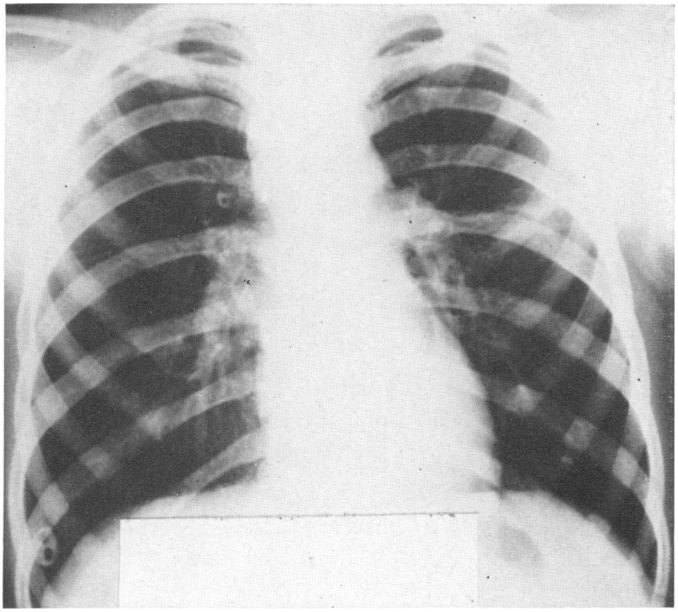


Figure 54. Same case, 3–9–48. New pneumonic lesion left third interspace with enlarged nodes (no symptoms) which disappeared by 3–22–48.

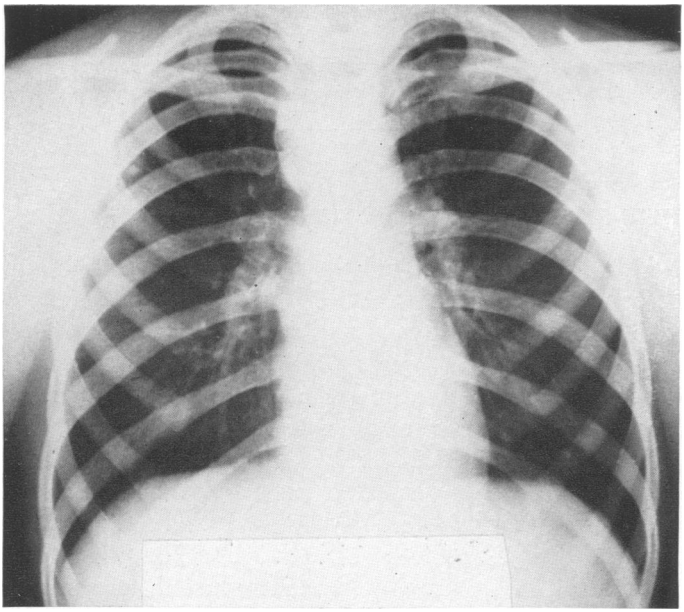


Figure 55. Case 17, 8–31–48. Lesion on left now absent.

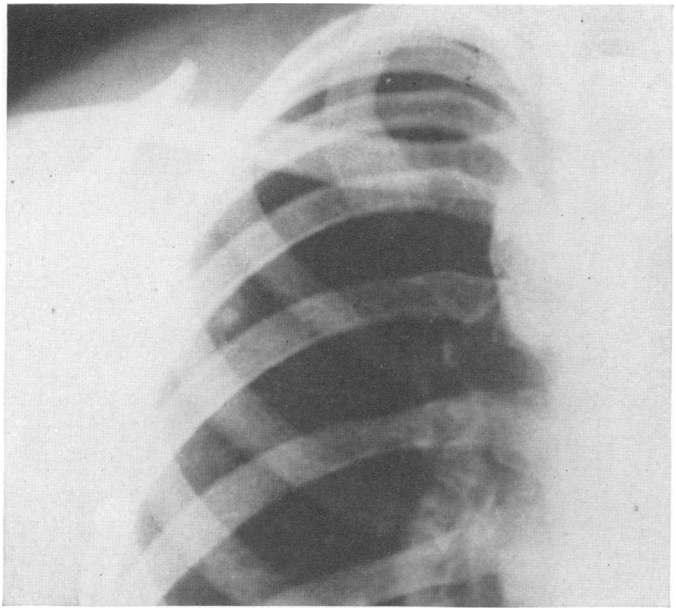


Figure 56. Same film as above. Lesion ⅔ actual size. 6 complement fixation tests for histoplasmosis: first 3 positive, last 3 suspicious.

INCIDENCE OF DISEASE

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring

UNITED STATES

REPORTS FROM STATES FOR WEEK ENDED OCTOBER 15, 1949

A total of 1,207 cases of poliomyelitis was reported during the current week, as compared with 1,586 last week, a decrease of 379 cases, or 23.9 percent. The median figure of the corresponding weeks of the past 5 years is 711. Increases totaling an aggregate of 63 cases were reported in 15 States and the District of Columbia. Only Oregon reported an increase of more than 8 cases (from 23 last week to 33 currently). For the individual States the range in cases recorded during the week was from no cases in 4 States (Arizona, Delaware, New Hampshire and Wyoming) to 81 and 182 cases in Michigan and New York, respectively. For the year to date (41 weeks) a total of 35,943 cases has been reported, as compared with 21,510 for the same period last year and a 5-year median of 16,134.

No unusual incidence in the reportable diseases was evident for the current week. Tularemia cases increased from 2 last week to 15 currently in 9 States. Four of these cases were recorded in Texas. Diphtheria and meningitis increased slightly for the week but remained below the median.

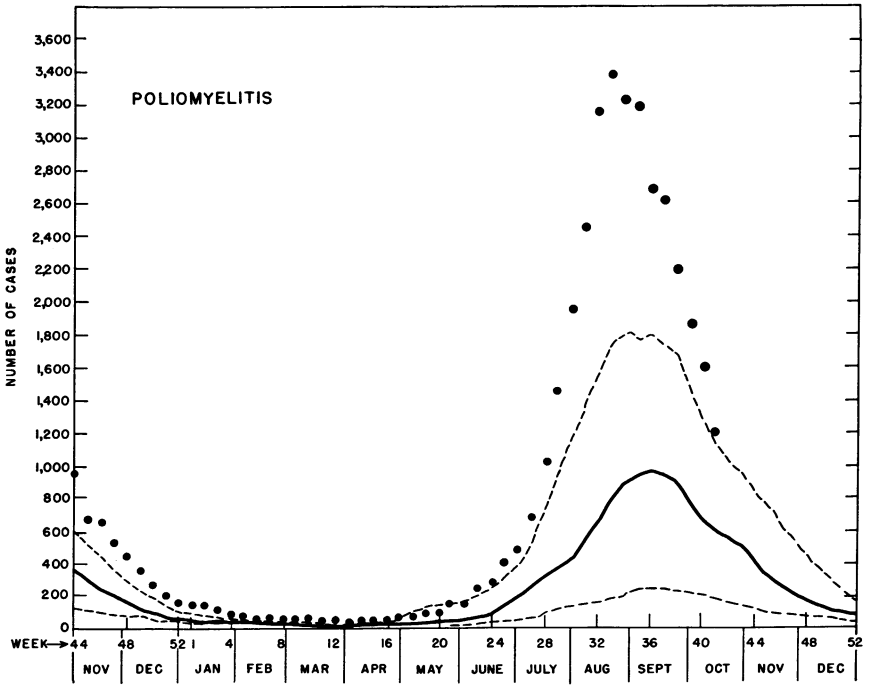
Reported cases of influenza for the week remained low, totaling 1,082, or slightly more than half the 5-year median of 2,010. Total influenza cases reported to date is 83,939 as compared to 150,301 cases reported for the corresponding period last year.

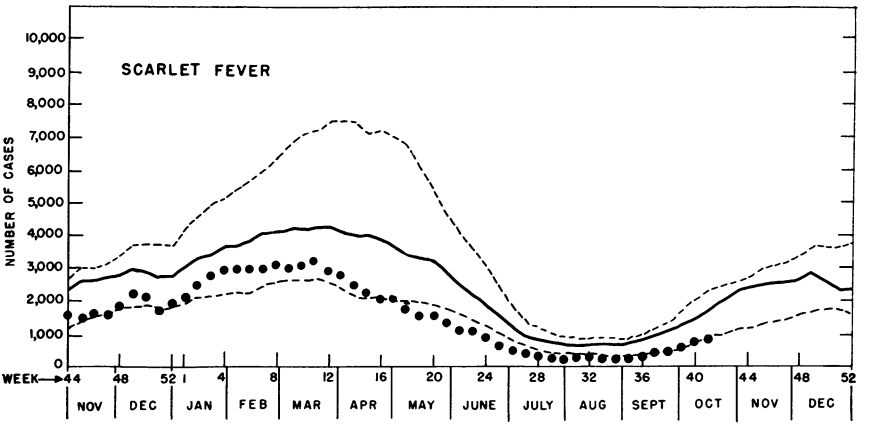
The reported cases of rabies in animals for the current week was 79 as compared to 86 for the preceding week. Current reports were received from 32 States, 18 of which reported no cases. Texas with 20 cases was highest for the week, followed by New York with 11, Indiana with 9, and Ohio, Georgia and Oklahoma with 5 cases each. The total number of cases of rabies in animals reported to date is 4,548.

A total of 8,750 deaths was recorded during the week in 94 large cities in the United States, as compared with 9,071 last week, 8,540 and 8,814, respectively, for the corresponding weeks of 1948 and 1947, and a 3-year median (1946–48) of 8,773. For the year to date the total is 375,626, as compared with 376,969 for the same period last year. Infant deaths totaled 668, last week 646, same week last year 631, 3-year median 705. The cumulative figure is 26,851, same period last year 25,601.

Communicable Disease Charts

All reporting States, November 1948 through October 15, 1949





The upper and lower broken lines represent the highest and lowest figures recorded for the corresponding weeks in the 7 preceding years. The solid line is the median figure for the 7 preceding years. All three lines have been smoothed by a 3-week moving average. The dots represent numbers of cases reported for the weeks of 1948.

Telegraphic case reports from State health officers for the week ended Oct. 15, 1949

(Leaders indicate that no cases were reported)

Division and State	Diphtheria	Encephalitis, infectious	Influenza	Measles	Meningitis, meningococcal	Pneumonia	Poliomyelitis	Rocky Mountain spotted fever	Scarlet fever	Smallpox	Tularemia	Typhoid and paratyphoid fever [e]	Whooping cough	Rabies in animals
NEW ENGLAND														
Maine				22	2	7	8		2				4	
New Hampshire													6	
Vermont				43			10						1	
Massachusetts	1	1		19			50		24				69	
Rhode Island						1	12		3				11	
Connecticut	1		1	12	1	32	19		9				61	
MIDDLE ATLANTIC														
New York	3	2	[c] 3	50	4	164	182		49			4	155	11
New Jersey	4		5	26	1	49	64		9			2	87	
Pennsylvania	1			48	5	53	33		26			2	148	
EAST NORTH CENTRAL														
Ohio	3		4	16	2	99	47		96			3	64	5
Indiana	8	1	11	13	1	5	43		33			1	12	9
Illinois		1		12	4	54	79		28		1	3	97	4
Michigan [a]	1		1	43	2	14	[f] 81		60			3	124	4
Wisconsin			6	33	1	3	26		23				67	
WEST NORTH CENTRAL														
Minnesota		1		4		14	23		16			3	4	
Iowa	1			12			37		10					4
Missouri	2			1	1	15	27		8		2	6	10	
North Dakota			2	4			7		1			1	4	
South Dakota		5		1			10		3					
Nebraska			10	6		5	21		23					
Kansas	1	1		3		11	24		2				15	
SOUTH ATLANTIC														
Delaware				2									16	
Maryland [a]	2		1	4		26	15	2	[d] 10			1	25	
District of Columbia				1		14	7		2			1	1	
Virginia	6		93	1		28	11	1	18			2	28	2
West Virginia	7		7	17	1	2	5		11			4	17	
North Carolina	40			13	3		[f] 8		88		1	1	7	
South Carolina	7		12	1		8	3		11			1		4
Georgia	28		9	3	1	6	[f] 8	2	21		1	3	1	5
Florida	2			3		20	5		3		1			

EAST SOUTH CENTRAL														
Kentucky	10			3	3	6	21		27			4	3	3
Tennessee	21		16	18	2	47	12	1	58		2	2	13	
Alabama	11	1	15			21	9		10			2	3	
Mississippi [a]	14		1	3		15	6		10				8	
WEST SOUTH CENTRAL														
Arkansas	6		35	3	1	27	[1] 9		2		2	2	7	1
Louisiana	6			4		13	4		3			1	1	
Oklahoma	3	1	31	3	2	20	29		3		1		7	5
Texas	30	1	726	23	5	199	36		8		4	6	66	20
MOUNTAIN														
Montana	1	1		34		2	4		3				4	
Idaho	1		8	4		3	16		[d] 6					
Wyoming				7					2				1	
Colorado	2	1	42	5	2	21	31		11			4	6	
New Mexico			1	7	1	4	16		2			1	4	
Arizona			27	8		9			2				4	
Utah [a]		1	1	11			19		2				6	
Nevada				1			2		2					
PACIFIC														
Washington			2	14	2	6	21		15				11	
Oregon	7		11	12		19	33		12				8	
California	11	1	1	32	2	24	74		[d] 36			10	103	2
Total	241	19	1,082	605	49	1,066	1,207	6	803		15	73	1,289	
Median, 1944–48	344	10	1,473	814	74		711	5	1,132	1	14	101	1,435	
Year to date 41 weeks	5,736	632	83,939	591,650	2,705	62,765	[1] 35,943	541	62,226	44	935	3,093	49,411	
Median, 1944–48	9,268	515	198,538	556,638	4,939		16,134	506	93,055	286	749	3,364	78,899	
	(27th)		(30th)	(35th)	(37th)		(11th)		(32d)	(35th)		(11th)	(39th)	
Seasonal low week ends	July 9		July 30	Sept. 3	Sept. 17		Mar. 19		Aug. 13	Sept. 3		Mar. 19	Oct. 1	
Since seasonal low week	1,968		8,072	3,132	189		[1] 35,027		3,966	3		2,633	2,809	
Median, 1944–45 to 1948–49 [b]	3,500		8,531	3,725	273		15,871		6,760	13		2,889	3,024	

[a] Period ended earlier than Saturday.
[b] The median of the 5 preceding corresponding periods (1944–45 to 1948–49).
[c] New York City only.
[d] Including cases reported as streptococcal infection and septic sore throat.
[e] Including paratyphoid fever; currently reported separately as follows: Indiana 1, Minnesota 1, Missouri 6, West Virginia 1, North Carolina 1, Alabama 1, Louisiana 1, Texas 2, Colorado 1, California 8. Cases reported as Salmonella infection not included in the table were as follows: Massachusetts 2, New York 1.
[1] Poliomyelitis—Deductions: Michigan, week ended Sept. 3, 1 case, week ended Oct. 8, 2 cases; North Carolina week ended Oct. 1, 1 case; Georgia, week ended Sept. 10, 1 case; Arkansas, week ended Aug. 6, 1 case.
Relapsing fever: California, 1 case.
Alaska: Measles 2, pneumonia 1, scarlet fever 1, septic sore throat 9.
Hawaii Territory: Influenza 1, measles 3, scarlet fever 2.

TERRITORIES AND POSSESSIONS

Hawaii Territory

Plague (rodent).—According to information dated October 5, 1949, plague infection was reported proved positive on September 20, 1949, in 1 rat, found dead in Hamakua District, Island of Hawaii, T. H., District 1A, Kukuihaele.

Panama Canal Zone

Notifiable diseases—August 1949.—During the month of August 1949, certain notifiable diseases were reported in the Panama Canal Zone and terminal cities as follows:

Disease	Residence [1]									
	Panama City		Colon		Canal Zone		Outside the zone and terminal cities		Total	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Chickenpox	3		1		10		2		16	
Diphtheria	2	1			1		2		5	1
Dysentery:										
Amebic	3						3		6	
Bacillary	1		2				1		4	
Hepatitis, infectious					1				1	
Malaria [2]	3	1			9		79		91	1
Measles			2						2	
Meningitis, meningococcal		2		2				1		5
Mumps					1				1	
Pneumonia		4		6	10	1		3	[3] 10	14
Poliomyelitis	1								1	
Tetanus	1								1	
Tuberculosis		15		3				5	(3)	23
Typhoid fever							1		1	
Typhus fever (murine)	1				1				2	
Whooping cough		2			8				[3] 8	2
Yaws							3		3	
Yellow fever								2		2

[1] If place of infection is known, cases are so listed instead of by residence.
[2] 1 recurrent case.
[3] Reported in the Canal Zone only.

DEATHS DURING WEEK ENDED OCT. 15, 1949

[From the Weekly Mortality Index, issued by the National Office of Vital Statistics]

	Week ended Oct. 15, 1949	Corresponding week, 1948
Data for 94 large cities of the United States:		
Total deaths	8,750	8,540
Median for 3 prior years	8,773	
Total deaths, first 41 weeks of year	375,626	376,969
Deaths under 1 year of age	668	631
Median for 3 prior years	705	
Deaths under 1 year of age, first 41 weeks of year	26,851	27,365
Data from industrial insurance companies:		
Policies in force	70,078,686	70,832,898
Number of death claims	9,468	9,292
Death claims per 1,000 policies in force, annual rate	7.0	6.9
Death claims per 1,000 policies, first 41 weeks of year, annual rate	9.1	9.3

FOREIGN REPORTS

CANADA

Provinces—Notifiable diseases—Week ended September 24, 1949.—During the week ended September 24, 1949, cases of certain notifiable diseases were reported by the Dominion Bureau of Statistics of Canada as follows:

Disease	Newfoundland	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Total
Chickenpox			14	1	36	45	9	10	23	15	153
Diphtheria	1		1		3	2					7
Dysentery, bacillary					6	2	1				9
Encephalitis, infectious							4	2			6
German measles						5	1		7	3	16
Influenza			20			4				2	26
Measles			44		27	29	41	49	15	48	253
Meningitis, meningococcal							1	1		2	4
Mumps			12		3	30	3	9	10	40	107
Poliomyelitis			5	1	25	34	8	4	8	13	98
Scarlet fever				1	22	8	2		16	4	53
Tuberculosis (all forms)	11		7	15	74	12	46	4	24	32	225
Typhoid and paratyphoid fever					70	8		2	1	4	85
Undulant fever			1				3				4
Venereal diseases:											
Gonorrhea	6	1	7	7	119	72	31	13	59	73	388
Syphilis	3		5	2	59	31	8	6	5	20	139
Other forms										3	3
Whooping cough	1				89	42	2	3		2	139

CUBA

Habana—Notifiable diseases—5 weeks ended July 30, 1949.—During the 5 weeks ended July 30, 1949, certain notifiable diseases were reported in Habana, Cuba, as follows:

Disease	Cases	Deaths	Disease	Cases	Deaths
Chickenpox	4		Poliomyelitis	1	
Diphtheria	9	1	Scarlet fever	1	
Leptospirosis	1		Tuberculosis	8	
Malaria	5		Typhoid fever	18	3
Measles	7				

Provinces—Notifiable diseases—5 weeks ended July 30, 1949.—During the 5 weeks ended July 30, 1949, cases of certain notifiable diseases were reported in the Provinces of Cuba as follows:

Disease	Pinar del Rio	Habana[1]	Matanzas	Santa Clara	Camaguey	Oriente	Total
Cancer	6	12	7	20	3	14	62
Chickenpox		5					5
Diphtheria	1	11	2	5	1	6	26
Leprosy		14				3	17
Malaria	1	5	1	1	7	17	32
Measles		9	1		2		12
Poliomyelitis		1		1		4	6
Scarlet fever		1					1
Tuberculosis	7	20	14	13	44	25	123
Typhoid fever	2	19	7	17	12	23	80
Undulant fever						3	3
Whooping cough		7			1	1	9
Yaws						17	17

[1] Includes the city of Habana.

FINLAND

Notifiable diseases—August 1949.—During the month of August 1949, cases of certain notifiable diseases were reported in Finland as follows:

Disease	Cases	Disease	Cases
Cerebrospinal meningitis	2	Poliomyelitis	44
Diphtheria	90	Scarlet fever	154
Dysentery	3	Syphilis	49
Gonorrhea	880	Typhoid fever	29
Paratyphoid fever	156		

REPORTS OF CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER RECEIVED DURING THE CURRENT WEEK

Note.—The following reports include only items of unusual incidence or of special interest and the occurrence of these diseases, except yellow fever, in localities which had not recently reported cases. All reports of yellow fever are published currently.

A table showing the accumulated figures for these diseases for the year to date is published in the PUBLIC HEALTH REPORTS for the last Friday in each month.

Plague

Brazil.—During the period January 1–April 30, 1949, 31 cases of plague, with 2 deaths, were reported in Brazil, distributed as follows: January 1–31—Bahia State, Serrinha County 7 cases, Feira County 3 cases; Pernambuco State, Caruara County 1 case, 1 death, Garanhuns County 2 cases, Panelas County 1 case; February 1–28—Bahia State, Serrinha County 2 cases; Pernambuco State, Araripina County 1 case, Garanhuns County 1 case; March 1–31—Bahia State, Feira County 1 case; Pernambuco State, Bom Conselho County 4 cases, Garanhuns County 1 case; April 1–30, Pernambuco State, Garanhuns County 6 cases, Bezerros County 1 case, 1 death.

Netherlands Indies—Java—Jogjakarta.—During the week ended September 16, 1949, 36 fatal cases of plague were reported in Jogjakarta Residency, Java. For the week ended October 8, 1949, 11 cases were reported in the city of Jogjakarta.

Smallpox

Colombia.—During the month of August 1949, 235 cases of smallpox (alastrim) were reported in Colombia, 33 of which were stated to have occurred in the city of Medellin.

Netherlands Indies—Java.—Smallpox has been reported in cities in Java as follows: Week ended October 8, 1949, Batavia 148 cases, Pekalongan 20 cases, Semarang 28 cases, Tegal 11 cases; week ended October 1, Batavia 253 cases; week ended September 10, Bandoeng 56 cases, Cheribon 44 cases.

Typhus Fever

Colombia.—During the period August 1–31, 1949, 258 cases of typhus fever were reported in Colombia (including cases of murine type). Twenty-one of these cases were reported in Medellin, all murine type.

Great Britain—England and Wales.—During the week ended September 17, 1949, 4 cases of murine typhus fever were reported in Newport, Monmouthshire, England.

Yellow Fever

Gold Coast.—On September 1, 1949, 1 suspected case of yellow fever was reported at Atiankama, Oda area, Gold Coast.

Examination for Chemists and Biochemists

Examinations for scientists and sanitarians (chemists and biochemists) in the United States Public Health Service Regular Commissioned Corps will be held January 9–11, 1950, in various cities throughout the country. Completed applications must be in the Washington Office by December 12, 1949.

Appointments are permanent and provide opportunities for career service in research and public health activities. Benefits include periodic pay raises and promotions; liberal retirement provision; medical care, annual and sick leave.

Appointments will be made in the grades of assistant and senior assistant, equivalent to Army ranks of first lieutenant and captain, respectively. Entrance pay is $3,811 for assistant (with dependents) and $4,489 for senior assistant (with dependents), including rental and subsistence allowance.

Minimum requirements for chemist and biochemist in the scientist category are 7 years training and experience after high school, including a doctor's degree from a recognized university. Minimum requirements for chemist in the sanitarian category are 7 years post-high school training and experience, including a master's degree from an approved university.

For application forms and additional information write to Surgeon General, Public Health Service, Federal Security Agency, Washington 25, D. C., Attention: Division of Commissioned Officers.

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