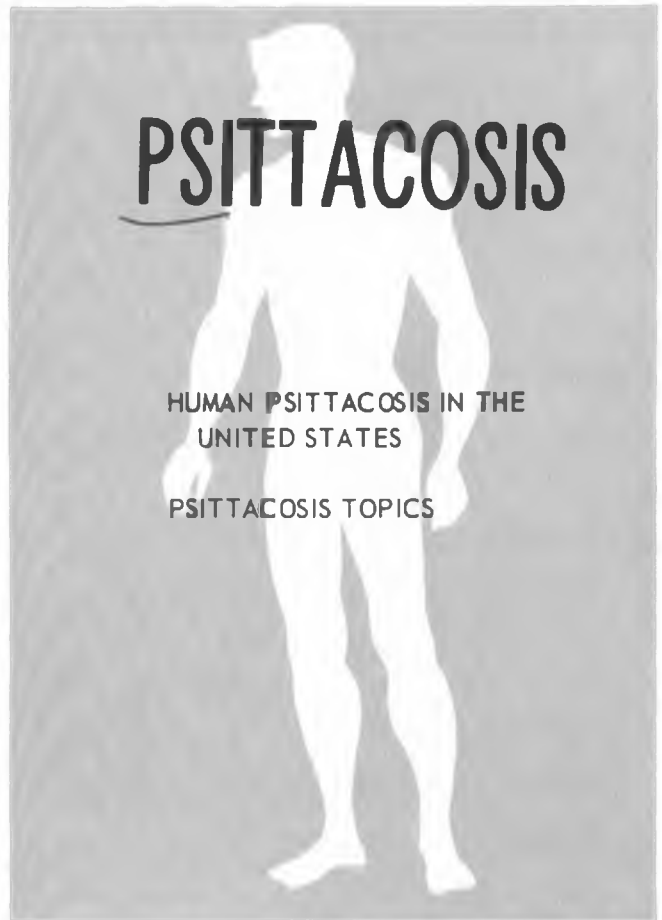
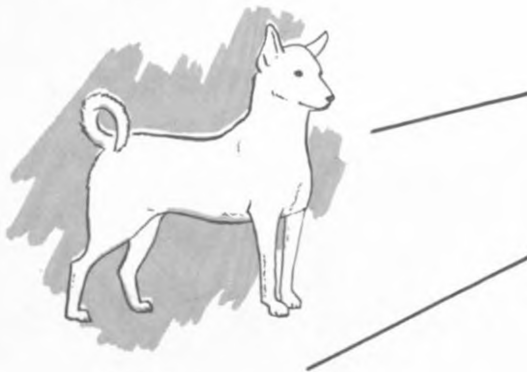
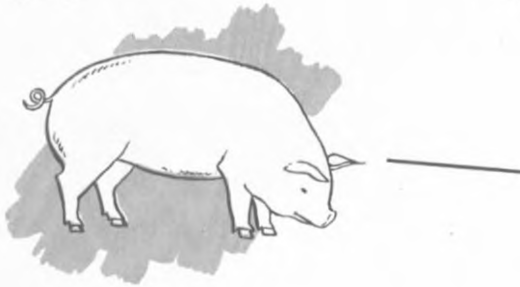
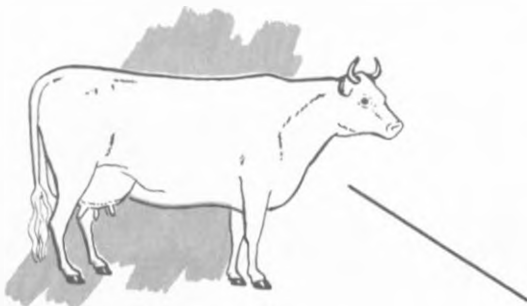


MARCH 1969

NATIONAL
COMMUNICABLE DISEASE CENTER

ZOONOSES

SURVEILLANCE



U. S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE

HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION

HUMAN PSITTACOSIS IN THE UNITED STATES

I. SUMMARY (Table I)

Seventeen states reported a total of 45 cases of human psittacosis in 1968, four more than the 41 cases reported the previous year. Epidemiologic case histories on 37 of the 45 cases (82 percent) were received by the Zoonoses Investigations Unit, National Communicable Disease Center.

II. GEOGRAPHIC DISTRIBUTION (Table I)

California reported the greatest number of cases with Michigan, New York, and Texas tied for second in number of cases reported. These four states accounted for 60 percent of the 1968 cases. Twelve states reported an increase in 1968, 13 states reported a decline, and one state reported the same number of cases in 1967 and 1968. Cases were reported from seven states that had no cases the previous year; nine states reported cases in 1967 but none in 1968.

III. TEMPORAL DISTRIBUTION (Figure 1)

Of 37 cases investigated, 27 (73 percent) occurred in the winter and spring months.

IV. AGE AND SEX DISTRIBUTION (Table II)

There were no significant differences in the age or sex distribution of the 1968 cases for which epidemiologic case reports were received.

V. SOURCE OF INFECTION (Table III)

Parakeets were responsible for 17 of the 37 cases (46 percent) reviewed. Most of these cases were related to exposure to pet parakeets in homes.

VI. SYMPTOMS (Table IV)

Fever and pneumonia were recorded in most cases of human psittacosis in 1968.

PSITTACOSIS TOPICS

I. CHEMOTHERAPY FOR PSITTACIFORMES

Arnstein, Eddie, and Meyer¹ investigated a practical approach for eliminating psittacosis as a potential hazard for man and animal contacts of captive parrots. From their study, and with the knowledge that there is initially a low rate of psittacosis infection in most wild or uncrowded captive psittacine birds, group treatment with chlortetracycline in the feed was determined to be practical, effective, and economically feasible in a program of combined therapy and prophylaxis. A 45-day course of treatment was found to eliminate the causative organisms completely from the blood and feces of the birds. The authors concluded that parrots treated in this manner are unlikely to become sources of psittacosis for man.

Arnstein, Buchanan, Eddie, and Meyer² evaluated the efficacy of chlortetracycline in the liquid diet of lorys and lorikeets. The blood levels reached with the dosage used was sufficient to prevent or eliminate psittacosis infection.

II. PSITTACOSIS IN THE CANADIAN ARCTIC

The presence of psittacosis in the Canadian Arctic was discovered through serological surveys of Eskimos and Indians from 1957 to 1961. Complement-fixing antibody was found in 16-80 percent of the human inhabitants of various Arctic communities. Efforts to isolate the organism from birds were unsuccessful, although 18 percent of the snow geese captured during the spring migration and 12 percent caught in the fall migration had psittacosis antibody. Titers tended to be higher in the spring than in the fall in these birds.

Psittacosis in the Arctic apparently is endemic but, to date, there have not been any clinical cases reported. There are no answers to any of the important epidemiological questions on this unresolved problem of psittacosis, or a psittacosis-related infection in the Arctic.

III. PSITTACOSIS IN GEORGIA

During the summer of 1968, a serum sample taken from a 9-year-old boy, suffering from encephalitis due to a Coxsackie virus, was found to have a significant titer against psittacosis by the Georgia State Department of Public Health.⁴ The boy lived at a childrens' home and examination of the sera from 10 of the other occupants of the cottage in which the boy lived disclosed elevated psittacosis titers in 4 of the other boys. Further inquiry revealed that the children in the home often play with dead pigeons and captive live pigeons. Two pigeon squabs and three adult birds were obtained for laboratory evaluation. The psittacosis agent was isolated from one of the adult pigeons. There was no evidence of clinical disease resembling psittacosis in any of the children in the home. Serologic studies for psittacosis in all of the children are now in progress.

References

1. Arnstein, P., Eddie, B., and Meyer, K. F. Control of Psittacosis by Group Chemotherapy of Infected Parrots, *The American Journal of Veterinary Research*, 29 (11): 2213-2227, 1968.
2. Arnstein, P., Buchanan, W. G., Eddie, B. and Meyer, K. F. Chlortetracycline Chemotherapy for Nectar-Feeding Psittacine Birds, *Journal of the American Veterinary Medical Association*, 154: 190-191, 1969.
3. Hildes, J. A., Some Zoonotic Problems in the Canadian Arctic, *Archives of Environmental Health*, 18: 133-137, 1969.
4. Dreesen, D., Personal Communication, Georgia State Department of Health, Atlanta, Georgia, 1969.

TABLE I
HUMAN PSITTACOSIS – 1968 *

State	Five Year Mean (1963-1967)	1968* Cases	Comparison of numbers of cases reported in 1968 with 1967
Alabama	0.0	0	0
Alaska	0.0	0	0
Arizona	0.4	1	+1
Arkansas	0.2	0	0
California	9.6	9	+7
Colorado	0.0	0	0
Connecticut	1.6	3	+1
Delaware	0.0	0	0
Florida	0.6	0	-1
Georgia	1.4	1	+1
Hawaii	0.0	0	0
Idaho	0.0	0	0
Illinois	4.6	1	+1
Indiana	0.0	0	0
Iowa	0.4	0	-1
Kansas	0.4	0	-1
Kentucky	0.4	0	0
Louisiana	0.2	0	-1
Maine	0.2	0	0
Maryland	0.4	0	0
Massachusetts	2.8	1	-4
Michigan	1.8	6	+5
Minnesota	2.4	0	-2
Mississippi	0.0	0	0
Missouri	0.0	0	0
Montana	0.6	0	-2
Nebraska	0.0	0	0
Nevada	0.0	0	0
New Hampshire	0.4	0	-1
New Jersey	0.8	1	+1
New Mexico	0.0	1	+1
New York	3.0	6	+3
North Carolina	0.8	1	+1
North Dakota	0.0	0	0
Ohio	1.8	3	+2
Oklahoma	0.2	0	-1
Oregon	1.0	0	0
Pennsylvania	2.0	1	-2
Rhode Island	0.0	0	0
South Carolina	0.0	0	0
South Dakota	0.0	0	0
Tennessee	2.6	2	-1
Texas	9.4	6	-3
Utah	0.8	0	0
Vermont	0.0	0	0
Virginia	0.8	0	0
Washington	0.8	0	-1
West Virginia	0.2	1	+1
Wisconsin	3.6	1	0
Wyoming	0.0	0	0
TOTALS	1.1	45	+4

* Provisional Data

SOURCE: Case reports submitted to the NCDC Zoonoses Investigations Unit, *Morbidity and Mortality Weekly Report*

TABLE II

HUMAN PSITTACOSIS BY AGE AND SEX – 1968*

AGE (YEARS)	SEX		TOTAL
	MALE	FEMALE	
0 – 9	3	2	5
10 – 19	1	1	2
20 – 29	3	3	6
30 – 39	2	3	5
40 – 49	5	3	8
50 – 59	2	2	4
60 – 69	4	2	6
70+	0	1	1
TOTAL	20	17	37

*Provisional Data

SOURCE: Case reports submitted to the NCDC Zoonoses Investigations Unit

TABLE III

HUMAN PSITTACOSIS BY EXPOSURE CATEGORIES AND
MOST PROBABLE SOURCE OF INFECTION – 1968*

EXPOSURE CATEGORY	MOST PROBABLE SOURCE OF INFECTION									
	PARAKEET	PIGEON	CANARY	BIRDS, UNSPECIFIED	CHICKEN OR DUCK	PARROT	BIRD CAGE	WALL DUST	UNKNOWN	TOTAL
Pet Bird Owner	14		1	1		2				18
Pet Bird Dealer	1			1		3				5
Pet Bird Breeder	1	2								3
Other	1	4			1		1	1		8
Unknown									3	3
TOTAL	17	6	1	2	1	5	1	1	3	37

TABLE IV

SYMPTOMS OF
HUMAN PSITTACOSIS CASES† – 1968*

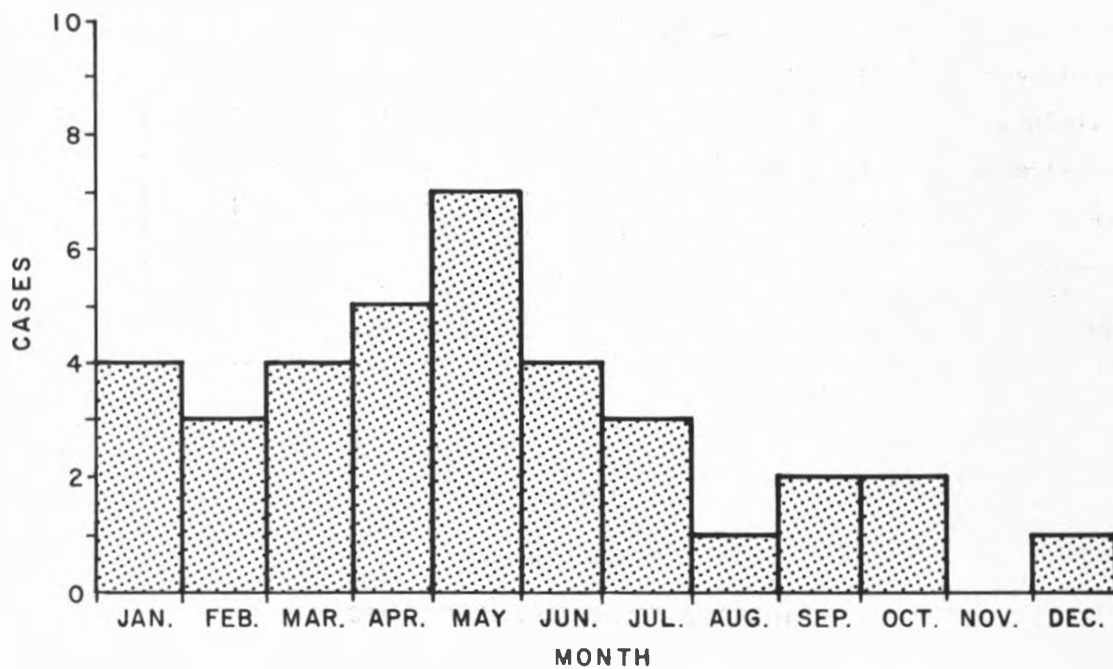
SYMPTOM	NUMBER
Fever	30
Pneumonia	25
Cough	16
Lethargy / Malaise	11
Chills	10
Headache	8
Swollen Lymph Nodes	4

†37 cases where symptoms were recorded

*Provisional Data

SOURCE: Case reports submitted to the NCDC Zoonoses Investigations Unit.

Figure 1 HUMAN PSITTACOSIS BY DATE OF ONSET, 1968*



* PROVISIONAL DATA

SOURCE: CASE REPORTS SUBMITTED TO THE NCDC
ZOOZOSES INVESTIGATIONS UNIT

STATE EPIDEMIOLOGISTS STATE PUBLIC HEALTH VETERINARIANS

Vital key to all disease surveillance activities are the State Epidemiologists, who are responsible for collecting, interpreting, and transmitting data and epidemiological information from their individual States. Their contributions to this report are gratefully acknowledged. In addition, valuable contributions to zoonoses surveillance reports are made by State Public Health Veterinarians.

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*Dual assignment