CDC. Psittacosis annual summary

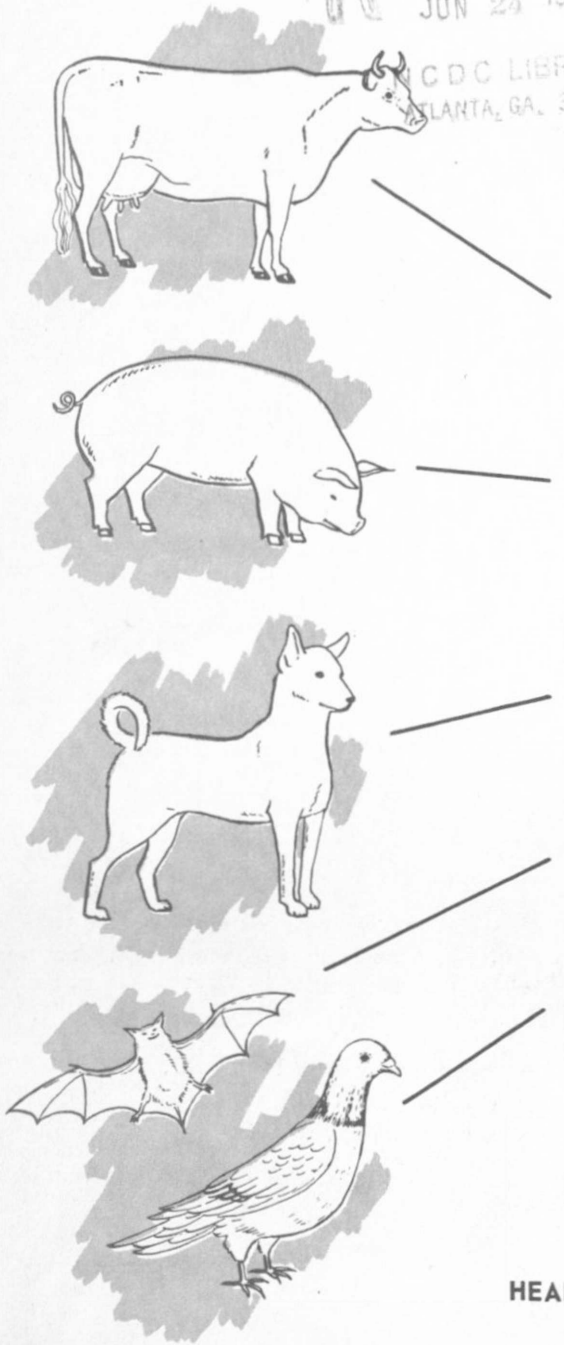
ANNUAL SUMMARY
PSITTACOSIS 1969

MAY 1970

NATIONAL
COMMUNICABLE DISEASE CENTER

ZOONOSES

SURVEILLANCE



PSITTACOSIS

HUMAN PSITTACOSIS IN THE UNITED STATES

PSITTACOSIS TOPICS

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

PREFACE

Information summarized in this report is intended primarily for those responsible for disease control activities. Anyone desiring to quote this report should verify the data at the original source for accuracy and interpretation.

Contributions to the surveillance report are most welcome. Address:

National Communicable Disease Center
Attn: Office of Veterinary Public Health Services
Epidemiology Program
Atlanta, Georgia 30333

National Communicable Disease Center . . . . . David J. Sencer, M.D., Director
Epidemiology Program . . . . . Philip S. Brachman, M.D., Acting Director
Office of Veterinary Public Health Services . . . . James H. Steele, D.V.M., Chief
Lawrence A. Busch, D.V.M.

Foreign Quarantine Program . . . . . Authur S. Osborne, M.D., Director
Epidemiology and Research Analysis Section . . . James W. Mosley, M.D., Chief
John H. Richardson, D.V.M.

HUMAN PSITTACOSIS IN THE UNITED STATES

I. SUMMARY (Table I)

Sixteen states reported a total of 56 cases of human psittacosis in 1969, 11 more than were reported in 1968. Epidemiologic case reports were received on 46 of the 56 cases (82 percent) by the Office of Veterinary Public Health Services, National Communicable Disease Center (NCDC).

II. GEOGRAPHIC DISTRIBUTION (Table I)

California reported the greatest number of cases for the third consecutive year. Four states, California, Connecticut, Maryland, and Pennsylvania, accounted for 54 percent of the 1969 cases. Eleven states reported an increase in cases over 1968, 9 states recorded a decrease, and 3 states reported the same number of cases. Cases were reported from 6 states that had no cases the previous year; 7 states reported cases in 1968, but none in 1969. Nine states have not recorded any cases in the past 10 years, and 19 states have not reported any human psittacosis since 1964.

III. TEMPORAL DISTRIBUTION (Figure 1)

Of the 45 cases where the month of onset was known, 28 (62 percent) occurred from March thru July. More cases occurred in June than any other month, followed by March with the second highest number. In 1968, more cases were recorded in April and May.

IV. AGE AND SEX DISTRIBUTION (Table II)

As in 1968, there was no outstanding difference in the age or sex distribution. The greatest change was noted in the 0-9 year age group which involved only 1 case in 1969 (2.2 percent), but included 5 cases in 1968 (13.5 percent).

V. SOURCE OF INFECTION (Table III)

Parakeets were associated with 13 of the 46 cases (28 percent), compared with 17 cases (46 percent) in the previous year. Parrots were implicated in 8 cases (17 percent) in 1969 compared with 5 (14 percent) in 1968. In 1968, 16 percent of the cases were related to pigeons and, in 1969, 17 percent of the cases were associated with pigeons. In 1969, however, 5 cases (11 percent) were most likely due to chickens or turkeys, whereas there was only 1 case (3 percent) related to poultry in 1968.

The majority of the patients were exposed in homes. In 21 of the 46 cases (46 percent) the associated bird or birds were sick or had died.

VI. MAJOR SYMPTOMS AND THERAPY (Table IV)

Fever and pneumonia were the predominant clinical manifestations of human psittacosis in 1969. Over half of the cases in which treatment was recorded received tetracycline. The next most common therapy was penicillin.

VII. SELECTED CASE REPORTS

CALIFORNIA

On June 25, 1969, a 27-year-old woman became ill with fever, chills, weakness, malaise, nausea, and vomiting. X-ray studies performed on July 1, 1969, showed areas of pulmonary infiltration. Tetracycline therapy was instituted after 4 days of initial ampicillin treatment.

On June 28, 1969, the 30-year-old brother of the first patient and his 26-year-old wife became sick with similar manifestations of cough, chills, and fever. Both patients were started on tetracycline therapy. A chest radiograph of the wife revealed pulmonary infiltrates.

A family pet bird, a cockatiel, had been purchased from a pet shop on June 14, 1969. The bird died on July 8, 1969, and the psittacosis agent was isolated from the bird.

Serological examinations of the 3 patients for complement fixing (CF) antibodies against psittacosis showed evidence of infection by this agent:

Case	Date	CF Titer
Sister	7-8-69	1:16
	7-21-69	1:16
Brother	7-7-69	< 1:8
	7-21-69	1:16
Wife	7-7-69	< 1:8
	7-21-69	1:16

The rise in titers in two of the patients and evidence of infection in the third, and isolation of the organism from the dead, recently purchased bird support a diagnosis of psittacosis.

Further investigation showed that the pet shop owner who sold the cockatiel had a CF titer of 1:32 against psittacosis. He did not have a history of illness.

All birds in the aviary from which the infected bird originated were placed on medicated feed for 30 days; one cockatiel remaining in the pet shop was treated.

MARYLAND

Crawford, Joseph, Mellin, Richardson, and Busch[1] reported on five cases of human psittacosis investigated in Maryland during 1969. These cases occurred from December 1968 to April 1969.

All of the cases involved parakeets or small parrots from local department store pet shops. Four of the patients had purchased birds that subsequently died. The fifth case occurred in a pet department clerk who sold birds. In fact, she had sold birds to two of the patients.

The authors concluded that these cases were not epidemiologically related. Epidemiologic investigation also revealed antibodies against psittacosis in asymptomatic employees of pet shops and family members of cases, indicating previous infection.

The discussion of psittacosis in psittacine birds that follows was included in the article:

> "Pet birds sold through retail outlets in the United States originate from both domestic and foreign sources. According to the figures of the Foreign Quarantine Program, National Communicable Disease Center, 256,000 psittacine birds entered the country during fiscal year 1969; essentially none of these were parakeets. The vast majority of the estimated 3 million parakeets sold in the United States each year are raised in aviaries within this country.

Psittacosis is enzootic in the bird populations in most areas of the world, including the United States. Therefore, any psittacine bird, as well as many non-psittacine avian species, are potential sources of human exposure. To control this source of exposure, the Foreign Quarantine regulations require medication of psittacine birds with chlortetracycline prior to importation. After proper medication, these birds can, for all practical purposes, be considered free from psittacosis. However, as soon as medication is stopped, these birds are susceptible to infection. Thus, treated birds can only be considered psittacosis-free while they are maintained on medication or are isolated from contact with birds that may be infected.

Since asymptomatic latent carriers are known to be reservoirs of psittacosis in both wild and domestically raised birds, pet birds, both imported and domestic, may be exposed when obtained from multiple sources and mixed in the environment of a dealer's or a retailer's pet shop, a common practice in the United States. This mixing of medicated and non-medicated birds, or birds from different domestic sources, may present an increased public health hazard. The histories of recent human cases of psittacosis in the United States indicate that almost 50 percent of the cases occurred in owners of pet birds.....personnel in pet shops are also at a high risk of infection."

PENNSYLVANIA

A 68-year-old housewife received a parakeet as an Easter gift on April 6, 1969. The bird died on April 27, 1969, and was discarded. A second parakeet was obtained as a replacement. Both birds were from a local pet shop and were raised by a local breeder.

In May, the woman became sick with fever, sweats, chills, head and neck pain, and weakness. A diagnosis of fever of unknown origin with anemia and resultant exhaustion was made. She was treated with penicillin and symptoms regressed although she remained weak.

On June 15, 1969, she was hospitalized because of persistent weakness and was treated with tetracycline. The patient improved and was discharged within a week. A serum sample collected on June 19, 1969, had a CF titer of 1:256 against psittacosis.

The second parakeet became ill early in July. The bird continued to eat, but appeared weak and sat on the bottom of the cage. There was no other evidence of disease, but the bird was euthanized and disposed of by a veterinarian after a diagnosis of "stroke."

A serologic survey of four pet shop employees, and the breeder and his wife was undertaken. Of the four pet shop personnel, three had experienced illnesses compatible with psittacosis late in February 1969 or early in March, 1969. The first person had what was diagnosed as bronchial pneumonia. A serum specimen taken within a week of onset was negative for psittacosis. A repeat sample in November was again negative. The second employee experienced a milder illness with chills, fever, and weakness. A titer of 1:8 was found in this person's serum in November. The third individual became acutely ill in March with chills, sweats, intermittent high fever, weakness, and severe cervical pain. A short time preceding this illness, several canaries obtained from the local breeder had died in the victim's home. No medical treatment was sought and the illness regressed except for weakness. Serum from this case was reported to be reactive in November, indicating previous infection.

Examination of sera from the breeder and his wife showed antibodies against psittacosis. Neither had a history of recent illness, and none of the birds in the aviary had recently been sick. A prophylactic regimen of bird medication was undertaken with oxytetracycline-treated feed.

The breeder and the retail outlets supplied by the breeder were instructed in the epidemiology of psittacosis. A system for monitoring the birds' health was established in conjunction with the local health department.

WASHINGTON

Late in July 1969 a middle-aged man was hospitalized following an acute onset of chills, high fever, and a mild cough. Chest radiographs showed a right upper lobe infiltrate with pleural reaction.

The patient's history revealed an outstanding interest in parakeets and pigeons. He was currently raising about 30 homing pigeons for sport. Several weeks before his illness he had noted that three of the young birds had developed a non-specific malady resulting in poor development and anorexia. Because of their impaired growth, the sick birds were destroyed. These three were out of a group of four young birds being raised by a pair of adult birds. Two of these young pigeons had been obtained from another breeder. There was no known illness in the other breeder's aviary.

Acute and convalescent sera from the patient demonstrated a rise in CF antibody against psittacosis from less than 1:8 to 1:16. He was treated with broad spectrum antibiotics and recovered uneventfully. A follow-up serum had a titer of 1:16 a month after the onset.

PSITTACOSIS TOPICS

I. THE STATUS OF PSITTACOSIS IN THE UNITED STATES

In an editorial, Meyer[2] recently reviewed psittacosis-ornithosis as it exists in this country. He pointed out that infections with Chlamydia organisms, including Chlaymdia psittaci, cause latent infection without obvious manifestations of disease and with only minor harm to the host. Perpetuation and dissemination of the disease will continue until the problems of epidemiologic control aimed at preventing infections in birds can be solved. The current measures are only temporary and their success has led to complacency regarding psittacosis.

He reviewed the history of psittacosis control leading to the present Foreign Quarantine regulations requiring preventative chlortetracycline therapy before and during importation of psittacine birds into this country. The remaining problem of domestic enzootic foci in birds has not been approached in most areas. When uninfected birds enter the majority of pet shops or commercial distribution agencies they are at risk of cross infection from latently infected or acutely ill parakeets. There are few controls on the sanitation and general management of these facilities to prevent such cross infection.

Since psittacosis is a minor public health problem in comparison with certain other diseases, not all local health authorities will be able to adequately inspect pet shops or supervise treatment. Therefore, sporadic human cases and occasional outbreaks associated with infected birds in pet shops will continue. The author stated that there is no cause for alarm, but appealed to local and state health departments to investigate proven human infections and reminded physicians that psittacosis is not yet conquered.

II. CANINE PSITTACOSIS

What may be the first case of psittacosis in a dog was reported by Fraser, Norval, Withers, and Gregor in England. This case was found in association with a psittacosis outbreak in an aviary in 1965. The epizootic was first noted when a bird-fancier purchased a parakeet which became ill and died. At the same time, this breeder had sold six birds to a neighbor. One of the six was rejected and replaced. The breeder then became aware of several dead birds in his aviary. Losses continued and the epizootic eventually caused 100 deaths out of his 300 birds.

Necropsy examination of the dead birds showed changes consistent with psittacosis. The remaining birds were medicated with chlortetracycline for 3 weeks. Health authorities inspected the aviary and found the fancier's wife in bed with flu-like symptoms including fever, headache, and chest pains. Sera from the husband examined for psittacosis had a rise from negative to 1:64 and his wife had a rise in titer from 1:16 to 1:128 indicating current infection. Radiographic examination of the wife revealed pneumonic consolidation of the right lung lobe. She responded to treatment. Her husband remained asymptomatic.

In the neighboring house, three of the parakeets died and psittacosis was diagnosed at necropsy. The two owners became ill and were diagnosed as having psittacosis. Both were treated and recovered.

During a site visit to the premises by the veterinary inspector, the 7-year-old family pet, a Yorkshire Terrier, was noted to be losing condition and to have a persistent cough. The dog was examined, but no obvious abnormalities were found. X-rays showed a fairly well defined opacity involving half of the diaphragmatic lobe of the right lung. Paired sera revealed CF titers of 1:160 and 1:320. Treatment with chlortetracycline resulted in return in condition, disappearance of the cough, and clearing of the lungs. The psittacosis organism was isolated from the sick dog's feces.

Other dogs in the neighborhood were examined, but the results were inconclusive. Fecal cultures from these dogs were negative.

III. PET BIRDS IN THE UNITED STATES

During 1969, a total of 245,729 psittacine birds were imported into this country from Public Health Service approved treatment centers (Figure 2). The psittacine species imported included Amazon parrots, beebee parrots, conures, macaws, cockatoos, African grey parrots, lories, lorikeets, nandays, parrotlets, and a few parakeets other than budgerigars, or shell parakeets (Melospitticus undulatus). In addition, fewer than 5,000 psittacine birds entered the country as pets brought in by their owners.

About 3 million pet birds, including imported birds, are sold in the United States annually. It is estimated that 1 3/4 million of these are budgerigars raised in aviaries primarily in California, Oklahoma, and Texas. One quarter million are imported psittacine birds, mainly parrots. The remaining 1 million pet birds sold each year are canaries, finches, and other exotic species, the majority of which are imported. (It should be noted that canaries, finches, and a number of other pet species are not psittacine birds and are, therefore, not under Foreign Quarantine regulations.)

In 1969, the largest number of psittacine birds were imported into this country in June and September (Figure 2). Domestically raised shell parakeets are hatched year round, but peak periods are in May to July and to a lesser extent in October to December. These birds enter distribution channels at 6-8 weeks

of age. In 1969, peak months for human cases were March and June. No definite associations between bird distribution and human case occurrence can be made.

IV. STATE RULES AND REGULATIONS REGARDING PSITTACINE BIRDS

Table V summarizes the current state rules and regulations regarding psittacine birds. There is a great lack of uniformity with 16 states not having any specific rules or regulations. Many rely on the broad state authority for control of psittacine birds. A number require state permits before birds may be shipped into the state and others require leg bands. It is interesting that while only young parakeets can be successfully banded, several states imply that all psittacine birds must be banded. Only 3 states require that dealers (breeders, distributors, and retail stores) obtain permits to handle pet birds. Over one-fourth of the states require records of all bird sales by these dealers. Some of the information that must be recorded includes band numbers, name and address of purchaser, and date of sale. Many states specifically note that a quarantine may be imposed when sick birds are found, and it is determined that a public health hazard may exist. The enforcement of the Public Health Service regulations requiring individual owners bringing birds into the country as pets to treat these birds with chlortetracycline is mentioned in a number of state regulations. Some states require annual notification by the dealer that they are involved in handling pet birds. A few states have adopted the American Public Health Association guidelines (Outlined in Control of Communicable Diseases, 11th Edition, 1970, edited by Abram S. Benenson).

References:

1. Crawford K, Joseph JM, Mellin H, Richardson JH, and Busch LA: Psittacosis in Maryland. The Journal of Infectious Diseases 121: 236-238, 1970

2. Meyer KF: The Present Status of Psittacosis-Ornithosis. Archives of Environmental Health 19: 461-466, 1969

3. Fraser G, Norval J, Withers AF, and Gregor WW: A Case History of Psittacosis in the Dog. The Veterinary Record 85: 54-58, 1969

TABLE I – HUMAN PSITTACOSIS, UNITED STATES, 1960-1969*

STATE	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	TOTAL	10 YEAR RANK
Alabama	0	0	0	0	0	0	0	0	0	0	0	24
Alaska	0	0	1	0	0	0	0	0	0	0	1	23
Arizona	1	0	1	1	0	1	0	0	1	0	5	19
Arkansas	1	0	0	0	1	0	0	0	0	0	2	22
California	12	10	10	14	14	12	6	2	9	14	103	1
Colorado	1	0	2	0	0	0	0	0	0	0	3	21
Connecticut	4	2	6	3	0	2	1	2	3	6	29	8
Delaware	0	1	0	0	0	0	0	0	0	0	1	23
Dist. of Col.	0	0	0	0	0	0	0	0	0	0	0	24
Florida	0	0	0	0	1	1	0	1	0	2	5	19
Georgia	0	2	0	3	4	0	0	0	1	1	11	14
Hawaii	0	0	0	0	0	0	0	0	0	0	0	24
Idaho	0	1	0	0	0	0	0	0	0	0	1	23
Illinois	7	7	4	11	6	5	1	0	1	0	42	6
Indiana	0	0	1	0	0	0	0	0	0	0	1	23
Iowa	0	0	0	0	1	0	0	1	0	0	2	22
Kansas	1	0	0	0	0	0	1	1	0	0	3	21
Kentucky	2	0	0	1	0	1	0	0	0	0	4	20
Louisiana	0	0	0	0	0	0	0	1	0	4	5	19
Maine	0	0	0	0	0	1	0	0	0	0	1	23
Maryland	0	0	1	0	0	2	0	0	0	5	8	17
Massachusetts	2	3	1	2	2	1	4	5	1	0	21	11
Michigan	3	2	3	4	3	1	0	1	6	1	24	10
Minnesota	4	2	4	1	1	5	3	2	0	4	26	9
Mississippi	0	0	0	0	0	0	0	0	0	0	0	24
Missouri	0	0	4	0	0	0	0	0	0	0	4	20
Montana	0	0	2	1	0	0	0	2	0	0	5	19
Nebraska	0	0	0	0	0	0	0	0	0	0	0	24
Nevada	0	0	0	0	0	0	0	0	0	0	0	24
New Hampshire	0	0	0	0	0	0	1	1	0	0	2	22
New Jersey	0	1	1	0	3	0	1	0	1	0	7	18
New Mexico	0	0	0	0	0	0	0	0	1	1	2	22
New York	9	6	6	5	2	4	1	3	6	3	45	5
North Carolina	0	1	3	1	1	1	1	0	1	1	10	15
North Dakota	0	0	0	0	0	0	0	0	0	0	0	24
Ohio	1	0	1	2	3	2	1	1	3	4	18	12
Oklahoma	0	0	0	0	0	0	0	1	0	0	1	23
Oregon	3	2	1	2	1	1	1	0	0	1	12	13
Pennsylvania	27	6	5	0	2	1	4	3	1	5	54	4
Rhode Island	0	0	0	0	0	0	0	0	0	0	0	24
South Carolina	0	0	0	0	0	0	0	0	0	0	0	24
South Dakota	0	1	0	0	0	0	0	0	0	0	1	23
Tennessee	8	6	1	1	2	4	3	3	2	0	30	7
Texas	0	23	0	17	1	8	12	9	6	0	76	3
Utah	1	3	1	2	0	2	0	0	0	0	9	16
Vermont	0	0	0	0	0	0	0	0	0	0	0	23
Virginia	0	1	0	0	1	1	2	0	0	0	5	19
Washington	2	2	0	0	0	2	1	1	0	1	9	16
West Virginia	0	1	0	1	0	0	0	0	1	0	3	21
Wisconsin	24	18	20	4	4	3	6	1	1	3	84	2
Wyoming	0	0	1	0	0	0	0	0	0	0	1	23
Totals	113	102	79	76	53	61	50	41	45	56	676	
Puerto Rico												

*Provisional Data

Source: Case reports submitted to NCDC, Morbidity and Mortality Weekly Report.

TABLE II

AGE AND SEX DISTRIBUTION OF 46 CASES OF HUMAN PSITTACOSIS, UNITED STATES, 1969*

AGE (Years)	SEX MALE	SEX FEMALE	TOTAL	PERCENT OF TOTAL
0-9	0	1	1	2.2
10-19	4	2	6	13.0
20-29	3	6	9	19.6
30-39	3	3	6	13.0
40-49	3	4	7	15.2
50-59	3	3	6	13.0
60-69	3	3	6	13.0
70+	1	3	4	8.7
Unknown	1	0	1	2.2
Total	21	25	46**	99.9
Percent of Total	45.7	54.3	100.0	

Source: Case reports submitted to NCDC

* Provisional Data

** 46 reports received in which age and sex data were noted of 56 cases reported

TABLE III

MOST PROBABLE SOURCE OF INFECTION AND EXPOSURE CLASSIFICATION OF 46 CASES OF HUMAN PSITTACOSIS, UNITED STATES, 1969*

Exposure Classification	MOST PROBABLE SOURCE OF INFECTION: Parakeet	Pigeon	Canary	Parrot	Chicken	Turkey	Birds, Variety or unspecified	Cockatiel	Lovebird	Unknown	Total	Percent of Total
Pet Bird Owner	11	3	1	8				3	1		27	58.7
Pet Bird Dealer	1						2				3	6.5
Pet Bird Breeder		3	1								4	8.7
Poultry Related					3	2					5	10.9
Other	1	2									3	6.5
Unknown										4	4	8.7
Total	13	8	2	8	3	2	2	3	1	4	46**	100.0
Percent of Total	28.3	7.4	4.3	17.4	6.5	4.3	4.3	6.5	2.2	8.7	99.9	

*Provisional Date

**46 reports received in which a probable source and exposure were noted of 56 cases reported.

Source: Case reports submitted to NCDC

TABLE IV

MAJOR SYMPTOMS OF 45* CASES OF HUMAN PSITTACOSIS, UNITED STATES, 1969**

Symptom	Number	Percent of Total
Fever	39	86.7
Pneumonia	34	75.6
Cough	27	60.0
Lethargy-Malaise	20	44.4
Chills	18	40.0
Headache	12	26.7
Anorexia	6	13.3

* 45 reports received in which symptoms were noted of 56 cases reported.

** Provisional Data

Source: Case reports submitted to NCDC

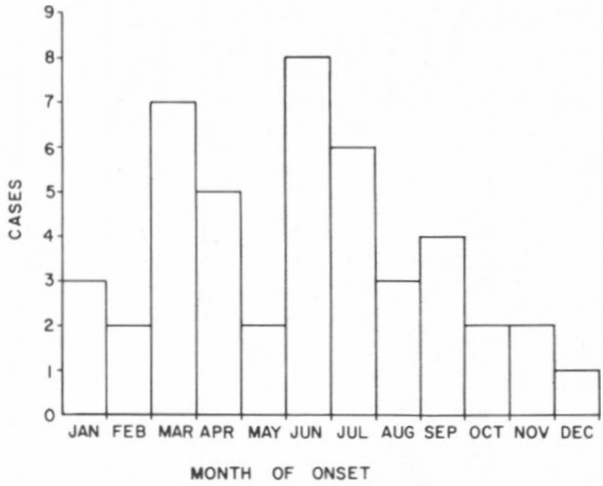
TABLE V – CURRENT STATE RULES AND REGULATIONS PERTAINING TO PSITTACINE BIRDS

REQUIREMENTS / STATE	Import Permit	Banding	Dealer Permit	Dealer Records	Quarantine Authorized	Enforces USPHS regulations	Sanitary Standards	Other Requirements
Alabama	–	–	–	–	–	+	–	–
Alaska	–	–	–	–	+	+	–	–
Arizona	–	–	–	–	–	–	–	–
Arkansas	–	–	–	–	–	+	–	–
California	–	+	–	+	+	–	–	–
Colorado	–	+	+	+	+	–	+	Bird Registry, Annual Notifica.
Connecticut	+	+	–	+	–	–	–	–
Delaware	–	–	–	–	–	–	–	–
Florida*								
Georgia	+	+	+	+	+	+	+	Bill of Lading
Hawaii	–	–	–	–	–	+	–	Adopted APHA Guidelines
Idaho	–	–	–	–	–	–	–	–
Illinois	–	–	–	+	–	+	–	–
Indiana	–	–	–	–	–	+	–	–
Iowa	–	–	–	–	–	–	–	–
Kansas	+	+	–	+	–	–	–	Exam. Dead Birds–Annual Notifica.
Kentucky	–	–	–	–	–	–	–	–
Louisiana	–	–	–	–	–	–	–	–
Maine	–	–	–	–	+	–	–	–
Maryland	–	–	+	+	–	–	–	–
Massachusetts	–	–	–	–	–	–	–	–
Michigan	–	–	–	–	–	–	–	–
Minnesota	–	–	–	–	–	–	–	–
Mississippi	–	+	–	–	+	–	+	Annual Notification
Missouri	–	–	–	–	+	–	–	–
Montana	–	–	–	+	+	+	–	–
Nebraska	+	–	–	–	–	–	–	–
Nevada	–	–	–	–	–	–	–	–
New Hampshire	–	–	–	–	–	–	–	Annual Notification
New Jersey	–	–	–	+	+	–	–	–
New Mexico	–	–	–	–	–	–	–	–
New York	–	–	–	–	–	+	–	–
North Carolina	–	–	–	–	+	+	–	–
North Dakota	–	–	–	–	–	+	–	–
Ohio	–	–	–	–	–	–	–	–
Oklahoma	–	–	–	–	–	–	–	Adopted APHA Guidelines
Oregon	–	+	–	–	–	–	–	–
Pennsylvania	–	–	–	+	+	–	–	–
Rhode Island	–	+	–	+	+	+	–	Health Certif.–Annual Notifica.
South Carolina	–	–	–	+	+	+	–	–
South Dakota	–	–	–	–	–	–	–	–
Tennessee	–	–	–	–	–	–	–	–
Texas	–	–	–	–	–	–	–	Health Certificate
Utah	+	–	–	–	+	–	–	Adopted APHA Guidelines
Vermont	–	+	–	+	+	–	–	–
Virginia	+	–	–	–	+	–	–	–
Washington	+	+	–	+	+	–	–	–
West Virginia	+	–	–	–	–	–	–	–
Wisconsin	–	–	–	–	–	–	–	–
Wyoming	–	–	–	–	–	–	–	–

* Regulations being revised

FIGURE 1

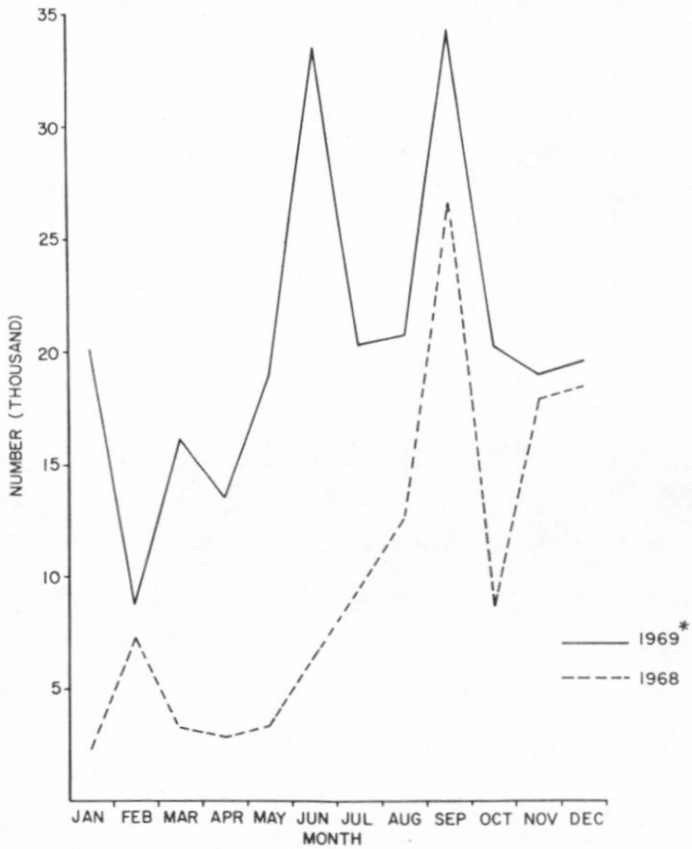
CASES OF HUMAN PSITTACOSIS, BY MONTH OF ONSET, UNITED STATES, 1969*



*PROVISIONAL DATA
SOURCE: CASE REPORTS SUBMITTED TO NCDC

FIGURE 2

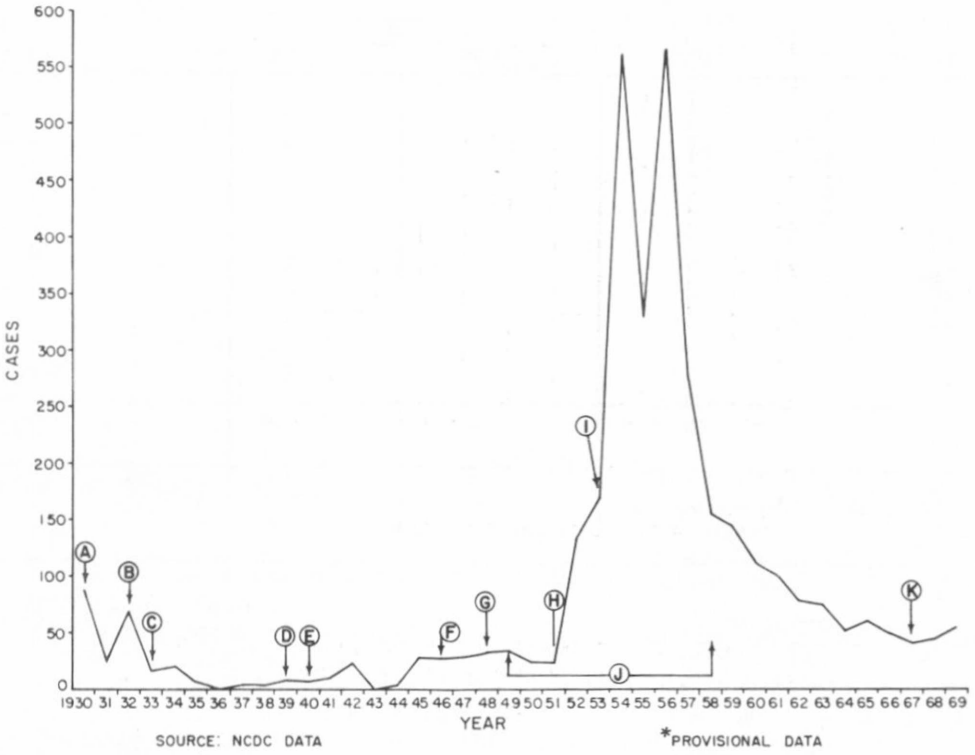
PSITTACINE BIRDS IMPORTED FROM PUBLIC HEALTH SERVICE APPROVED TREATMENT CENTERS



*PROVISIONAL DATA
SOURCE: FOREIGN QUARANTINE PROGRAM, NCDC

FIGURE 3

REPORTED PSITTACOSIS MORBIDITY, MORTALITY, QUARANTINE REGULATIONS, AND RECOGNITION OF DISEASE IN AVIAN SPECIES OTHER THAN PSITTACINES IN THE UNITED STATES, 1929-1969*



Legend for
Figure 3

REPORTED PSITTACOSIS MORBIDITY, MORTALITY, QUARANTINE REGULATIONS, AND RECOGNITION OF DISEASE IN AVIAN SPECIES OTHER THAN PSITTACINES IN THE UNITED STATES, 1929-1969

A Public Health Service restrictions placed on the importation of parrots.

B Interstate shipment of psittacine birds prohibited without health certificate; Public Health Service restrictions applied to all psittacine birds.

C Commercial importation and interstate shipment of psittacine birds under 8 months of age prohibited.

D Permitted importation of psittacine birds for commercial purposes, zoological parks, and scientific studies; required laboratory examination for birds for commercial use.

E Recognized in chickens and pigeons.

F Commercial importation of psittacine birds prohibited.

G Recognized in turkeys and ducks.

H Removed all interstate shipment restrictions for psittacine birds from psittacosis-free areas; removed age limit on psittacine birds imported for zoological parks and research institutions.

I Clarified foreign quarantine regulations by defining zoological parks and disposing of excluded birds.

J Many human cases recognized as acquired from commercial poultry.

K Commercial importation of psittacine birds allowed from Public Health Service approved treatment centers after 45 days chlortetracycline medication.

STATE EPIDEMIOLOGISTS
STATE PUBLIC HEALTH VETERINARIANS

Viral 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.

STATE	*STATE EPIDEMIOLOGISTS*	*STATE PUBLIC HEALTH VETERINARIAN*
Alabama	Frederick S. Wolf, M.D.	
Alaska	Donald K. Freedman, M.D.	
Arizona	Philip M. Hotchkiss, D.V.M.	Philip M. Hotchkiss, D.V.M.
Arkansas	John A. Harrel, Jr., M.D.	Harvie R. Ellis, D.V.M.
California	Philip K. Condit, M.D.	George L. Humphrey, D.V.M.
Colorado	C. S. Mollohan, M.D.	Martin D. Baum, D.V.M.
Connecticut	James C. Hart, M.D.	
Delaware	Floyd I. Hudson, M.D.	
District of Columbia	William E. Long, M.D.	George D. Coffee, D.V.M.
Florida	E. Charlton Prather, M.D.	James B. Nichols, D.V.M.
Georgia	John E. McCroan, Ph.D.	David Dreesen, D.V.M.
Hawaii	Lloyd C. Guthrie, M.D.	John M. Gooch, D.V.M.
Idaho	John A. Mather, M.D.	
Illinois	Norman J. Rose, M.D.	Paul R. Schnurrenberger, D.V.M.
Indiana	Hermann E. Rinne, D.O.	Dan Schlosser, D.V.M.
Iowa		S. L. Hendricks, D.V.M.
Kansas	Don E. Wilcox, M.D.	George A. Mullen, D.V.M.
Kentucky	Calixto Hernandez, M.D.	Joseph W. Skaggs, D.V.M.
Louisiana	*Charles T. Caraway, D.V.M.	*Charles T. Caraway, D.V.M.
Maine	Dean Fisher, M.D.	
Maryland	Howard J. Garber, M.D.	Kenneth L. Crawford, D.V.M.
Massachusetts	Nicholas J. Fiumara, M.D.	Julian M. Karasoff, D.V.M.
Michigan	John L. Isbister, M.D.	Donald B. Coohon, D.V.M.
Minnesota	D. S. Fleming, M.D.	
Mississippi	Durward L. Blakey, M.D.	
Missouri	E. A. Belden, M.D.	Edmund R. Price, D.V.M.
Montana	Mary E. Soules, M.D.	
Nebraska	Russell J. Murray (Acting)	
Nevada	Walter Ward, M.D., Ph.D. (Acting)	
New Hampshire	Walter Kaupas, M.D.	
New Jersey	Ronald Altman, M.D.	Oscar Sussman, D.V.M.
New Mexico	Paul E. Pierce, M.D.	
New York State	James O. Culver, M.D.	Melvin K. Abelseth, D.V.M.
New York City	Vincent F. Guinee, M.D.	Jeroham Asedo, D.V.M.
North Carolina	Martin P. Hines, D.V.M.	John I. Freeman, D.V.M.
North Dakota	Kenneth Mosser	
Ohio	John R. Ackerman, M.D.	Jack H. Russell, D.V.M.
Oklahoma	R. LeRoy Carpenter, M.D.	
Oregon	Monroe A. Holmes, D.V.M. (Acting)	Monroe Holmes, D.V.M.
Pennsylvania	W. D. Schrack, Jr., M.D.	Ernest J. Witte, V.M.D.
Puerto Rico	Henry Negrón Aponte, M.D.	Eduardo Toro, D.V.M.
Rhode Island	H. Denman Scott, M.D. (Acting)	Thomas Greenan, Jr., D.V.M.
South Carolina	Donald H. Robinson, M.D.	
South Dakota	G. J. Van Heuvelen, M.D.	
Tennessee	William H. Armes, Jr., M.D. (Acting)	Luther E. Fredrickson, D.V.M.
Texas	M. S. Dickerson, M.D.	A. B. Rich, D.V.M.
Utah	Paul R. Ensign, M.D.	
Vermont	Robert B. Aiken, M.D.	D. Pomar, D.V.M.
Virginia		
Washington	Byron J. Francis, M.D.	
West Virginia	N. H. Dyer, M.D.	
Wisconsin	H. Grant Skinner, M.D.	Wayne H. Thompson, D.V.M.
Wyoming	Herman S. Parish, M.D.	

*Dual assignment