

LOUISIANA MONTHLY MORBIDITY. LHSASA

DISEASES REPORTED DURING THE MONTH OF

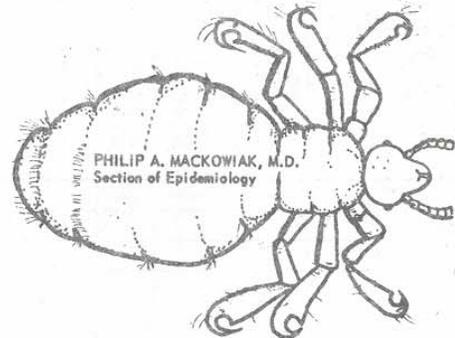
FEBRUARY, 1974

BY PARISH OF RESIDENCE

AN OLD COMPANION IS NOT NECESSARILY AN OLD FRIEND

*Lady Montague told me, and in her own house
"I do not care for you three skips of a louse"
I forgive her, for women, however well-bred,
Will still talk of that which runs most in their head*

Henry Fox, Impromptu Retort



BUREAU OF VITAL STATISTICS

DIVISION OF HEALTH MAINTENANCE AND AMBULATORY PATIENT SERVICES

Prepared by:

TABULATION
AND
ANALYSIS

| | ASEPTIC MENINGITIS | DIPHTHERIA | ENCEPHALITIS | ENCEPHALITIS, POST INFECTIONOUS | HEPATITIS A AND UNSPECIFIED | HEPATITIS B | TUBERCULOSIS, PULMONARY | MENINGOCOCCAL INFECTIONS | PERTUSSIS | RABIES IN ANIMALS | RUBELLA * | SEVERE UNDERNUTRITION | SHIGELLOSIS | TYPHOID FEVER | OTHER SALMONELLOSIS | TETANUS | MEASLES | GONORRHEA | SYPHILIS, PRIMARY AND SECONDARY |
|--------------------|-----------------------|------------|--------------|------------------------------------|--------------------------------|-------------|----------------------------|-----------------------------|-----------|-------------------|-----------|--------------------------|-------------|---------------|------------------------|---------|---------|-----------|------------------------------------|
| TOTAL TO DATE 1973 | 11 | 0 | 1 | 1 | 113 | 16 | 131 | 4 | 4 | 5 | 13 | 5 | 47 | 0 | 33 | 0 | 15 | 3240 | 140 |
| TOTAL TO DATE 1974 | 11 | 0 | 0 | 0 | 110 | 41 | 97 | 10 | 4 | 2 | 3 | 6 | 10 | 1 | 26 | 0 | 4 | 4149 | 110 |
| TOTAL THIS MONTH | 6 | 0 | 0 | 0 | 56 | 23 | 34 | 3 | 4 | 1 | 2 | 4 | 6 | 1 | 10 | 0 | 2 | 1982 | 50 |
| ACADIA | | | | | | | 1 | | | | | | | | | | | 7 | |
| ALLEN | | | | | | | | | | | | | | | | | | | |
| ASCENSION | | | | | 1 | 1 | 1 | | | | 1 | | | | | | | | 1 |
| ASSUMPTION | | | | | | | | | | | | | | | | | | | 6 |
| AVOYELLES | | | | | | | | 1 | | | | | | | | | | | 3 |
| BEAUREGARD | | | | | | | 2 | | | | | | | | | | | | 2 |
| BIENVILLE | | | | | | | | | | | | | | | | | | | 1 |
| BOSSIER | | | | | 3 | | | | | | | | | | | | | | 21 |
| CADDO | | | | | 4 | 1 | 4 | | | | | 1 | | | | | | | 135 |
| CALCASIEU | | | | | 1 | | 1 | | 2 | | | | | | | | | | 77 |
| CALDWELL | | | | | | | | | | | | | | | | | | | 1 |
| CAMERON | | | | | | | | | | | | | | | | | | | |
| CATAHOULA | | | | | | | | | | | | | | | | | | | |
| CLAIBORNE | | | | | | | | | | | | | | | | | | | 4 |
| CONCORDIA | | | | | | | 1 | | | | | | | | | | | | |
| DESOTO | | | | | | | | | | | | | | | | | | | 14 |
| EAST BATON ROUGE | | | | | 6 | 1 | | | | | | | 1 | 1 | 3 | | 1 | 110 | 5 |
| EAST CARROLL | | | | | | | | | | | | | | | | | | | 3 |
| EAST FELICIANA | | | | | | | | | | | | | | | | | | | 1 |
| EVANGELINE | | | | | | | | | | | | | | | | | | | 1 |
| FRANKLIN | | | | | | | | | | | | | | | | | | | 4 |
| GRANT | | | | | 1 | | | | | | | | | | | | | | 3 |
| IBERIA | | | | | | | 1 | | | | | | | | | | | | 17 |
| IBERVILLE | | | | | | | 2 | | | | | | | | | | | | 3 |

* INCLUDES RUBELLA, CONGENITAL SYNDROME

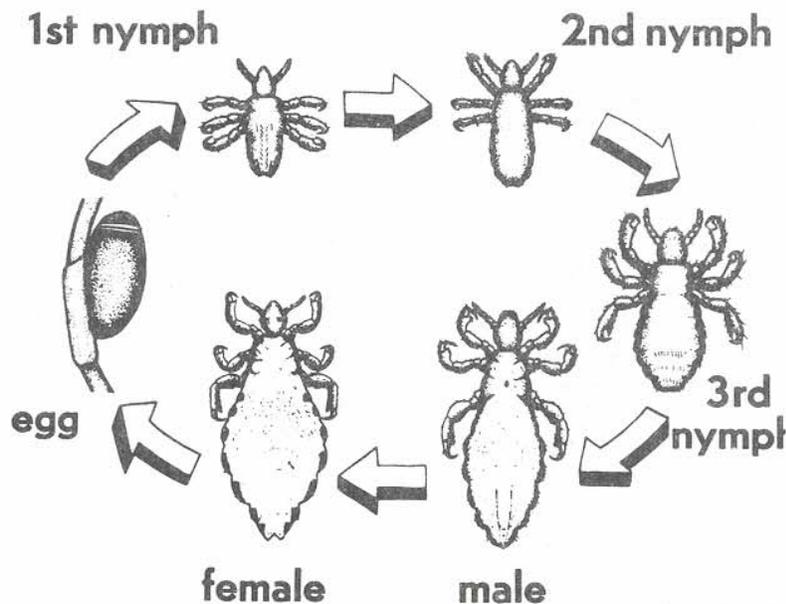
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|--|-----------------------|------------|--------------|----------------------------------|--------------------------------|-------------|----------------------------|-----------------------------|-----------|-------------------|---------|--------------------------|-------------|---------------|------------------------|---------|---------|-----------|------------------------------------|
| | ASEPTIC MENINGITIS | DIPHThERIA | ENCEPHALITIS | ENCEPHALITIS, POST INFECTIOUS | HEPATITIS A AND UNSPECIFIED | HEPATITIS B | TUBERCULOSIS, PULMONARY | MENINGOCOCCAL INFECTIONS | PERTUSSIS | RABIES IN ANIMALS | RUBELLA | SEVERE UNDERNUTRITION | SHIGELLOSIS | TYPHOID FEVER | OTHER SALMONELLOSIS | TETANUS | MEASLES | GONORRHEA | SYPHILIS, PRIMARY AND SECONDARY |
| JACKSON | | | | | | | | | 1 | | | | | | | | | 5 | |
| JEFFERSON | | | | | 4 | 2 | | | | | | | | | 2 | | 1 | 121 | 8 |
| JEFFERSON DAVIS | | | | | | | | | | | | | | | | | | 4 | |
| LAFAYETTE | | | | | 1 | 1 | | | | | | | | | | | | 34 | 2 |
| LAFOURCHE | | | | | | | | | | | | | | | | | | 4 | |
| LASALLE | | | | | 1 | | | | | | | | | | | | | 2 | |
| LINCOLN | | | | | | | | | | | | | | | | | | 49 | |
| LIVINGSTON | | | | | | 1 | | | | | | | | | | | | 2 | 2 |
| MADISON | | | | | | | | | | | | | | | | | | 12 | 1 |
| MOREHOUSE | | | | | | | | | | | | | | | | | | 8 | |
| NATCHITOCHES | | | | | | | | | | | | | | | | | | 6 | |
| ORLEANS | 4 | | | | 22 | 15 | 12 | 2 | | | | | 5 | | 3 | | | 856 | 19 |
| OUACHITA | | | | | 2 | | 1 | | | | | | | | | | | 73 | 4 |
| PLAQUEMINES | | | | | | 1 | | | | | | | | | | | | 2 | |
| POINTE COUPEE | | | | | | | | | | | | | | | | | | 3 | 1 |
| RAPIDES | 2 | | | | | 2 | 1 | | | 1 | | | | | | | | 92 | |
| RED RIVER | | | | | | | | | | | | | | | | | | | |
| RICHLAND | | | | | | | | | | | | | | | | | | 4 | |
| SABINE | | | | | | | | | | | | | | | | | | | |
| ST. BERNARD | | | | | 1 | | | | | | | | | | | | | 7 | 1 |
| ST. CHARLES | | | | | | | | | | | | | | | | | | 4 | 1 |
| ST. HELENA | | | | | 1 | | | | | | | | | | | | | 8 | |
| ST. JAMES | | | | | | | | | | | | | | | | | | 2 | |
| ST. JOHN | | | | | | 1 | | | | | | | | | | | | 2 | |
| ST. LANDRY | | | | | | | | | 2 | | 1 | | | | | | | 20 | |
| ST. MARTIN | | | | | | | | | | | | | | | 2 | | | 6 | |
| ST. MARY | | | | | | | | | | | | | | | | | | 15 | |
| ST. TAMMANY | | | | | 1 | | | | | | | | | | | | | 41 | |
| TANGIPAHOA | | | | | 5 | | | | | | | 2 | | | | | | 22 | |
| TENSAS | | | | | | | | | | | | | | | | | | | |
| TERREBONNE | | | | | | | 1 | | | | | | | | | | | 9 | |
| UNION | | | | | | | | | | | | | | | | | | 8 | |
| VERMILION | | | | | 1 | 1 | | | | | | | | | | | | | |
| VERNON | | | | | | 1 | | | | | | | | | | | | 52 | |
| WASHINGTON | | | | | | | | | | | | | | | | | | 33 | |
| WEBSTER | | | | | | | | | | | | | | | | | | 18 | |
| WEST BATON ROUGE | | | | | | | | | | | | | | | | | | 8 | |
| WEST CARROLL | | | | | | | | | | | | | | | | | | 10 | |
| WEST FELICIANA | | | | | | | | | | | | | | | | | | 26 | 1 |
| WINN | | | | | 1 | 1 | | | | | | | | | | | | 4 | |
| OUT OF STATE | | | | | | | | | | | | | | | | | | | |

From January 1 through February 28, 1 case of Malaria (contracted outside the U.S.A.) was also reported.



Life Cycle of the Head Louse

The head louse may be a better American than many of us, since in his eye practically* all men are equal, and as such may serve as equally suitable domiciles. As implied by Henry Fox in his retort to Lady Montague, wealth, education, and power neither attract nor repel this tiny companion of man. Given the right conditions he will accept any man as home regardless of his qualifications.

Once consummated the union of man and louse is not easily dissolved. For the louse never leaves his host, except as a consequence of accident or disaster. Whether this can be compared with the friendship of higher forms of life is doubtful, however, since the louse, if cast out or if his host perishes, will seek out another host quickly or he is doomed.

We have recently received reports of outbreaks of head lice in schools of 3 different Louisiana parishes. Although this is an age old problem, it is one which can be eliminated. It is hoped that this discussion of the life cycle of the louse and currently available eradication measures will be of some assistance to physicians and other public health workers in their efforts to cope with louse infestations in the community.

The Louse

Modern lice consist of 2 closely related varieties: the biting lice, or Mallophaga, and the

sucking lice, or Anoplura. The head louse (*Pediculus humanus var. capitis*) and its close relative, the body louse (*Pediculus humanus var. corporis*) belong to the Anoplura. Although each has a number of distinctive characteristics (different habitats, size, color, and egg laying practices), they are similar physiologically and are capable of successfully cross-mating. On this basis they have been codified into separate varieties but are members of the same species. From the public health viewpoint, the important difference between the two forms lies in the fact that major epidemics of typhus have been associated with widespread infestations of body lice, not head lice.

Anoplura are thought to represent parasitic developments of an ancient group of pre-cockroaches which also gave rise to our present day cockroaches and termites. These creatures appear to have been derived from fur-scavenging insects, through the Psocidae or Corrodentia, small winged or wingless creatures, now represented by our common book lice. When the association between man and louse developed

* The individual of African extraction, in this instance, enjoys the head louse's only gesture of social discrimination. Perhaps as a result of his hair shaft of relatively large oval shape, the African Negro is rarely infected with head lice.

into its current penultimate union is not known, though careful scrutiny of a number of the oldest preserved mummies of North America and Africa have confirmed that the union dates back to prehistoric times.

The life cycle of the head louse as depicted in the accompanying figure consists of 5 stages: egg, 3 nymphal, and adult. The egg is relatively large and is provided with a cap at one end to admit air for development of the embryo and to facilitate escape of the young insect at the time of hatching. The egg of the head louse is attached to a human hair with cement which makes it difficult to dislodge, and is commonly referred to as a "nit."

A louse nymph emerges from the egg after a few days and after 3 successive molts attains adulthood. Only after the 3rd molt is the louse capable of reproducing. The total life cycle of the louse may be completed in 18 days.

Human lice are completely dependent upon human blood for sustenance and if fed on a foreign host (i.e. animal other than man) in most cases suffer a probably painful and fatal indigestion. They suck blood for long periods of time (usually 2-3 times per day), but do not ordinarily become engorged. During feeding dark feces are frequently passed onto the human skin, and, in the case of infected body lice, may transfer rickettsia from louse to man.

Head lice are found in the hair and on the scalp but are not known to occur on eyebrows or eyelashes. They tend to be most prevalent on the back of the neck and behind the ears. It is difficult to find lice away from man since they can survive for only brief periods of time away from their human host. Whereas beds occupied every night by lousy individuals tend to harbor the organism, if unoccupied for several nights, they tend to be free from lice. Head and body lice may be acquired by personal contact and by putting on infested garments. Head lice may also be acquired by contact with upholstered chairs or by using infested brushes and combs. Like rats leaving a sinking ship, lice tend to abandon a feverish patient in search of a healthier host.

Diagnosis

According to MacArthur: Following his murder, Sir Thomas Becket lay in state in the Canterbury Cathedral all night in preparation for burial the following day. As the body grew cold, the vermin that were living in his multiple covering garments started to crawl out and "the

vermin boiled over like water in a simmering cauldron, and the onlookers burst into alternate weeping and laughter." In this case, although postmortem, the diagnosis of pediculosis was made with obvious ease.

Under normal circumstances, the diagnosis of pediculosis is not as obvious and requires careful scrutiny if it is to be made at all. The only symptom is intense irritation leading to scratching and occasional secondary infection. Adult lice which may be seen as about 4 mm long are greyish and active and may frequently be seen crawling among hair shafts. Young nymphs are smaller and hence, much more difficult to see. As a result of engorgement with blood, they often resemble pin point blood crusts but differ from these in being motile.

Like the adult form the louse egg or nit may be seen with the naked eye. Nits are tiny oval globules of uniform size about 1 mm long. The gravid female cements these onto the hair shaft where it emerges from the follicle. However, due to hair growth, these may be found at a variable distance from the scalp at the time of examination. In contradistinction to dandruff, nits are not easily brushed off the hair shaft and, unlike lacquer, which after repeated use tends to coat hair shafts with a visible sheath, the nit does not vary in size or cover several millimeters of shaft.

Treatment

For centuries man has lived in relative harmony with this modest ectoparasite. Prior to the advent of modern insecticides man could do little to rid himself of this tiny freeloader. During those times he learned to ignore him for the most part or at least to squash him with dignity, i.e. in the privacy of his own room. In his ultimate acquiescence to this unavoidable association man wrote poems of the louse and even glorified the vermin. Cowan, for example, tells us that lice have even been important in politics. He states that during the Middle Ages, candidates for mayor of Hurdberg, Sweden, sat around a table, with heads bowed forward, allowing their beards to rest on the table. A louse placed in the center of the table, selected the mayor for the ensuing year by first adventuring to that man's beard!

With the advent of modern emphasis on personal hygiene and the availability of effective insecticides this once inseparable union of man and louse began to crumble. The following list is a compendium of those measures that have

allowed man to free himself of the louse. In summoning these to exorcise the individual or group of their infestation, the nurse or physician or concerned parent must realize that this parasite has not dined on man since time immemorial by chance. Rather he is exquisitely adapted to his life on man and as such will not be denied his natural home easily. One can not hope to undo a union of ages with one quick application of potion. Those potions (insecticides) that are available work only in conjunction with other measures. Significant resistance to DDT and Malathion have already been reported in the body louse and may also exist in the head louse. Hence, those programs which do not minimize opportunity for reinfestation (man does not develop immunity to lice once infested) favor emergence of resistant parasites and hence, are not programs at all.

Outline of Head Lice Control Measures*

I. Individual Treatment

- A. Carefully examine all members of the family for evidence of infestation.
- B. Infected individuals should shampoo with one of the following medications.
 - A-200 Pynrate liquid or gel
 - Cuprex
 - Kwell (gamma benzene hexachloride)
 - Derbac Tac medicated soap

Repeat treatment in 10 days to kill newly hatched lice.
- C. After shampooing remove all nits with fingernails or a fine tooth comb.
- D. Carefully wash all brushes and combs.
- E. In severe or re-infected cases, 1% Malathion may be dusted into the hair and allowed to remain 24 hours before shampooing.

II. Home Control Measures

- A. All clothing and bedding used within 1 month of infestation must be laundered in hot soapy water or dry cleaned.
- B. 1% Malathion or one of the common household insecticides should be used

to treat mattresses, upholstered furniture, and shelves on which head and neck apparels are stored.

- C. Pets that are frequently cuddled by infected children may serve as a temporary (unintentional) refuge for head lice and may also be treated with shampoo or Malathion.

III. School Control Measures

- A. Carefully examine all children in the same grade or classroom for head lice.
- B. Keep all infected children out of school until free from lice and nits.
- C. Keep children's clothing separate from that of other children at all times. Ideally each child should have an individual coat hook or locker.
- D. Children should not share articles of clothing.

* ALL AFFECTED MEMBERS OF A GIVEN HOUSEHOLD (SCHOOL, ETC.) MUST BE TREATED SIMULTANEOUSLY AND IN CONJUNCTION WITH APPROPRIATE ENVIRONMENTAL CONTROL MEASURES. UNLESS THE HEAD LOUSE IS ELIMINATED FROM ALL AREAS OF THE ENVIRONMENT AT THE SAME TIME, CURES WILL BE TEMPORARY!

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CURRENT STATUS OF INFLUENZA IN LOUISIANA

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ROBERT S. GOHD, PH.D
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An influenza-like illness, first detected in south central and southeastern Louisiana during late December, has since spread west and north. Roughly one third of the parishes have thus far been affected by the disease.

The number of emergency room visits and clinically diagnosed cases of influenza at Charity Hospital in New Orleans indicates peak activity occurred in that area during the third week of January. Similar data obtained from Huey P. Long Hospital in Alexandria suggest a peak in activity during the last week of January. In both Alexandria and New Orleans, these indicators have since fallen to within normal seasonal levels. Schools in both areas are now reporting normal absenteeism.

The north central parishes, most notably Jackson and Lincoln, are the latest to report significant outbreaks. Two schools in the Ruston area were closed during the 3rd week of February due to an influenza-like illness. Absenteeism in several schools in the two parish area has exceeded 30%. Adjacent parishes have also

reported isolated schools with higher than normal absenteeism due to "flu."

Reports from Shreveport and Monroe reveal little activity up to this time. While the evidence is not conclusive, available information does suggest influenza type B may be responsible for many of these outbreaks. Consistent with the usual course of influenza B outbreaks, school age children have been primarily affected in nearly all instances. Furthermore, isolates of influenza B were obtained from 4 patients at Charity Hospital in New Orleans during the first two weeks in January. Serological evidence of the disease without viral isolates were obtained from two additional patients during the same period.

Isolation of influenza A has also been reported by the Tulane University Division of Infectious Diseases. The source of the virus was an elderly female with a mild upper respiratory illness, who represents the only confirmed case of influenza A reported in Louisiana this year.