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ACUTE RESPONSE OF GUINEA PIGS TO VAPORS OF SOME NEW COMMERCIAL ORGANIC COMPOUNDS

XII. NORMAL BUTYL ACETATE [1]

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This report on the acute response of guinea pigs to normal butyl acetate ($CH_3.CH_2.CH_2.CH_2.COOCH_3$) vapor in air is the twelfth of a series of similar reports (*1*) [5] which deal with studies pertinent to establishing a criterion of the toxicity of some commonly used commercial products with those which have recently become commercially available for industrial application.

This investigation was undertaken at the request of Stanco, Inc., and was conducted jointly by the United States Bureau of Mines and that company at the Pittsburgh Experiment Station of the Bureau of Mines.

SCOPE OF WORK

The work included a study of the toxicity and physiological response of guinea pigs exposed to normal butyl acetate vapor in air. Only acute effects as produced by a single exposure were studied. The experiments were planned to cover a range of concentrations and periods of exposure which produce but slight or no response, moderate response, and serious response.

CHEMICAL AND PHYSICAL PROPERTIES

The normal butyl acetate ($CH_3.CH_2.CH_2.CH_2.COOCH_3$) used in this study was a commercial grade sold for industrial usage. It was water clear and had an agreeable odor in very low concentrations but was disagreeable in the range of concentrations studied.

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[1] Contribution from the Pittsburgh Experiment Station, U. S. Bureau of Mines, Pittsburgh, Pa. Published by permission of the Director, U. S. Bureau of Mines. Work completed on manuscript June 26, 1935.

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[5] Figures in italic denote reference cited.

A determination of the specific gravity and boiling range of this material gave the following results:

Specific gravity

15.6°/15.6° C	0.8771

Boiling range

Distillate, cumulative (percent)	Temperature °C. corrected to 760 mm	Distillate, cumulative (percent)	Temperature °C. corrected to 760 mm
Initial boiling point	115.9	60.0	124.5
1.0	116.9	70.0	125.2
2.0	117.9	80.0	126.0
3.0	118.4	90.0	126.7
4.0	119.1	95.0	127.7
5.0	119.4	97.0	129.0
10.0	120.5	98.0	130.0
20.0	121.5	99.0	132.0
30.0	121.9	99.5	136.0
40.0	122.7	99.9	141.1
50.0	123.8		

Recovery 99.9 percent; residue 0.1 percent.

These values agree closely with the specifications furnished by the manufacturer for this commercial product.

The boiling point of normal butyl acetate as given in the International Critical Tables (*2*) is 126.5° C.

Normal butyl acetate is an organic solvent used in the preparation of lacquers.

TEST APPARATUS

The apparatus for preparing normal butyl acetate vapor-air mixtures and for exposing animals was the same as that described in a previous report dealing with butanone (*1*).

COMPUTATION AND ANALYSIS OF VAPOR-AIR MIXTURES

The method of computation and analysis is the same as that described in the report on secondary amyl acetate (*1*). Table 1 gives the results of analysis of a standard alcoholic solution of normal butyl acetate made to check the accuracy of the method of analysis.

TABLE 1.—*Results of analysis of portions of standard alcoholic solution of normal butyl acetate*

Normal butyl acetate taken (milligrams)	Normal butyl acetate found (milligrams)	Recovery (percent)
50	47.4	94.8
50	48.0	96.0
100	89.9	89.9
100	90.2	90.2
100	93.0	[1] 93.0

[1] Average 92.8.

An average recovery of 92.8 percent was obtained. The values obtained for the amount of normal butyl acetate in the vapor-air mixtures used in animal exposures (table 2) were corrected by multiplying the determined value by 100/92.8, or 108.9.

Table 2 gives the values for the concentrations as computed from the volume of air and amount of normal butyl acetate vaporized, and the concentrations found by chemical analysis of vapor-air mixtures used in animal experiments. The calculation of the percent by volume was made on the basis that 1 gram molecular weight of normal butyl acetate is equivalent to 22.4 liters of vapor at 0° C. and 760 millimeters mercury pressure.

TABLE 2.—*Results of analysis of atmospheres used for exposing animals* [1]

Concentration by—		Concentration by—	
Computation	Analysis	Computation	Analysis
(2)	1.38	0.64	0.66
(2)	1.40	.65	.71
(2)	1.36	.30	.33
(2)	1.47	.29	.33
(2)	1.40	.29	.31
0.63	.69	.30	.30
.63	.67	.30	.31
.63	.62		

[1] Concentration in percent by volume at 25° C. and 760 mm pressure. To convert to milligrams per liter multiply by 53.2.
[2] Concentration obtained by recirculating air in a closed chamber at 30° C. and 740 mm pressure across wicks wet with normal butyl acetate. No computed concentration.

The maximum concentration attainable by recirculating air at 30° C. and 740 millimeters pressure over large surface wicks wet with normal butyl acetate in a closed chamber averaged approximately 1.4 percent. The remainder of the results in table 2 represent experimental atmospheres prepared by continuously volatilizing a measured amount of normal butyl acetate in a measured volume of air sufficient to give 2 to 3 air changes per hour in the experimental chamber. Tests have shown that this rate of change in the apparatus used is ample to prevent oxygen deficiency or significant increase in carbon dioxide percent. The general order of concentrations used in the experiments was 1.4, 0.7, and 0.33 percent by volume.

TEST PROCEDURE; DESCRIPTION AND CARE OF ANIMALS

The test procedure and description and care of animals were the same as described in the report on butanone (*1*).

RESULTS OF TEST

This report presents summarized results pertinent to signs or objective symptoms, fatality, and gross pathology.

OBJECTIVE SYMPTOMS

Control animals.—No signs or symptoms were exhibited by the 18 control guinea pigs taken at random from the stock animals used in these experiments. No deaths occurred.

Exposed animals.—The signs or symptoms exhibited by animals exposed to normal butyl acetate vapor, in the order of their occurrence, were as follows: Irritation of the nose and eyes, manifested by rubbing nose with the forepaws and squinting; lacrimation; incoordination; narcosis; respiratory disturbances (gasping); and death. Table 3 gives the average time necessary to produce the symptoms by various concentrations of normal butyl acetate vapor in air. The figures given indicate the average time for occurrence of the sign or symptom, excepting those in parentheses, which indicate that the particular sign or symptom did not occur in the maximum period of exposure as given.

TABLE 3.—*Signs and symptoms produced in guinea pigs exposed to vapors of normal butyl acetate*

Type of symptom	Concentration of vapor in percent by volume		
	1.4	0.7	0.33
	Duration of exposure, minutes		
Nasal irritation (rubbing nose)	(1)	(1)	2 (810)
Eye irritation (squinting)	(1)	(1)	5
Lacrimation	1	5	2 (810)
Incoordination	2-4	420	2 (810)
Narcosis (unconsciousness)	15-30	700	2 (810)
Changes in respiration (dyspnea, gasping)	190	2 (810)	2 (810)
Death	240	2 (810)	2 (810)

1 Occurred almost immediately after start of exposure.
2 Not observed in the period of exposure given in parentheses.

With the exception of eye irritation no abnormal signs were observed during or following an exposure to 0.33 percent normal butyl acetate vapor in air by volume for 810 minutes. With exposure to 0.7 percent in air, irritation of the nose and eyes occurred immediately, lacrimation occurred in 5 minutes, incoordination in 420 minutes, and narcosis in 700 minutes, but no deaths occurred during or following an exposure of 810 minutes. The time for occurrence of these symptoms decreased rapidly with increase in concentration, and death was produced by an exposure to 1.4 percent vapor in air for 240 minutes.

GROSS PATHOLOGY

Control animals.—The 18 control animals killed for autopsy exhibited no significant gross pathology.

Exposed animals.—The gross pathological findings in animals that died during exposure (see fig. 1 and table 3) were moderate congestion of the brain, lungs, liver, and kidneys.

Exposure to conditions which produced marked incoordination and narcosis (1.4 percent for 90 minutes, and 0.7 percent for 810 minutes) produced slight to moderate congestion of the brain and slight congestion of the lungs, liver, and kidneys in animals killed immediately after exposure; but these findings were absent in animals killed for autopsy 4 to 8 days following exposure. No gross pathology was observed in animals exposed to 0.33 percent for 810 minutes.

SUMMARY OF FATALITY AND PHYSIOLOGICAL RESPONSE

The fatality and summary of the response of guinea pigs exposed to normal butyl acetate vapor in air is shown graphically in figure 1 and given in conventional degrees of response in table 4. The results

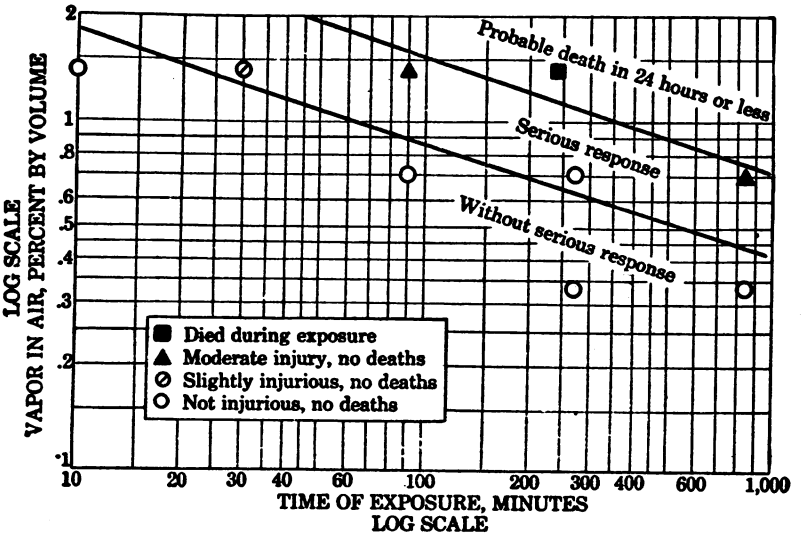

FIGURE 1.—Acute effects of exposure of guinea pigs to normal butyl acetate vapor in air.

of each experiment are designated by a symbol which represents one of four different degrees of severity. The symbols represent the most severe response for a majority, or at least three, of a group of six animals exposed to a given condition. The response of none of the animals deviated markedly from that which is representative of the group. In addition to representing the response of each group by symbols, the symbols have been separated into three general fields or zones of probable response.

Table 4 gives the concentrations (obtained by direct experiment or extrapolated from table 3 and fig. 1) which produce the degrees of response generally reported in the literature dealing with noxious gases. These data may be compared with toxicological data for other compounds (*1, 3, 4, 5, 6, 7, 8, 9*).

TABLE 4.—*Acute effects of exposure of guinea pigs to normal butyl acetate vapor in air*

Acute effects of exposure after various periods of time	Concentration, percent by volume in air
Kills in a few minutes	(1)
Dangerous to life in 30 to 60 minutes	(1)
Dangerous to life after several hours	1.0–1.4
Maximum amount for 1 hour without serious disturbance	.7
Maximum amount for several hours with but slight or no symptoms	.33

[1] Not produce by 1.4 percent vapor, the highest concentration obtained in a closed chamber by extended recirculation of air (30° C. and 740 mm pressure) over wicks wet with normal butyl acetate.

CAUSE OF DEATH

Death apparently was due to a state of narcosis which terminated in death rather than to the irritation of the lungs. No animals died following exposure; they either died during exposure or survived the exposure and the 4 or 8 day post-exposure observation period. In some instances the animals were unconscious several hours after termination of exposure (to 1.4 percent for 90 minutes and to 0.7 percent for 810 minutes) but appeared normal 24 hours after exposure.

WARNING PROPERTIES AND HAZARDS OF ACUTE POISONING

Men exposed to 1.4, 0.7, and 0.33 percent vapor in air even for a short time pronounced the atmosphere extremely disagreeable because of its strong odor and irritation to eyes and nasal passages. The latter concentration produced no marked symptoms and was apparently harmless to guinea pigs after one exposure of several hours.

WARNING PROPERTIES AND EXPLOSION HAZARDS

The explosion hazard of normal butyl acetate is minimized by the warning properties of concentrations below the inflammable range, but it cannot be ignored. A few determinations of the inflammable properties of the vapor of the normal butyl acetate used in this study indicated the lower limit to be approximately 1.7 percent.

SUMMARY AND CONCLUSIONS

The acute physiological response of guinea pigs to air containing a commercial grade of normal butyl acetate ($CH_3.CH_2.CH_2.CH_2.COO-CH_3$) vapor was determined. The concentrations of the vapor ranged from those that produced death to those that produced no effect after several hours' exposure. The signs of response, the fatality, and the gross pathology are given, and the warning properties as observed by the exposure of persons are described.

1. Normal butyl acetate produces narcosis, terminating in death in the higher concentrations. The symptoms are principally those of eye and nasal irritation and narcosis. Animals that did not die during exposure recovered.

2. The principal gross pathological findings were congestion of the brain, lungs, liver, and kidneys, as observed in the autopsies performed immediately after exposure.

3. At room temperature it was not possible to attain a concentration that was dangerous to the life of guinea pigs in 30 to 60 minutes. Exposure to 1.0 to 1.4 percent vapor is considered dangerous to life of guinea pigs after several hours; 0.7 percent is the maximum amount for 1-hour exposure without serious disturbance other than eye and nasal irritation; and 0.33 is the maximum amount for several hours' exposure with but slight or no symptoms.

4. Commercial normal butyl acetate used in the experiments had a distinct odor and was markedly irritating to the nose and eyes of men in concentrations found to be apparently harmless to guinea pigs after a single exposure of several hours' duration. Concentrations of the vapor well below the estimated lower inflammable limit (approximately 1.7 percent) are extremely disagreeable to men from the standpoint of odor and eye and nasal irritation.

ACKNOWLEDGMENTS

This investigation was made under the immediate direction of W. P. Yant, supervising chemist, health laboratory section, United States Bureau of Mines. The pathological examinations were made by John Chornyak, formerly medical officer in charge, pathological laboratory, and S. H. Black, formerly assistant surgeon of the Bureau of Mines.

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TABULATION OF HEALTH DEPARTMENT SERVICES

Report of Committee on Records and Reports to State and Territorial Health Officers and the United States Public Health Service in Thirty-fourth Annual Conference, Washington, D. C., April 13–14, 1936

STATEMENT OF THE CHAIRMAN

At the last annual meeting of the State and Territorial health officers with the United States Public Health Service, a conference committee on records and reports was appointed. That committee, in its report to the conference, expressed the opinion that a broad subject such as records and reports for use by health agencies requires continuous study and adaptation of forms to changes in practice. The conference committee, after developing general principles which should be embodied in any system of records and reports, specifically recommended that a permanent committee be appointed to pursue the subject.

In the selection of the permanent committee on records and reports, an attempt was made to limit the membership to a group small enough for economical and effective operation, yet of sufficient number to provide representation for States portraying sectional differences in program and for representation of the two Federal agencies charged with administration of the public health provisions of the

National Social Security Act. Participation of special health interests has been secured through the appointment of consultants.

This committee did not become active until assured that funds would be available for making the Social Security Act effective. Since then two meetings have been held. Between meetings a large amount of work has been accomplished through correspondence and informal conferences of smaller groups.

Obviously the entire subject of records and reports could not have been studied, much less acted upon, since the formation of this committee. It became necessary to make a selection of subjects for consideration. The members promptly decided that the development of the structure for a general administrative type of report would answer a previously existing need which had been accentuated by the passage of the Social Security Act. The group has addressed itself to this task for the past several months.

The conference will appreciate the difficult assignment given to this committee, since two extreme points of view are encountered whenever records and reports are under discussion. These points of view are represented by those who are contented with nothing or with a few impressionistic statements of the workers themselves and by those who insist upon standardized forms and definitions which will portray the service in sufficient detail for critical analysis. These opposing views, as well as all gradations in between, represent definite convictions, however ill-founded they may be, which cannot be passed over lightly or brushed aside by mere fiat of this or any other committee.

It is the feeling of the members that perhaps some agreement can be reached on items of information which a local health officer may find necessary for the administration of his program. The first task undertaken was to list the services which might be found in local programs and to select items which would be descriptive of the whole. On the accompanying form the several services of health departments as well as the items selected for descriptive purposes are listed. This committee recognizes that all these services may not be performed by the health department in a given health jurisdiction and that in a few areas the program may contain additional elements. The inclusion or exclusion of a service is not to be construed as an expression of opinion concerning the proper content of a public health program.

It is hoped that the tabulation form, together with the accompanying set of definitions and instructions, may serve as the basis of a reporting system. The completed form or such sections as apply to local programs may be copied and filed with State and Federal agencies. Interpretative comments may be appended if desired. Perhaps an abbreviated list of items will, under certain

circumstances, satisfy the requirements of State and Federal agencies. This introduces no complication provided items are selected from the complete list. However, it will be necessary to follow the instructions and definitions if any degree of comparability in data between areas is to be obtained.

There has not been sufficient time to consider the items for the portraying of special services, such as industrial hygiene, mental hygiene, accident prevention, and other services which are being developed. Neither has there been opportunity to explore the more fundamental subject of basic health department records.

Before moving the adoption of this report, I wish to emphasize that there is being submitted for your consideration only one element in the system of records and reports; namely, a list of items to be tabulated by local health officers together with covering definitions and instructions. State and Federal agencies may select from this list those items which are considered necessary as a report of progress.

F. J. UNDERWOOD, *Chairman.*

COMMITTEE

Members	*Consultants*
F. J. UNDERWOOD, *chairman*	PEARL McIVER
J. W. BROWN	K. E. MILLER
E. S. GODFREY[1]	J. A. MILNE
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F. C. ROTHERT	
G. W. RUHLAND	
W. C. WILLIAMS	

DEFINITIONS AND INSTRUCTIONS FOR TABULATION OF HEALTH DEPARTMENT SERVICES[2]

GENERAL DIRECTIONS

Purpose of form.—The tabulation form to which these instructions and definitions apply is an instrument devised for use by local health departments in summarizing services. The items appearing on the form are considered necessary for describing the services to which they refer. As an aid to preservation, the pages of the form should be perforated in order that they may be inserted in a loose-leaf or ring binder.

Permissible adaptations.—A State or a given local health agency may choose to add sections if services not included in the form are being rendered or to supplement the list if the existing services are not adequately described for local administration purposes. In the event any service described by a section of the tabulation is not included in the local program, that particular section obviously need not be completed. However, there should be no changes in the wording

[1] Replaced by J. W. Brown.

[2] Definitions and instructions apply to Tabulation of Health Department Services, approved in 1936 by State and Territorial Health Officers, the United States Public Health Service, and the United States Children's Bureau.

or numbering of the items on the form except as approved by the State and Territorial health officers, the United States Public Health Service, and the United States Children's Bureau. Suggestions for altering the form or definitions and instructions should be sent to the chairman in order that they may be considered in the future when revisions are under discussion.

Reporting practice.—All items on the tabulation form may be required for reporting to a State or Federal agency; or at the discretion of the agency concerned, selected items may be used in lieu of the complete tabulation. If the tabulation form is used as a report, items which identify the report and describe the area should be completed, and the report should be signed by the health officer.

Report year.—The calendar year is recommended as the report year. For purposes of tabulation, the year is treated as a unit, and the enumeration is begun anew each year with the first service rendered. A person who is under care, supervision, or instruction at the close of one year and who is carried over into the following year or who returns at any time during the following year is considered new and should be counted again. The principle just described also applies to premises under sanitation service.

Enumeration of individuals and premises.—When either of the terms "individuals" or "premises" appears on the tabulation form, the service described is presumed to continue, perhaps with interruptions, during the year. Under these circumstances an individual or a premises should be counted only once during the year as the recipient of a given type of service.

Enumeration of individuals seen in groups.—Unless a case record is made for an individual receiving service through group activities, he is not considered as an individual admitted to service.

Enumeration of cases and admissions.—Either of the terms "cases" or "admissions" is used in the tabulation form for conditions which require attention for only a limited time. The condition rather than the individual is the basis of enumeration. If a person should be admitted for a condition which terminates, such as acute illness, pregnancy, etc., and should apply for the same service or a different service within the same year, that person is readmitted and counted a second time.

Enumeration of procedures.—Visits, inspections, examinations, treatments, and similar procedures are to be enumerated on the basis of each service when it is rendered, in keeping with the following circumstances:

A service is counted if it is rendered by an individual with professional training required for performing the service.

A service may be recorded for indirect contact with an individual or with a premises, such as a parent seen in behalf of a child, the owner of property regarding improvements, or other situations of similar character. A casual inquiry about the health of an individual or the condition of a premises or advice informally given should not be entered in the tabulation.

An actual entry of the service must be made on a case or premises record. An index card may, at the discretion of the health officer, be used in place of the more elaborate case or premises card, particularly if further service is not contemplated.

A single call at a home is to be counted as one visit if service is rendered to only one person, as two visits if two persons are served, and so on, provided an entry is made on the record of each individual. A service to a school child in school is not recorded as a field visit.

A single contact with an individual is to be recorded only once. A contact with an individual where two or more types of service are performed is to be recorded only one time, according to the primary purpose of the visit. If a chronic or continuing condition is complicated by an acute condition, then the individual preferably is classed as having received service for the acute condition.

When two staff members participate in a given service, the service is entered on the tabulation by one member only, preference being given to the staff member performing the major service.

A contact made by a technical supervisor should not be included in the tabulation unless such contact be for rendering special service in relation to a case or a premises.

As a general rule the premises forms the basis for enumerating field visits. However, when the visit involves a premises with several utilities, such as a hotel having a restaurant, a barber shop, and a swimming pool, or such as an amusement park having numerous concessions, a separate record is made of each utility or concession seen for a definite purpose and each contact is counted as a separate visit.

Service by whom to record.—The tabulation is intended primarily to express: (1) Service performed by the staff of the health department, (2) service performed by other agencies if administered or financed by the health department, and (3) action taken by citizens in observance of health laws or upon recommendation of the health department.

The tabulation is also intended to include a limited number of services which are complementary to the program of the health department, such as designated activities of private physicians and hospitalization of communicable disease and tuberculosis cases. These services are to be included irrespective of where budgetary or administrative responsibility may reside. When a private physician participates under direction in a program which is administered by the health department, his service is recorded in the same manner as prescribed for that of a regular staff member. A service of a physician to a private patient may be included where indicated on the tabulation form (visits to private physicians), provided an entry of the service is made on the record of the individual served and is filed in the health department.

Use of columns.—The five columns following the items of service are so arranged that the form is adaptable to tabulations or reports for various periods, including successive months, a calendar quarter, or an entire year. It is essential that each column bear a heading designating the period to which the figures apply. The following are examples of column headings that are acceptable, especially if the form is to be used directly as a quarterly or annual report:

Quarterly report

Total previous quarter	April	May	June	Total this quarter

Annual report

Total first quarter	Total second quarter	Total third quarter	Total fourth quarter	Total this year

In a report for the first quarter of the year the total for the last quarter of the preceding year should not be included. The quarterly totals in the annual report are not intended to be cumulative.

Educational services.—It is presumed that an educational influence pervades the whole program of the health department. Certain procedures susceptible to mass application, however, are set apart for special entry in the Tabulation of Health Department Services.

A "public lecture" or a "talk" is construed to mean the orderly presentation of information to a group. A classroom health talk is not to be included, as this type of instruction is an integral part of the school health program and should be tabulated separately. Attendance should be computed as accurately as possible.

A health class is more formal in character than a lecture or a talk; the term "class" implies that a definite number of individuals have agreed to pursue a course of instruction extending over a specified number of sessions. "Enrollment" is

the number registered for the entire course. "Attendance" is the sum of the numbers present at each session during the period under consideration. A person can be enrolled only once for a course; but when attendance is tabulated, the same individual should be counted each time present.

Medical conferences.—A medical conference may be described as a contact of an individual with a physician in the health department office or in a field station for the discussion of a personal health problem. A visit to a private physician does not fall in this category.

Visits to private physicians.—Visits to private physicians refer to visits by cases for whom there is an individual case record in the health department. As a rule, these individuals will also be receiving some service, commonly nursing, from the health department.

Office, clinic, or conference visits.—Office, clinic, or conference visits are contacts made by health department personnel with individuals in stations of the health department.

Field visits.—Field visits are contacts made by health department personnel with premises or with individuals at places other than stations of the health department.

SPECIFIC ITEMS

All items appearing in the Tabulation of Health Department Services are not included in the definitions which follow. The items selected for definition are representative of activities common to a number of services. Those items not included are considered self-explanatory.

A. COMMUNICABLE DISEASE CONTROL.

1. *Admissions to service* include persons who are ill with communicable disease, who are suspected of having communicable disease, or who are carriers of the causative organism, provided these persons are seen by the health department for purposes of care or control. Those receiving immunization services only are not counted under this item.

2. *Consultations with physicians* are visits by health department physicians to patients under the care of private physicians for purposes of assisting in the establishment of diagnoses or of giving professional advice of any type to the physicians in charge of the cases.

3–9. *Field visits* refer only to those made by the health department to diagnosed or suspected cases and to carriers. Spread and source contacts should not be included unless the visits reveal diagnosed or suspected cases or carriers.

10–14. *Admissions to hospitals* should include all cases and carriers of disease hospitalized, irrespective of the agencies operating the hospitals or of the influence of the health department in securing admissions.

15–20. *Immunizations* refer to those persons who received the approved dosage of the appropriate agent for active immunization. If more than one injection is required, the person should not be counted until the series is completed. For tabulation purposes, it is not necessary that immunity be confirmed by a test, although it may be desirable practice. Immunization service may be recorded when the work is performed by the health department or when performed by any other agent, provided pertinent facts are entered in the health department record for the individual immunized.

B. VENEREAL DISEASE CONTROL.

1. *Admissions to medical service* include persons admitted for diagnosis and/or treatment at facilities of the health department. Prenatal cases, food handlers, diarymen, and other persons on whom Wassermann tests or urethral or cervical smears are made as part of routine physical examination are not included unless

formally admitted to venereal disease clinic facilities of the health department. Persons given prophylaxis for the prevention of venereal disease or advice in regard to sex hygiene are not included in this category but may be enumerated under "Other service" (B 5).

2. *Cases transferred to private physicians* are those included in the preceding item who are actually transferred to private physicians for treatment of venereal disease.

3. *Clinic visits* include only visits for diagnosis and/or treatment to health department facilities.

4. *Field visits* include all visits by the health department for purposes of control or care to venereal disease patients, contacts, and sources of infection.

C. TUBERCULOSIS CONTROL.

1. *Individuals admitted to medical service* are those admitted to diagnostic and/or treatment facilities of the health department for ambulatory patients.

2. *Individuals admitted to nursing service* are all diagnosed, arrested, and suspected cases visited by health department nurses. Contacts and persons with the childhood type of infection may be included if they are under active supervision and if definite service is rendered.

A "contact", for purposes of tabulation, is an individual admitted to service because of close association with a diagnosed or suspected case of tuberculosis. A "suspect" is a person on whom a positive diagnosis has not been made but who is placed under observation. An arrested case is classed as a suspect.

3. *Physical examinations in clinics* comprise all examinations and reexaminations, regardless of physical findings, made at diagnostic facilities of the health department. Such examinations may be for diagnosis or check on the progress of the disease. Examinations of contacts, suspects, and persons with the childhood type of disease should be included.

4. *X-ray examinations* should be counted according to the principle outlined under "Physical examinations" (C 3).

5, 7, 8. *Clinic visits, field nursing visits,* and *office nursing visits* refer to service contacts made between the health department staff and diagnosed, suspected, or arrested cases of tuberculosis. Visits to or by contacts and persons with the childhood type of infection may be included if active supervision is being exercised and if definite service is rendered during the visits.

9. *Admissions to sanatoria* include all residents of the area who have tuberculosis and are admitted to any hospital or any sanatorium either in the area or outside the area, irrespective of the agency or person responsible for admission of the patients. Admissions of nonresident patients to sanatoria or hospitals within the area are not counted in local health department work.

D. MATERNITY SERVICE.

1. *Cases admitted to antepartum medical service* include only those given services by the health department where a physician is in attendance. Partial services, such as urinalysis or blood-pressure reading, by nonmedical attendants are not counted under this item.

6. *Office nursing visits by antepartum cases* apply to the visits of antepartum cases to the health department nurses, in which individual advisory services are rendered.

7. *Cases given nursing service at delivery* refer to obstetrical deliveries at which a nurse of the health department acted as an assistant to the attendant.

10. *Cases admitted to postpartum nursing service* should include those previously under antepartum care by health department nurses and those admitted for postpartum care only.

13. *Midwives under planned instruction* are those lay women who regularly engage in obstetrical practice and who have registered for organized courses of instruction. They are not to be included unless they are in regular attendance at courses conducted by the health department.

14. *Midwife meetings* are less formal in character than midwife classes. A staff member of the health department or some other person approved by the health officer must preside if this item is to be tabulated.

16. *Visits for midwife supervision* are visits made by or to members of the health department for the purpose of supervision of the practice of individual midwives.

20. *Enrollment in maternity classes* comprises the number of women receiving formal instruction in maternity hygiene and motherhood through courses organized under health department auspices.

E. Infant and Preschool Hygiene.

For purposes of classifying service to children—

An "infant" is a child under 1 year of age.

A "preschool child" is a child between 1 and 6 years of age who is not attending grade school. A child under 6 years of age in a nursery school or kindergarten is counted as a preschool child.

A child under continuous health supervision but passing from one age group to another during a report year is counted once as an infant and once as a preschool child.

Service to be recorded under this section is the usual prophylactic and health promotion service connoted by the term "hygiene." Care of sick children and reparative dentistry are to be included in "Morbidity service" (H). Measures for the control of communicable disease, tuberculosis, or venereal disease should be posted in the sections devoted to these parts of the program.

1, 8. *Infants admitted to medical service* and *preschool children admitted to medical service* include only those receiving services through facilities of the health department where physicians are in attendance.

2, 9. *Infants admitted to nursing service* and *preschool children admitted to nursing service* include all infants and preschool children seen by nurses of the health department in the interest of health supervision.

6, 13. *Office nursing visits* are those of infants and preschool children to health department nurses, in which individual advisory services are rendered.

15. *Prophylaxis by dentists or dental hygienists* includes services of the health department, such as the removal of calcareous deposits, cleaning of teeth, and the instruction of persons in care of the mouth.

19. *Enrollment in infant and preschool classes* comprises the number of adults receiving formal instruction in infant and preschool hygiene through courses organized under health department auspices.

F. School Hygiene.

For purposes of classifying service, a child is regarded as a "school child"—

If 6 years of age and under 15, regardless of whether he is attending school;

If under 6 years but attending grade school;

If 15 years or over and attending school.

1. *Inspections by physicians or nurses* are those observations by health department physicians or nurses for the detection of communicable disease, or of body parasites, or to check on correction of physical defects found by previous examinations.

2. *Examinations by physicians* are the more formal types of examinations given by the health department at stated periods during school life to determine physical status.

3. *Examinations by physicians with parents present* are those which are made in the presence of parents (father, mother, or guardian), thus affording an opportunity for the physicians to discuss the findings with the parents.

G. Adult Hygiene.

1–5. *Physical examinations* include the number of examinations made by health department physicians of (1) persons engaged in occupations where freedom from certain diseases is required by the health authorities and (2) supposedly well adults who wish to have an appraisal of their physical condition. Laboratory tests or interim inspections for specific communicable diseases do not in themselves constitute a physical examination. The number of examinations rather than the number of individuals forms the basis of enumeration.

H. Morbidity Service.

1, 2. *Admissions to medical service* and *admissions to nursing service* include sick persons who are provided with medical and/or nursing care on an ambulatory or domiciliary basis through facilities of the health department and who are not listed elsewhere in the tabulation. Care of inmates in penal and custodial institutions, exclusive of what may be regarded as hospital work, should be recorded under these items. The illness rather than the individual forms the basis of enumeration.

3, 4. *Clinic visits* and *field medical visits* are visits in the interest of medical care which are made by or to clinic and field physicians of the health department.

5, 6. *Field nursing visits* and *office nursing visits* are visits in the interest of morbidity nursing care which are made by or to field and clinic nurses employed by the health department.

7. *Admissions to hospitals* include those patients admitted for medical or surgical or obstetrical care to hospital facilities of the health department. Only admissions to the hospital sections of penal and custodial institutions are to be posted for such institutions. The illness rather than the individual forms the basis of enumeration.

8. *Patient-days of hospital service* are the sum of the days that all patients receiving medical or surgical or obstetrical care were in hospital facilities of the health department.

9. *Individuals admitted to dental service* are persons admitted to facilities of the health department for reparative dentistry.

10, 11. *Refractions* and *tonsil and adenoid operations* are terms used to describe corrective work performed in facilities of the health department for the implied physical defects of children. Other corrections are to be recorded under "Other service" (H 12).

I. Crippled Children Service.

Unless otherwise specified by State law, a "child" is defined, for the purposes of tabulation, as any person under 21 years of age having orthopedic or other types of deformities commonly connoted by the term "crippled."

1. *Individuals reported* include all children having orthopedic or other types of deformities who come to the attention of the health department.

2. *Individuals examined at diagnostic clinics* are crippled children examined by orthopedic or other specialists at health department clinics or elsewhere if by arrangement of the health department.

3. *Individuals treated* are those children who obtained care in connection with a crippling condition. Such care may be posted if it is rendered by the health department or if the department definitely makes the arrangements.

7. *Other service* is intended for the separate listing of visits or other services by physiotherapists, social workers, and nutritionists if rendered by the health department.

J. General Sanitation.

1, 2, 3. *Approved individual water supplies installed, new privies installed,* and *new septic tanks installed* include those sanitary improvements made by or induced by the health department. However, it must be understood that these items relate to new construction of individual water supplies and excreta disposal facilities which are not connected with the public system.

4–11. *Field visits* are synonomous with "inspections" as commonly used and include all visits by the health department personnel in the interest of sanitation. As was pointed out in "Enumeration of procedures," the count is usually based on the premises. However, in the case of a premises such as a hotel with several utilities or an amusement park having numerous concessions, a separate entry is made on the record of each utility or concession seen for a definite purpose and each contact is counted as a separate visit.

12. *Buildings mosquito proofed* refer to buildings where people congregate or reside which the health department has been instrumental in making mosquito proof by screening with 16-mesh wire and by stoppage of cracks and holes through which mosquitoes might enter.

14. *Anopheles breeding places eliminated* refer to depressions where water normally collected and which the health department has succeeded in having filled or drained for the purpose of permanently preventing the breeding of mosquitoes.

15. *Anopheles breeding places controlled* refer to natural and artificial collections of water which through the efforts of the health department have been treated with approved larvicides for the purpose of preventing breeding of mosquitoes.

K. Protection of Food and Milk.

1. *Food-handling establishments registered for supervision* comprise the number of places at which food or beverages are produced, processed, or dispensed, and over which the health department regularly exercises sanitary control. Establishments can be registered but once each report year and then only if a complete survey of each premises is made and the findings are recorded.

3. *Dairy farms registered for supervision* include only farms producing milk under provision of milk regulations or ordinances and receiving at least one complete inspection by the health department during the report year.

5. *Milk plants registered for supervision* are to be considered in the same manner as "Food-handling establishments." The term "milk plants" applies to pasteurizing plants, milk depots, cheese factories, creameries, ice cream factories, and other similar places.

7. *Cows tuberculin tested* are cows tested by veterinarians of the health department, and dairy cows tested by other veterinarians when testing is required by local milk ordinances.

8. *Animals slaughtered under inspection* refer to animals slaughtered for food under competent antemortem and postmortem inspections by the health department.

9. *Carcasses condemned in whole or in part* refer to carcasses condemned by the health department and disposed of in an approved manner.

L. Laboratory Service.

1–21. *Specimens examined* include specimens examined by the health department laboratory and specimens examined by other laboratories for the health department.

DEFINITIONS AND INSTRUCTIONS FOR TABULATION OF REPORTABLE DISEASES [1]

Source of list.—The diseases affecting man which appear on the tabulation form are selected from those in the International List of Causes of Death, fourth revision, 1929. The figures in parentheses after the diseases are the International List numbers.

Use of columns.—The columns following the list of diseases are to be used according to the general directions appearing in Definitions and Instructions for Tabulation of Health Department Services.

Method of enumeration.—Only reportable diseases coming to the attention of the health department are to be included. A case reported by a school authority, householder, nurse, or other nonmedical person is to be regarded as a suspect until the diagnosis has been established and the case is reported by an attending physician or a medical officer of the health department. A report by a veterinarian is accepted for a disease in an animal. A positive laboratory finding alone is not to be accepted in lieu of a clinical diagnosis by a physician, or by a veterinarian if the condition occurs in animals. If any disease listed on the form is not reportable in the State, the omission should be accounted for by placing in the first column opposite the disease the letters N. R. (not reportable).

[1] Definitions and instructions apply to Tabulation of Reportable Diseases, approved in 1936 by State and Territorial Health Officers, the United States Public Health Service, and the United States Children's Bureau.

State _____ County or district _____
Population of health jurisdiction _____ Period _____ Year _____

A. COMMUNICABLE DISEASE CONTROL.					
1. Admissions to service					
2. Consultations with physicians					
Field visits					
3. Diphtheria					
4. Typhoid fever and paratyphoid fever					
5. Scarlet fever					
6. Smallpox					
7. Measles					
8. Whooping cough					
9. Other (specify)					
_____					
Admissions to hospitals					
10. Diphtheria					
11. Typhoid fever and paratyphoid fever					
12. Scarlet fever					
13. Smallpox					
14. Other (specify)					
_____					
Immunizations (persons immunized)					
15. Smallpox					
16. Diphtheria, under 1 year					
17. Diphtheria, 1 through 4 years					
18. Diphtheria, 5 years and over					
19. Typhoid fever					
20. Other (specify)					
_____					
21. Public lectures and talks					
22. Attendance					
B. VENEREAL DISEASE CONTROL.					
1. Admissions to medical service					
2. Cases transferred to private physicians					
3. Clinic visits					
4. Field visits					
5. Other service (specify)					
_____					
6. Public lectures and talks					
7. Attendance					

Form no. _____
Approved 1936.

Tabulation of Health Department Services.

Approved by: State and Territorial Health Officers, United States Public Health Service, United States Children's Bureau.

State _____ County or district _____ Period _____ Year _____

C. TUBERCULOSIS CONTROL.					
1. Individuals admitted to medical service					
2. Individuals admitted to nursing service					
3. Physical examinations in clinics					
4. X-ray examinations					
5. Clinic visits					
6. Visits to private physicians					
7. Field nursing visits					
8. Office nursing visits					
9. Admissions to sanatoria					
10. Other service (specify)					
11. Public lectures and talks					
12. Attendance					
D. MATERNITY SERVICE.					
1. Cases admitted to antepartum medical service					
2. Cases admitted to antepartum nursing service					
3. Visits by antepartum cases to medical conferences					
4. Visits by antepartum cases to private physicians					
5. Field nursing visits to antepartum cases					
6. Office nursing visits by antepartum cases					
7. Cases given nursing service at delivery					
8. Cases given postpartum medical examination					
9. Cases given postpartum examination by private physicians					
10. Cases admitted to postpartum nursing service					
11. Nursing visits to postpartum cases					
12. Other service (specify)					
13. Midwives under planned instruction					
14. Midwife meetings					
15. Attendance at meetings					
16. Visits for midwife supervision					
17. Other service (specify)					
18. Public lectures and talks					
19. Attendance					
20. Enrollment in maternity classes					
21. Attendance					
E. INFANT AND PRESCHOOL HYGIENE.					
Infants					
1. Individuals admitted to medical service					
2. Individuals admitted to nursing service					
3. Visits to medical conferences					
4. Visits to private physicians					
5. Field nursing visits					
6. Office nursing visits					
7. Other service (specify)					
Preschool					
8. Individuals admitted to medical service					
9. Individuals admitted to nursing service					
10. Visits to medical conferences					
11. Visits to private physicians					
12. Field nursing visits					
13. Office nursing visits					
14. Inspections by dentists or dental hygienists					
15. Prophylaxis by dentists or dental hygienists					
16. Other service (specify)					
17. Public lectures and talks					
18. Attendance					
19. Enrollment in infant and preschool classes					
20. Attendance					

State _____ County or district _____ Period ___ Year____

F. SCHOOL HYGIENE.					
1. Inspections by physicians or nurses					
2. Examinations by physicians					
3. Examinations by physicians with parents present					
4. Individuals admitted to nursing service					
5. Field nursing visits					
6. Office nursing visits					
7. Inspections by dentists or dental hygienists					
8. Prophylaxis by dentists or dental hygienists					
9. Other service (specify)					
10. Public lectures and talks					
11. Attendance					
12. Classroom health talks					
13. Attendance					
G. ADULT HYGIENE.					
Physical examinations					
1. Milk handlers					
2. Other food handlers					
3. Midwives					
4. Teachers					
5. Other (specify)					
H. MORBIDITY SERVICE.					
1. Admissions to medical service					
2. Admissions to nursing service					
3. Clinic visits					
4. Field medical visits					
5. Field nursing visits					
6. Office nursing visits					
7. Admissions to hospitals					
8. Patient-days of hospital service					
9. Individuals admitted to dental service					
10. Refractions					
11. Tonsil and adenoid operations					
12. Other service (specify)					
I. CRIPPLED CHILDREN SERVICE.					
1. Individuals reported					
2. Individuals examined at diagnostic clinics					
3. Individuals treated					
4. Individuals admitted to nursing service					
5. Visits to diagnostic clinics					
6. Nursing visits					
7. Other service (specify)					
8. Public lectures and talks					
9. Attendance					

State _____ County or district _____ Period ____ Year ____

J. GENERAL SANITATION.					
1. Approved individual water supplies installed					
2. New privies installed					
3. New septic tanks installed					
Field visits					
4. Private premises					
5. Camp sites					
6. Swimming pools					
7. Barber shops and beauty parlors					
8. Schools					
9. Public water supplies					
10. Sewerage plants					
11. Other (specify)					
12. Buildings mosquito proofed					
13. Minor drainage—linear feet completed					
14. Anopheles breeding places eliminated					
15. Anopheles breeding places controlled					
16. Other service (specify)					
17. Public lectures and talks					
18. Attendance					
K. PROTECTION OF FOOD AND MILK.					
1. Food-handling establishments registered for supervision					
2. Field visits to food-handling establishments					
3. Dairy farms registered for supervision					
4. Field visits to dairy farms					
5. Milk plants registered for supervision					
6. Field visits to milk plants					
7. Cows tuberculin tested					
8. Animals slaughtered under inspection					
9. Carcasses condemned in whole or in part					
10. Other service (specify)					
11. Public lectures and talks					
12. Attendance					
L. LABORATORY.					
Specimens examined					
1. Water—bacteriological					
2. Water—chemical					
3. Milk or milk products					
4. Other food					
5. Typhoid: Blood cultures					
6. Typhoid: Widal					
7. Typhoid: Stool cultures					
8. Typhoid: Urine cultures					
9. Diphtheria cultures					
10. Syphilis					
11. Undulant fever (human)					
12. Bangs disease (animal)					
13. Typhus fever					
14. Tularemia					
15. Malaria					
16. Gonorrhea					
17. Tuberculosis					
18. Feces for parasites					
19. Urinalysis					
20. Rabies					
21. Other service (specify)					

_____,
Health Officer.
_____,
_____,
Address.
_____,
Date.

State _____ County or district _____
Population of health jurisdiction _____ Period _____ Year _____

REPORTABLE DISEASES					
Anthrax (20)					
Chickenpox (44a)					
Diphtheria (10)					
Dysentery (13)					
Gonorrhea (35)					
Hookworm (40)					
Influenza (11)					
Malaria (38)					
Measles (7)					
Meningococcus mening.tis (18)					
Ophthalmia neonatorum (35)					
Pellagra (62)					
Pneumonia (107-109)					
Poliomyelitis (16)					
Puerperal septicemia (145)					
Rabies in man (21)					
Rabies in animal					
Scarlet fever (8)					
Smallpox (6)					
Streptococcic sore throat (115a)					
Syphilis (34)					
Trachoma (88)					
Tuberculosis (23-32)					
Tularemia (44c)					
Typhoid fever (1)					
Typhus fever (3)					
Undulant fever (5)					
Whooping cough (9)					

Form no. _____
Approved 1936.

Tabulation of Reportable Diseases.

Approved by State and Territorial Health Officers, United States Public Health Service, United States Children's Bureau.

_____,
Health Officer.
_____,
_____,
Address.
_____,
Date.

DEATHS DURING WEEK ENDED AUGUST 15, 1936

[From the Weekly Health Index, issued by the Bureau of the Census, Department of Commerce]

	Week ended Aug. 15, 1936	Corresponding week, 1935
Data from 86 large cities of the United States:		
Total deaths	7,277	6,955
Deaths per 1,000 population, annual basis	10.2	9.7
Deaths under 1 year of age	494	514
Deaths under 1 year of age per 1,000 estimated live births	45	47
Deaths per 1,000 population, annual basis, first 33 weeks of year	12.6	11.7
Data from industrial insurance companies:		
Policies in force	68,206,196	67,585,751
Number of death claims	11,456	11,014
Death claims per 1,000 policies in force, annual rate	8.8	8.5
Death claims per 1,000 policies, first 33 weeks of year, annual rate	10.3	10.1

PREVALENCE 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

CURRENT WEEKLY STATE REPORTS

These reports are preliminary, and the figures are subject to change when later returns are received by the State health officers

Reports for Weeks Ended Aug. 22, 1936, and Aug. 24, 1935

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended Aug. 22, 1936, and Aug. 24, 1935

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended Aug. 22, 1936	Week ended Aug. 24, 1935	Week ended Aug. 22, 1936	Week ended Aug. 24, 1935	Week ended Aug. 22, 1936	Week ended Aug. 24, 1935	Week ended Aug. 22, 1936	Week ended Aug. 24, 1935
New England States:								
Maine		1	1		10	38	0	0
New Hampshire							0	0
Vermont					7	12	0	0
Massachusetts	2	6			46	21	1	0
Rhode Island	1	2			3	2	0	0
Connecticut		2			10	16	0	1
Middle Atlantic States:								
New York	18	10		[1] 1	96	146	3	5
New Jersey	10	1	6	3	44	32	1	2
Pennsylvania	18	29			39	39	5	0
East North Central States:								
Ohio	9	11	6	1	7	17	3	1
Indiana	10	11	7	47	4	2	2	4
Illinois	21	15	4	3	11	32	3	7
Michigan	6	8	1		8	31	0	0
Wisconsin	1	2	7	20	20	56	0	1
West North Central States:								
Minnesota	1	1		1		2	2	0
Iowa	2	5		2		3	3	2
Missouri	2	18	8	28	2	6	1	3
North Dakota		2		18		8	0	0
South Dakota		3					0	1
Nebraska	3	11			3	1	0	0
Kansas	5	3		1	5	4	2	1
South Atlantic States:								
Delaware					1	4	0	0
Maryland [2] [3]	5	6			11	1	3	4
District of Columbia	2	9		1	3	1	1	3
Virginia [4]	9	28			19	12	1	2
West Virginia	10	20		10	5	10	0	1
North Carolina	18	21			4		3	1
South Carolina	5	9	39	45	2	1	0	0
Georgia [3]	22	18					2	0
Florida [3]	3	3		1	11	4	2	0

See footnotes at end of table.

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended Aug. 22, 1936, and Aug. 24, 1935—Continued

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended Aug. 22, 1936	Week ended Aug. 24, 1935	Week ended Aug. 22, 1936	Week ended Aug. 24, 1935	Week ended Aug. 22, 1936	Week ended Aug. 24, 1935	Week ended Aug. 22, 1936	Week ended Aug. 24, 1935
East South Central States:								
Kentucky	7	22	----	----	4	31	1	0
Tennessee [3]	24	11	8	12	1	6	1	5
Alabama [3]	15	33	4	5	----	----	0	1
Mississippi [3]	16	19	----	----	----	----	0	0
West South Central States:								
Arkansas	4	11	1	5	----	----	0	0
Louisiana [3]	9	12	22	19	2	11	3	1
Oklahoma [3] [5]	10	9	6	5	----	4	0	1
Texas [3]	25	39	28	12	26	----	1	0
Mountain States:								
Montana	----	----	----	----	----	4	0	0
Idaho	----	----	1	1	3	2	0	0
Wyoming	1	----	----	----	----	18	0	0
Colorado	2	9	----	----	2	6	4	0
New Mexico	6	2	----	----	6	----	0	1
Arizona	2	3	7	4	5	2	0	0
Utah [3]	2	1	----	----	1	1	0	0
Pacific States:								
Washington	2	----	----	----	13	17	0	0
Oregon	1	----	3	3	5	43	1	0
California	19	23	12	10	49	87	2	4
Total	328	449	171	258	498	733	51	56
First 34 weeks of year	15,440	18,569	141,908	104,369	270,548	696,212	6,009	4,221

Division and State	Poliomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended Aug. 22, 1936	Week ended Aug. 24, 1935	Week ended Aug. 22, 1936	Week ended Aug. 24, 1935	Week ended Aug. 22, 1936	Week ended Aug. 24, 1935	Week ended Aug. 22, 1936	Week ended Aug. 24, 1935
New England States:								
Maine	0	8	5	1	0	0	2	6
New Hampshire	----	4	----	----	0	0	1	0
Vermont	0	4	----	1	0	0	0	0
Massachusetts	2	112	34	49	0	0	3	3
Rhode Island	0	39	4	2	0	0	0	1
Connecticut	1	40	3	6	0	0	1	2
Middle Atlantic States:								
New York	11	291	86	67	0	0	22	37
New Jersey	1	26	18	23	0	0	10	10
Pennsylvania	1	11	84	88	0	0	37	24
East North Central States:								
Ohio	8	2	48	51	0	0	13	27
Indiana	1	2	20	22	1	0	8	11
Illinois	15	9	66	83	0	0	28	51
Michigan	3	87	46	23	2	0	6	14
Wisconsin	0	10	60	42	0	0	2	2
West North Central States:								
Minnesota	1	3	12	26	9	0	3	21
Iowa	0	1	20	16	2	0	9	4
Missouri	1	1	10	21	0	0	22	23
North Dakota	0	2	14	9	1	0	1	1
South Dakota	2	1	2	3	3	0	1	3
Nebraska	0	1	6	1	0	2	4	0
Kansas	0	0	26	11	0	0	6	16
South Atlantic States:								
Delaware	0	0	----	1	0	0	2	4
Maryland [3] [5]	0	6	13	18	0	0	13	23
District of Columbia	0	7	2	5	0	0	3	4
Virginia [4]	4	39	11	16	0	0	20	41
West Virginia	0	4	19	26	0	0	10	28
North Carolina	0	11	16	15	0	1	21	21
South Carolina	0	3	1	2	0	0	16	20
Georgia [3]	1	0	10	5	0	0	26	30
Florida [3]	0	1	2	2	0	0	1	1

See footnotes at end of table.

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended Aug. 22, 1936, and Aug. 24, 1935—Continued

Division and State	Poliomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended Aug. 22, 1936	Week ended Aug. 24, 1935	Week ended Aug. 22, 1936	Week ended Aug. 24, 1935	Week ended Aug. 22, 1936	Week ended Aug. 24, 1935	Week ended Aug. 22, 1936	Week ended Aug. 24, 1935
East South Central States:								
Kentucky	5	36	4	20	0	0	56	81
Tennessee [3]	24	6	14	15	0	0	53	47
Alabama [3]	21	1	15	3	1	0	29	22
Mississippi [3]	10	1	5	8	0	0	7	4
West South Central States:								
Arkansas	1	1	6	8	0	3	14	0
Louisiana [3]	2	6	1	2	0	0	29	22
Oklahoma [3] [5]	1	0	1	4	0	0	11	35
Texas [3]	1	4	11	31	0	16	50	58
Mountain States:								
Montana	1	0	9	3	24	0	3	3
Idaho	1	0	5	6	0	0	1	1
Wyoming	0	0	6	2	4	1	0	0
Colorado	0	0	4	15	1	0	5	3
New Mexico	0	0	2	14	0	0	2	11
Arizona	0	0	1	3	0	0	6	3
Utah [2]	0	1	5	16	1	0	1	0
Pacific States:								
Washington	2	2	12	8	1	4	2	12
Oregon	1	0	8	17	1	1	3	8
California	11	24	57	67	0	2	8	11
Total	133	807	804	877	51	30	571	749
First 34 weeks of year	1,500	4,329	184,756	181,256	6,296	5,341	7,467	9,997

[1] New York City only.
[2] Week ended earlier than Saturday.
[3] Typhus fever, week ended Aug. 22, 1936, 67 cases, as follows: Maryland, 1; Georgia, 40; Florida, 1; Tennessee, 1; Alabama, 12; Louisiana, 1; Oklahoma, 1; Texas, 10.
[4] Rocky Mountain spotted fever, week ended Aug. 22, 1936: Virginia, 5 cases.
[5] Exclusive of Oklahoma City and Tulsa.

SUMMARY OF MONTHLY REPORTS FROM STATES

The following reports of cases reported monthly by States is published weekly and covers only those States from which reports are received during the current week.

State	Menin-gococcus menin-gitis	Diph-theria	Influ-enza	Mala-ria	Mea-sles	Pellag-ra	Polio-mye-litis	Scarlet fever	Small-pox	Ty-phoid fever
July 1936										
Alabama	6	34	7	952	19	41	194	40	0	73
Georgia	7	36	33	1,597	10	74	14	26	0	179
Idaho	1	1	3	----	49	----	5	26	12	9
Illinois	27	109	40	40	67	----	28	607	56	46
Kansas	2	22	3	2	22	1	4	188	5	29
Louisiana	5	37	58	237	27	16	3	16	0	123
Maryland	14	21	6	2	426	1	2	71	0	28
Minnesota	2	19	1	4	149	----	3	199	14	6
Mississippi	1	15	337	805	274	488	23	19	0	94
Nevada	----	----	4	----	2	----	0	10	0	0
New Mexico	2	7	4	2	54	4	1	34	0	34
North Dakota	1	----	1	----	10	----	4	24	13	3
Oklahoma [1]	2	23	25	198	3	24	0	28	0	89
Rhode Island	3	7	----	----	46	----	0	36	0	2
South Carolina	----	69	115	1,114	23	123	1	6	0	35
Tennessee	9	19	107	244	69	46	60	36	0	121
Texas	4	71	183	3,933	251	71	1	66	----	161
West Virginia	13	12	12	----	32	1	3	65	1	32

[1] Exclusive of Oklahoma City and Tulsa.

Summary of monthly reports from states—Continued

July 1936

Chicken pox:	Cases
Alabama	12
Georgia	21
Idaho	11
Illinois	471
Kansas	13
Louisiana	1
Maryland	72
Minnesota	75
Mississippi	137
Nevada	3
New Mexico	11
North Dakota	14
Oklahoma [1]	5
Rhode Island	15
South Carolina	30
Tennessee	4
Texas	33
West Virginia	37
Conjunctivitis:	
Georgia	6
Maryland	1
New Mexico	1
Dengue:	
Louisiana	1
Mississippi	12
South Carolina	4
Texas	1
Diarrhea:	
Maryland	25
South Carolina	710
Dysentery:	
Georgia (amoebic)	15
Georgia (bacillary)	116
Illinois (amoebic)	5
Illinois (amoebic carriers)	31
Illinois (bacillary)	4
Kansas (amoebic)	1
Kansas (bacillary)	1
Louisiana (amoebic)	7
Maryland	8
Minnesota (amoebic)	3
Minnesota (bacillary)	2
Mississippi (amoebic)	125
Mississippi (bacillary)	1,580
New Mexico (amoebic)	1
New Mexico (bacillary)	18
Oklahoma [1]	71
Tennessee (amoebic)	3
Tennessee (bacillary)	117
Texas (amoebic)	1
Texas (bacillary)	36
Epidemic encephalitis:	
Alabama	4
Georgia	2
Illinois	4
Kansas	4
Louisiana	2
Maryland	1
Minnesota	1
North Dakota	1
Texas	3
Food poisoning:	
Maryland	7
German measles:	
Alabama	4
Illinois	32
Kansas	8
Maryland	56
New Mexico	4
Rhode Island	100
Tennessee	1
Glanders:	
Louisiana	1

Hookworm disease:	Cases
Georgia	204
Louisiana	10
Mississippi	302
South Carolina	47
Impetigo contagiosa:	
Kansas	1
Maryland	24
Tennessee	2
Lead poisoning:	
Illinois	4
Maryland	2
Leprosy:	
Louisiana	1
South Carolina	1
Mumps:	
Alabama	49
Georgia	127
Idaho	15
Illinois	220
Kansas	54
Louisiana	6
Maryland	343
Mississippi	314
Nevada	2
New Mexico	20
North Dakota	22
Oklahoma [1]	11
Rhode Island	21
South Carolina	46
Tennessee	41
Texas	238
West Virginia	26
Ophthalmia neonatorum:	
Alabama	3
Illinois	6
Maryland	1
Mississippi	17
Oklahoma [1]	1
South Carolina	5
Tennessee	5
Paratyphoid fever:	
Georgia	5
Illinois	4
Louisiana	4
South Carolina	8
Texas	6
Puerperal septicemia:	
Mississippi	16
Tennessee	1
Rabies in animals:	
Alabama	68
Illinois	37
Louisiana	27
Mississippi	17
South Carolina	28
Rabies in man:	
Illinois	1
Relapsing fever:	
Kansas	1
Rocky Mountain spotted fever:	
Idaho	6
Illinois	2
Maryland	14
Minnesota (delayed report)	1
Tennessee	6
West Virginia	1
Scabies:	
Oklahoma [1]	4
Tennessee	2
Septic sore throat:	
Georgia	17
Idaho	2
Illinois	8
Kansas	5

Septic sore throat—Con.	Cases
Louisiana	7
Maryland	5
Minnesota	9
New Mexico	1
Oklahoma [1]	28
Rhode Island	3
Tennessee	1
Tetanus:	
Alabama	7
Georgia	1
Illinois	7
Kansas	1
Louisiana	6
Maryland	8
Tennessee	3
Trachoma:	
Illinois	161
Mississippi	2
Oklahoma [1]	1
Tennessee	44
Tularaemia:	
Alabama	1
Georgia	3
Illinois	3
Kansas	1
Louisiana	3
Minnesota	12
Nevada	6
Tennessee	2
Texas	4
Typhus fever:	
Alabama	46
Georgia	116
Louisiana	1
Maryland	2
South Carolina	2
Texas	31
Undulant fever:	
Alabama	6
Georgia	13
Illinois	7
Kansas	5
Louisiana	3
Maryland	6
Minnesota	9
Mississippi	1
New Mexico	3
Oklahoma [1]	9
Tennessee	5
Texas	9
Vincent's infection:	
Idaho	1
Illinois	24
Kansas	3
Maryland	10
North Dakota	4
Oklahoma [1]	6
Tennessee	4
Whooping cough:	
Alabama	46
Georgia	46
Idaho	24
Illinois	945
Kansas	67
Louisiana	117
Maryland	450
Minnesota	133
Mississippi	293
Nevada	8
New Mexico	69
North Dakota	7
Oklahoma [1]	16
Rhode Island	34
South Carolina	38
Tennessee	51
Texas	13
West Virginia	42

[1] Exclusive of Oklahoma City and Tulsa.

PLAGUE INFECTION IN CALIFORNIA AND UTAH

Plague infection has been reported proved by animal inoculation in a collection of 315 fleas taken from 11 ground squirrels, *Citellus grammurus*, shot on July 28 in Clear Creek Canyon about 15 miles northeast of Cove Fort, Sevier County, Utah.

The State Director of Public Health of California has reported plague infection proved by animal inoculation in 5 squirrels from a ranch 33 miles north and 13 miles west of Alturus, Modoc County, Calif., making a total of 10 squirrels proved positive for plague from that focus.

WEEKLY REPORTS FROM CITIES

City reports for week ended Aug. 15, 1936

This table summarizes the reports received weekly from a selected list of 140 cities for the purpose of showing a cross section of the current urban incidence of the communicable diseases listed in the table. Weekly reports are received from about 700 cities, from which the data are tabulated and filed for reference.

State and city	Diphtheria cases	Influenza		Measles cases	Pneumonia deaths	Scarlet fever cases	Smallpox cases	Tuberculosis deaths	Typhoid fever cases	Whooping cough cases	Deaths, all causes
		Cases	Deaths								
Maine:											
Portland	0		0	0	0	0	0	1	0	4	18
New Hampshire:											
Concord	0		0	0	2	0	0	1	0	0	8
Manchester	0		0	0	0	1	0	0	0	0	6
Nashua	0			0		0	0		0	0	
Vermont:											
Barre											
Burlington	0		0	0	0	0	0	0	0	2	6
Rutland	0		0	1	0	0	0	0	0	2	3
Massachusetts:											
Boston	2		0	11	9	12	0	8	1	83	181
Fall River	0		0	0	1	3	0	0	0	0	29
Springfield	0		0	2	0	0	0	0	0	0	27
Worcester	0		0	10	1	2	0	1	0	16	40
Rhode Island:											
Pawtucket	0		0	0	0	0	0	0	0	0	
Providence	0		0	0	5	0	0	3	1	20	49
Connecticut:											
Bridgeport	0		0	3	2	0	0	1	0	6	25
Hartford	0		0	1	2	2	0	0	1	1	39
New Haven	0		0	0	1	0	0	0	1	12	33
New York:											
Buffalo	0		0	6	1	6	0	7	0	10	127
New York	13		2	51	46	25	0	77	18	115	1,131
Rochester	0		0	0	3	0	0	0	2	1	46
Syracuse	0		0	0	3	2	0	0	0	7	39
New Jersey:											
Camden	0		0	1	0	2	0	0	0	4	24
Newark	0		0	2	3	2	0	8	0	21	84
Trenton	0		0	0	3	2	0	1	0	0	29
Pennsylvania:											
Philadelphia	3	1	1	8	11	9	0	25	3	93	376
Pittsburgh	0		0	1	9	6	0	6	0	20	145
Reading	0		0	0	0	0	0	0	6	6	26
Ohio:											
Cincinnati	4		0	1	3	1	0	8	0	2	106
Cleveland	0	3	0	10	7	19	0	9	2	74	145
Columbus	1		0	0	2	2	0	4	0	6	76
Toledo	0		0	2	3	0	0	3	3	36	61
Indiana:											
Anderson	0		0	0	1	1	0	0	0	5	12
Fort Wayne	0		0	0	2	2	0	0	0	0	22
Indianapolis	0		0	0	2	3	0	3	1	6	91
Muncie	0		0	0	1	0	0	0	0	0	10
South Bend	0		0	0	0	0	0	0	0	1	13
Terre Haute	0		0	0	0	0	0	0	0	0	

City reports for week ended Aug. 15, 1936—Continued

State and city	Diphtheria cases	Influenza		Measles cases	Pneumonia deaths	Scarlet fever cases	Smallpox cases	Tuberculosis deaths	Typhoid fever cases	Whooping cough cases	Deaths, all causes
		Cases	Deaths								
Illinois:											
Alton	0	------	0	0	0	1	0	0	0	3	4
Chicago	7	------	0	5	16	45	0	43	6	93	598
Elgin	0	------	0	0	0	0	0	0	0	1	12
Moline	0	------	0	0	1	0	0	1	0	0	11
Springfield	0	------	0	0	0	1	0	0	1	1	24
Michigan:											
Detroit	0	1	0	8	7	23	0	25	0	105	235
Flint	1	------	0	0	1	5	0	3	0	7	20
Grand Rapids	0	------	0	0	0	2	0	0	0	17	23
Wisconsin:											
Kenosha	0	------	0	0	0	2	0	0	0	0	5
Madison	0	------	0	0	0	1	0	0	0	18	4
Milwaukee	0	------	0	1	6	14	0	5	0	47	94
Racine	0	------	0	1	0	2	0	0	1	5	15
Superior	0	------	0	0	0	0	0	0	0	0	6
Minnesota:											
Duluth	1	------	1	0	0	3	0	1	1	3	17
Minneapolis	0	------	0	1	3	1	0	0	0	3	82
St. Paul	0	------	0	2	3	2	0	2	0	16	54
Iowa:											
Cedar Rapids	0	------	--------	0	-------	0	0	-------	1	0	--------
Davenport	0	------	--------	0	-------	2	0	-------	0	0	--------
Des Moines	2	------	--------	0	-------	0	0	-------	0	1	--------
Sioux City	0	------	--------	0	-------	3	1	-------	0	0	--------
Waterloo	0	------	--------	0	-------	0	0	-------	0	2	--------
Missouri:											
Kansas City	0	------	0	0	6	6	0	8	0	1	115
St. Joseph	----	------	----	----	----	----	----	----	----	----	----
St. Louis	4	------	0	1	4	8	0	8	1	11	188
North Dakota:											
Fargo	0	------	0	0	0	3	0	0	0	0	7
Grand Forks	0	------	--------	0	-------	0	0	-------	0	0	--------
Minot	0	------	0	0	0	0	0	0	0	0	3
South Dakota:											
Aberdeen	0	------	--------	0	-------	0	0	-------	1	0	--------
Nebraska:											
Omaha	0	------	0	1	1	0	0	3	0	0	41
Kansas:											
Lawrence	0	------	0	0	0	0	0	0	0	0	6
Topeka	0	1	1	0	1	0	0	0	0	0	16
Wichita	0	------	0	0	2	0	0	0	1	2	33
Delaware:											
Wilmington	0	------	0	0	0	1	0	2	0	9	27
Maryland:											
Baltimore	1	2	0	16	6	5	0	7	0	84	172
Cumberland	0	------	0	0	0	0	0	0	2	0	12
Frederick	0	------	0	0	0	0	0	0	0	0	3
District of Columbia:											
Washington	4	------	0	4	4	2	0	8	1	41	140
Virginia:											
Lynchburg	0	------	0	0	0	0	0	0	0	0	8
Norfolk	0	------	0	0	3	2	0	3	0	0	28
Richmond	0	------	0	0	4	2	0	5	1	1	56
Roanoke	0	------	0	0	0	0	0	1	3	0	15
West Virginia:											
Charleston	0	------	0	0	0	0	0	1	1	0	19
Huntington	3	------	--------	0	0	1	0	0	0	0	--------
Wheeling	0	------	0	1	2	0	0	0	0	2	19
North Carolina:											
Gastonia	0	------	0	0	0	0	0	0	0	0	--------
Raleigh	0	------	0	0	1	0	0	2	0	0	16
Wilmington	0	------	0	0	2	1	0	0	0	2	14
Winston-Salem	0	------	0	0	0	0	0	0	1	0	10
South Carolina:											
Charleston	0	2	0	0	2	0	0	0	1	0	22
Columbia	----	------	----	----	----	----	----	----	----	----	----
Florence	0	------	0	0	0	0	0	0	0	0	5
Greenville	1	------	0	1	0	1	0	1	0	0	11
Georgia:											
Atlanta	0	1	0	0	3	4	0	0	0	1	69
Brunswick	0	------	0	0	0	0	0	0	0	0	2
Savannah	2	2	0	0	0	0	0	1	1	1	20
Florida:											
Miami	0	------	0	1	0	0	0	2	0	4	26
Tampa	1	------	0	2	1	1	0	0	0	0	20

City reports for week ended Aug. 15, 1936—Continued

State and city	Diphtheria cases	Influenza		Measles cases	Pneumonia deaths	Scarlet fever cases	Smallpox cases	Tuberculosis deaths	Typhoid fever cases	Whooping cough cases	Deaths, all causes
		Cases	Deaths								
Kentucky:											
Ashland	0	----	----	0	----	2	0	----	0	0	0
Covington	0	----	0	0	2	0	0	0	0	0	12
Lexington	0	----	0	0	1	0	0	3	0	0	25
Louisville	1	----	0	0	3	4	0	2	2	13	80
Tennessee:											
Knoxville	2	----	2	0	2	0	0	2	1	0	33
Memphis	1	----	0	0	6	0	0	4	5	9	93
Nashville	2	----	0	0	6	0	0	0	0	0	65
Alabama:											
Birmingham	0	----	0	0	3	1	0	3	2	0	53
Mobile	0	----	0	0	2	0	0	2	0	0	29
Montgomery	0	----	----	0	----	0	0	----	0	0	----
Arkansas:											
Fort Smith	----	----	----	----	----	----	----	----	----	----	----
Little Rock	0	----	0	0	0	2	0	3	1	0	3
Louisiana:											
Lake Charles	0	----	0	0	0	0	0	0	0	0	4
New Orleans	6	3	0	3	6	0	0	14	8	0	151
Shreveport	0	----	0	0	1	0	0	2	1	0	41
Oklahoma:											
Oklahoma City	1	4	0	0	5	0	0	0	2	2	61
Tulsa	0	----	----	0	----	0	0	----	0	4	----
Texas:											
Dallas	2	----	0	2	9	1	0	2	0	0	107
Fort Worth	4	----	0	0	3	0	0	2	0	0	53
Galveston	1	----	0	0	1	0	0	0	0	0	21
Houston	7	----	0	1	3	1	0	9	2	1	99
San Antonio	0	----	0	1	1	0	0	7	0	0	82
Montana:											
Billings	0	----	0	0	0	0	0	0	0	1	3
Great Falls	0	----	0	0	0	0	0	0	0	5	8
Helena	0	----	0	0	0	2	0	0	0	0	5
Missoula	0	----	0	0	0	0	0	2	0	0	4
Idaho:											
Boise	0	----	0	0	1	0	0	0	0	0	8
Colorado:											
Colorado Springs	0	----	0	0	1	1	0	2	0	0	17
Denver	1	----	0	2	6	1	0	1	0	38	89
Pueblo	0	----	0	0	0	1	0	0	1	0	11
New Mexico:											
Albuquerque	0	----	0	0	0	0	0	4	1	0	17
Utah:											
Salt Lake City	0	----	0	7	0	3	0	1	0	8	31
Nevada:											
Reno	----	----	----	----	----	----	----	----	----	----	----
Washington:											
Seattle	----	----	----	----	----	----	----	----	----	----	----
Spokane	0	----	0	3	1	2	0	1	0	2	31
Tacoma	0	----	0	0	0	2	0	0	2	2	23
Oregon:											
Portland	0	----	0	0	3	0	0	3	0	16	72
Salem	0	----	----	0	----	0	0	----	1	0	----
California:											
Los Angeles	10	7	0	9	15	8	0	20	1	41	323
Sacramento	2	----	0	1	1	9	0	1	0	22	37
San Francisco	1	1	1	2	3	11	0	14	0	11	164

City reports for week ended Aug. 15, 1936—Continued

State and city	Meningococcus meningitis		Poliomyelitis cases	State and city	Meningococcus meningitis		Poliomyelitis cases
	Cases	Deaths			Cases	Deaths	
Massachusetts:				District of Columbia:			
Boston	1	0	1	Washington	3	1	0
Worcester	1	0	0	Virginia:			
New York:				Lynchburg	0	0	1
Buffalo	1	0	1	Florida:			
New York	7	4	4	Miami	0	0	2
New Jersey:				Tennessee:			
Newark	1	0	0	Memphis	0	0	1
Pennsylvania:				Nashville	0	0	2
Philadelphia	1	0	0	Birmingham	0	0	3
Ohio:				Louisiana:			
Cincinnati	2	1	0	New Orleans	1	1	0
Columbus	1	0	0	Texas:			
Toledo	0	0	1	Dallas	0	0	1
Illinois:				Houston	1	0	0
Chicago	1	0	3	Colorado:			
Moline	0	0	1	Denver	1	0	1
Michigan:				Washington:			
Detroit	0	0	1	Spokane	0	0	2
Kansas:				Oregon:			
Topeka	0	0	1	Salem	0	0	1
Maryland:				California:			
Baltimore	3	1	0	Los Angeles	1	1	1

Dengue.—Cases: Grand Rapids, 1.
Epidemic encephalitis.—Cases: New York, 2; Philadelphia, 2; Grand Rapids, 1; Duluth, 1; Wichita, 2; Memphis, 1; Denver, 2; Albuquerque, 1; Portland, Oreg., 1.
Pellagra.—Cases: Hartford, 1; Winston-Salem, 1; Atlanta, 1; Savannah, 7; Louisville, 1; Dallas, 1.
Typhus fever.—Cases: New York, 2; Roanoke, 1; Atlanta, 3; Savannah, 4; Mobile, 1; Dallas, 1.

FOREIGN AND INSULAR

CUBA

Habana—Communicable diseases—4 weeks ended August 1, 1936.—During the 4 weeks ended August 1, 1936, certain communicable diseases were reported in Habana, Cuba, as follows:

Disease	Cases	Deaths	Disease	Cases	Deaths
Diphtheria	3		Poliomyelitis	[1] 3	
Leprosy	2	1	Tuberculosis	13	3
Malaria	[1] 71	1	Typhoid fever	[1] 93	22

[1] Includes imported cases.

Provinces—Notifiable diseases—4 weeks ended July 25, 1936.—During the 4 weeks ended July 25, 1936, cases of certain notifiable diseases were reported in the Provinces of Cuba as follows:

Disease	Pinar del Rio	Habana	Matanzas	Santa Clara	Camaguey	Oriente	Total
Cancer		3		3	1	4	11
Chicken pox		4		1	3		8
Diphtheria		1		1		2	4
Leprosy						6	6
Malaria	103	74	77	147	180	596	1,177
Measles		4			6	9	19
Poliomyelitis				3	4	1	8
Scarlet fever		1					1
Tuberculosis	21	7	13	28	9	37	115
Typhoid fever	19	110	65	71	18	51	334

ITALY

Communicable diseases—4 weeks ended June 21, 1936.—During the 4 weeks ended June 21, 1936, cases of certain communicable diseases were reported in Italy as follows:

Disease	May 25–31		June 1–7		June 8–14		June 15–21	
	Cases	Communes affected	Cases	Communes affected	Cases	Communes affected	Cases	Communes affected
Anthrax	13	13	16	16	12	9	17	16
Cerebrospinal meningitis	18	16	23	22	19	17	16	15
Chicken pox	383	163	312	139	294	156	268	133
Diphtheria and croup	356	194	388	226	318	191	301	174
Dysentery	9	7	3	3	12	10	9	7
Hookworm disease	17	14	23	14	12	8	32	9
Lethargic encephalitis	1	1	3	2	1	1	1	1
Measles	2,211	352	2,174	354	1,978	358	1,971	360
Mumps	434	126	368	110	320	105	263	96
Paratyphoid fever	58	49	66	48	47	40	59	52
Poliomyelitis	36	25	57	40	44	29	76	53
Puerperal fever	28	28	25	22	34	32	23	21
Scarlet fever	278	128	274	126	235	114	278	122
Smallpox and varioloid	1	1					1	1
Typhoid fever	261	148	248	152	284	178	325	179
Undulant fever	96	64	110	71	117	68	117	88
Whooping cough	700	185	836	215	705	205	769	224

JAMAICA

Communicable diseases—4 weeks ended August 8, 1936.—During the 4 weeks ended August 8, 1936, cases of certain communicable diseases were reported in Kingston, Jamaica, and in the island outside of Kingston, as follows:

Disease	Kingston	Other localities	Disease	Kingston	Other localities
Chicken pox		4	Puerperal fever		1
Diphtheria	1	1	Scarlet fever	1	
Dysentery	31	75	Tuberculosis	24	70
Erysipelas	1	1	Typhoid fever	26	87
Leprosy	1				

MALTESE ISLANDS

Vital statistics—1935.—The following table shows the births and deaths reported in the Maltese Islands during the year 1935, together with the number of deaths reported from certain notifiable diseases.

Estimated civil population	256,140	Deaths from—Continued	
Live births	8,701	Influenza	2
Births per 1,000 population	33.96	Measles	57
Deaths	6,018	Pneumonia	192
Deaths per 1,000 population	23.49	Puerperal sepsis	8
Deaths under 1 year per 1,000 live births	285.71	Scarlet fever	2
Deaths from:		Tuberculosis (respiratory system)	125
Cerebrospinal fever	1	Typhoid fever	32
Diphtheria	19	Undulant fever	80
Erysipelas	1	Whooping cough	14

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER

NOTE.—A table giving current information of the world prevalence of quarantinable diseases appeared in the PUBLIC HEALTH REPORTS for August 28, 1936, pages 1214-1227. A similar cumulative table will appear in the PUBLIC HEALTH REPORTS to be issued September 25, 1936, and thereafter, at least for the time being, in the issue published on the last Friday of each month.

Plague

Algeria—Oran Department—Mostaganem.—On August 18, 1936, 1 suspected case of plague was reported at Mostaganem, Oran Department, Algeria.

China—Manchuria—Kirin Province.—According to information dated August 20, 1936, 5 cases of plague were reported in Kirin Province, Manchuria, China.

Hawaii Territory—Island of Hawaii—Hamakua District—Paauhau Sector.—A rat found on August 13, 1936, in Paauhau Sector, Hamakua District, Hawaii Island, Hawaii Territory, has been proved plague-infected.

Peru.—During the month of July, 4 cases of plague with 3 deaths were reported in Peru.

United States.—A report of plague-infection in California and Utah appears on page 1257 of this issue of PUBLIC HEALTH REPORTS.

Smallpox

Ceylon—Colombo.—During the week ended August 8, 1936, 1 case of smallpox was reported in Colombo, Ceylon.

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