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A STATISTICAL STUDY OF 500 PSYCHOPATHIC PRISONERS 1

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This is a report prepared from information contained in the clinical records of 500 prisoners received at and subsequently discharged from the Medical Center for Federal Prisoners located at Springfield, Mo. These prisoners were received by transfer from other Federal penal and correctional institutions primarily because they were behavior problems at the referring institutions, and therefore proper subjects for admission to the special unit built at the Medical Center to accommodate such persons. At one time or another all 500 subjects had been given a diagnosis of constitutional psychopathic inferiority (C. P. I.), or, to use the more common term, psychopathic personality.

Almost half (48 percent) of these psychopathic prisoners came from penitentiary-type institutions, 35 percent from reformatories, 2 percent from the National Training School for Boys, and the rest from a miscellaneous assortment of other Federal correctional institutions. Many of them had been in two or more Federal institutions before they came to Springfield.

The special unit for psychopaths at the Medical Center was opened on July 2, 1940. The subjects used in the present study represent those who were discharged from the institution during the period July 2, 1940, to December 31, 1944, inclusive. Very conveniently the number came out exactly 500. The discharges rather than the admissions were purposely selected in order to get some follow-up data on postmural antisocial activity.

The value of statistical presentation is greatly enhanced if com-

¹ From the Bureau of Medical Services, Medical Center for Federal Prisoners, Springfield, Mo.

parison can be made with other data of a similar character. In the present instance we were interested in how the subject group differed from male prisoners in all Federal penal and correctional institutions and how it differed from the male civilian population of comparable age. Since it was not possible to get satisfactory data on discharged Federal prisoners, use was made of the admission data on male prisoners received in Federal institutions during the years 1941, 1942, 1943, and 1944 (1, 2, 3, 4). Data concerning the civilian population were obtained from the Bureau of the Census Reports for 1940, after making the necessary corrections for sex and age (5). Religious data for the civilian population were obtained from the World Almanac and Book of Facts based on a 1936 church census (6). The Selective Service report for 1943-44 yielded some information about physical defects (7).

Utilizing these sources of information, it was possible to compare psychopathic prisoners with Federal prisoners for the following factors: Age, race, nativity, marital status, current offense, and current sentence. It was likewise possible to compare the psychopathic prisoners with civilians for the following factors: Age, race, nativity, marital status, education, occupation, religion, physical defects, and population of residence.

DEMOGRAPHIC DATA

These data are the general type of information contained in police blotters or obtained in census enumerations. It is fairly reliable since it is not usually confidential except in the case of women who may wish to conceal their ages. In the present instance the study deals entirely with the male sex, and the exception is not applicable. As far as the cases in this study are concerned, the occupational history is the least reliable because in most instances the information was obtained from the prisoners themselves or from their relatives. The educational record is also not too accurate, for the same reason. Prisoners are inclined to exaggerate their educational and occupational attainments.

Age.—Comparative ages for psychopathic prisoners, all Federal prisoners, and civilians are presented in table 1.

Table 1.—Comparative ages of male psychopathic prisoners, Federal prisoners, and civilians

Age	Psycho- paths	Federal prisoners	Civilians	Age	Psycho- paths	Federal prisoners	Civilians
15-19	Percent 7 37 32 12 5	Percent 8 17 22 16 13	Percent 13 9 13 10 10	40-49 50 and over 15-39 Median years	Percent 6 1 93 24.8	Percent 15 9 76 30.8	Percent 17 28 55 36. 9

The median age given for Federal prisoners is the age on admission, whereas the median age given for psychopathic prisoners is the age on discharge. Since the latter served a median of 2.4 years on their sentences, it follows that the median age on admission for the psychopathic prisoners is 22.4 years. At any rate, with or without this correction, it is apparent that there is a definite tendency for Federal prisoners to come from the younger age groups of the civilian adolescent and adult population. This tendency is unmistakable in the case of psychopathic prisoners. A definite relationship exists between age and criminal psychopathy. Something happens to psychopathic prisoners as they become older. They may reform completely, they may become model prisoners, or they may die young. At any rate, the age factor certainly deserves further investigative effort.

Nativity.—Table 2 shows the results on the nativity of psychopathic prisoners, Federal prisoners, and civilians.

Table 2.—Nativity of male psychopathic prisoners, Federal prisoners, and civilians

Nativity	Psychopaths	Federal prisoners	Civilians
Native born Foreign born	Percent 96	Percent 84 16	Percent 95

The percent of Federal prisoners who are foreign-born is three times the percent of foreign-born civilians. This is accounted for in a large measure by foreigners who violate immigration laws. However, there is no significant difference between civilians and psychopathic prisoners in this respect. As a matter of fact, 87 percent of the psychopaths were native-born and also had native parents. Criminal psychopaths are a native product and not a foreign importation.

Race.—Racial distribution for the three groups is presented in table 3.

Table 3.—Distribution according to race of male psychopathic prisoners, Federal prisoners, and civilians

Race	Psychopaths	Federal prisoners	Civilians
White	Percent 84 13 3	Percent 77 20 3	Percent 89 10 1

The proportion of nonwhite individuals among Federal prisoners is about two times the proportion of nonwhite individuals among civilians. However, the percent of nonwhite psychopaths is lower than the percent of nonwhite Federal prisoners. Eighty-three per-

cent of the white psychopathic prisoners stemmed from Nordic ancestry, 5 percent from Latin, 4 percent from Slavic, 2 percent from Semitic, and 6 percent from mixed ancestry.

Marital status.—Table 4 shows the distribution according to marital status for the three groups, ages 15 to 39.

Table 4.—Distribution according to marital status for male psychopathic prisoners, Federal prisoners, and civilians, in the age group 15 to 39

Marital status	Psychopaths	Federal prisoners	Civilians
Single Common-law Married Divorced or separated. Widowed.	Percent 72 5 7 16	Percent 44 44 10 2	Percent 51 47 11 1

¹ Includes only the divorced.

It is rather odd that there should be fewer single men among Federal prisoners than among civilians. Aside from that the results are what one would expect. There is a higher proportion of unsuccessful marriages among Federal prisoners and psychopathic prisoners than among civilians. Since the psychopaths are younger, it is natural that there should be a high percentage who had never married. Furthermore, psychopaths are not willing to accept the responsibilities of marriage, as indicated by the high percentage of failures, 70 percent of the marriages ending in divorce or separation.

Population of residence.—Sixty-nine percent of the psychopathic prisoners, prior to the age of 16, lived in communities of 5,000 or more population; 15 percent in rural nonfarm communities; 14 percent on farms; and 2 percent in institutions principally. On the other hand, 57 percent of the civilians lived in communities of 2,500 or more population; 20 percent in rural nonfarm communities; and 23 percent on farms. Even with the disparity in population standards, 5,000 as against 2,500, the results show a strong tendency for psychopathic prisoners to come from urban areas. Here is another factor which deserves further investigation. Do psychopaths tend to migrate to cities, or do cities produce psychopaths?

Education.—Two percent of the psychopathic prisoners had had no formal education; 12 percent attended one to four grades; 51 percent, five to eight grades; 31 percent, some high school; and 4 percent attended college for some period of time. Comparable figures for the civilian population are: 1 percent, no education; 6 percent, one to four grades; 36 percent, five to eight grades; 46 percent, one or more years of high school; and 11 percent, one or more years of college. The median grade for the psychopathic prisoners was found to be 7.7, and for the civilians 9.7. The fact that psychopathic

criminals are not as well educated as civilians may be due to lack of opportunity, or more likely, to indifference to education.

Occupation.—Comparison of psychopathic prisoners with civilians, from the standpoint of occupation, reveals only two essential differences. Whereas civilians show 14 percent who are classified as managers and officials, psychopathic prisoners show none in this category. On the other hand, 60 percent of the psychopathic subjects were classed as laborers or operatives, that is, unskilled or at best semiskilled laborers, in contrast to 33 percent of the civilians so classified. This is based on the number of psychopathic prisoners who gave an occupation. Actually 10 percent of the total number had never worked, and an additional 13 percent were engaged in illegal occupations principally. This is simply another indication of the irresponsibility of psychopaths.

Religion.—As a general rule, the psychopathic prisoners do not take religion seriously. Eighteen percent had no religious preference; and of those who did, 62 percent claimed that they had been brought up in the Protestant faith, 35 percent in the Catholic faith, and 3 percent in the Jewish faith. The church census for 1936 uncorrected for sex and age, shows the following distribution: Protestant, 56 percent, Catholic, 36 percent, and Jewish, 8 percent. These differences are too small to be of any significance.

ANTISOCIAL HISTORY

The antisocial activities of prisoners are accorded a great deal of prominence in their clinical records. Not only is the history of delinquency obtained by several institutional officials, but verified information is also secured from reports submitted by the Federal Bureau of Investigation, court records, police reports, probation officers' reports, social service agencies, and to a lesser extent from relatives. Major offenses resulting in penitentiary sentences are not likely to escape notice, but minor offenses punishable by fines or short jail terms may be overlooked.

Current offense.—Psychopathic prisoners show a decided penchant for stealing cars, 39 percent of the subjects having been committed for violation of the National Motor Vehicle Theft Act, in contrast to 9 percent of all Federal prisoners convicted for violating the same act. Apparently there is some significant relationship between car thievery and criminal psychopathy. It is possible that youth may be a factor, since the median age on admission for all Federal prisoners convicted of car stealing is 22.8 years, which is almost identical with the median age of 22.4 years, the admission age for psychopathic prisoners. At any rate, it would be worth while to investigate this relationship more fully.

The next highest in frequency of offenses among psychopathic prisoners is sodomy, 13 percent having been charged with that offense. All of these were military court-martial cases. Sodomy cases account for 1 percent of the offenses committed by all Federal prisoners. The present administrative policy is to concentrate homosexual individuals at the Medical Center as much as possible, rather than to keep them in the other penal and correctional institutions.

There are two other differences between the groups which are worth mentioning. Eighteen percent of Federal prisoners were convicted of violating liquor laws, but only 2 percent of the psychopathic prisoners were convicted of similar offenses. Likewise, 17 percent of the Federal prisoners ran afoul of the Selective Service Act, in contrast to 3 percent of the psychopathic prisoners.

Current sentence.—The average sentence imposed on psychopathic prisoners for their current offense was 55.2 months, in contrast to 27.6 months for Federal offenders. The median sentences were 43.2 and 15.6 months, respectively. The biggest difference lies in sentences of 1 year and 1 day, or less, only 4 percent of the psychopathic prisoners having such sentences, in contrast to 42 percent of all Federal offenders. On the other hand, 27 percent of the psychopathic subjects had sentences of 5 to 10 years, as opposed to 7 percent of all the Federal prisoners. Evidently courts are not too kindly disposed toward psychopaths. As an additional point of interest, 20 percent of the psychopathic subjects were serving two or more sentences either concurrently or consecutively, and another 9 percent were parole or conditional release violators for which they had to serve time in addition to that imposed by the new sentence.

First arrest.—There is general agreement that criminal psychopaths get into trouble with the law at an early age, and the current findings are no exception. The median age at the time of the first arrest was 16.9 years, and this figure would undoubtedly have been considerably lower if more complete data had been available. Fifteen percent of the psychopathic criminals in this study had a police record before the age of 13. The bulk of the first arrests were for crimes against property (47 percent), next came truancy and juvenile delinquency (13 percent), and third, sexual offenses (12 percent). Fifty-five percent were committed to jail or to some type of penal and correctional institution after their first known arrest, 26 percent were dismissed, and only 13 percent were placed on probation. The rather small number placed on probation is surprising.

Ostensible reason for antisocial activity.—The word ostensible is used purposely. No one knows why psychopaths commit crimes, least of all themselves. However, the reasons as elicited by the examining psychiatrists, together with percentage distributions, are presented for what they are worth: Faulty upbringing, poor discipline, or

vicious home, 50 percent; abnormal personality organization, 37 percent; bad companions, 5 percent; economic distress, 3 percent; ignorance of the law, 3 percent; and alcoholic intoxication, 2 percent.

Principal antisocial activity.—Apparently the subjects have little respect for property. Sixty-two percent committed crimes against property as their major antisocial activity, 17 percent indulged in illegal sexual activities, 7 percent preferred crimes against the person, and the rest specialized in violating laws of public policy, postal laws, revenue and immigration laws. Larceny requires less ingenuity than being a successful counterfeiter or confidence man. This may account for the preponderance of simple theft among psychopaths. The aggressiveness and "assaultiveness" of some psychopathic prisoners would lead one to suspect a greater percentage of crimes of violence than shown by the results.

Total number of commitments.—One usually thinks of psychopathic prisoners as confirmed recidivists. Yet 19 percent of our present group of subjects were first offenders, 22 percent had no previous record of commitments under sentence of 1 year or less, and 46 percent had no previous record of commitments under sentence of more than 1 year. Nevertheless, considering the group as a whole, each inmate averaged 3.8 commitments under sentence of 1 year or less. and 2.0 commitments under sentence of 1 year or more, including the current commitment. Expressed in medians, the figures are 3.1 and 1.7, respectively. Compared with all Federal offenders, the psychopathic prisoners show a much higher proportion of recidivists-81 percent compared with 49 percent. Prior to being admitted to the Medical Center, 37 percent of the subjects had at one time or another been inmates of juvenile institutions, 50 percent, of jails, and 98 percent, of penitentiaries or adult penal institutions. Twenty percent of the subjects had been in all three types of institutions, juvenile, jail, and adult penal. In other words, our subjects had had ample opportunity for rehabilitation before coming to Springfield.

OTHER PERSONAL DATA

The information under this heading is usually obtained by the psychiatrist and a representative of the institutional social service department; and verifications, if any, generally come from relatives and social service agencies. Some of the information is quite subjective in character, and therefore not too reliable.

Adjustment before the age of 16.—Thirty-nine percent of the subjects were considered obedient and well-behaved as children. The figure is undoubtedly too high because most parents are reluctant to admit the faults of their children. Another 22 percent were described as obedient, but inclined to get into mischief or trouble. Thirty-one

percent were admittedly headstrong, willful, and difficult to manage. No adequate information could be obtained on 6 percent, and 2 percent were brought up principally in institutions.

Economic status last year not in custody.—Apparently crime does not pay as far as the present subjects are concerned. Twenty-six percent lived at home, dependent upon their parents, 46 percent barely made a living, and only 28 percent were in comfortable economic circumstances. None were well-to-do.

Sexual history.—Sixty percent of the subjects admitted heterosexual experiences only, 17 percent both heterosexual and homosexual, 14 percent homosexual experiences only, and 9 percent of the subjects did not give an adequate enough history for classification. Of the pure homosexuals, 7 percent took the active male role only, 71 percent the female inactive role only, and 22 percent assumed both roles. Of the bisexual individuals, 39 percent preferred the male role in homosexual relationships, 33 percent the female role, and 28 percent either role. In other words, 50 percent of all individuals who admitted homosexual experiences preferred the female role, 25 percent the male role, and 25 percent were satisfied either way.

By including common-law relationship with the single, 77 percent of the subjects had never been married. Of those who had been married, 64 percent had no children, 23 percent had one child, 11 percent, two children, and only 2 percent three or more children. The reproduction rate for married psychopathic prisoners is, therefore, less than one child per person. If there is anything to heredity, the psychopathic strain may be eliminated eventually.

Habits.—Twenty-nine percent admitted excessive indulgence in alcohol, 27 percent had a definite history of nomadism, 27 percent were lazy and shiftless, 4 percent gave a history of drug addiction, and 4 percent gave a history of excessive gambling. No definite information about habits was available in 37 percent of the cases. One would expect a higher percentage of alcoholics than indicated above, likewise a higher percentage of gamblers. Undoubtedly a more exhaustive inquiry would change the picture considerably.

Military history.—Sixty-five percent of the subjects had no military experience, 20 percent had peacetime military experience only, 12 percent were in military service during World War II, and 3 percent had other types of military experiences. Of those who had military experience, only 18 percent received an honorable discharge, and 82 percent received a discharge other than honorable. One can readily see why the military authorities should avoid the recruitment of psychopaths. They do not react at all well to regimentation.

Past medical history.—Thirty-three percent of the psychopathic prisoners gave no history of unusual or permanently disabling diseases, 47 percent had the usual diseases of childhood with no sequelae,

6 percent had acute infectious diseases with sequelae, 3 percent received injuries resulting in some permanent damage, and 11 percent suffered chronic disabling diseases. Twenty-one percent gave a history of gonorrhea, 7 percent of syphilis, and 7 percent of both syphilis and gonorrhea. In other words, 65 percent denied venereal disease of any kind. One would expect a higher incidence, at least of gonorrhea, than was reported, despite the fact that a substantial number of the subjects were homosexuals.

Even psychopaths hesitate to admit mental disease. Therefore, it is not surprising that 82 percent of the subjects denied any mental disease. Five percent gave a history of nervous breakdown, unspecified, 3 percent of epilepsy, and 10 percent of frank psychoses. If verified information could be obtained, the percentage of mental abnormality would be correspondingly higher.

FAMILY HISTORY AND RELATIONSHIPS

Subjective information regarding family history is not at all easy to procure. For some reason an individual may readily admit that he himself is a blackguard, but he will tend to conceal any detrimental facts about his ancestry. Therefore, most of the data have to be gleaned from verified sources of information, principally letters from relatives. The mothers reveal the skeletons in the paternal closet, and the fathers disclose the darker side of the maternal ancestry.

Psychopathic determinants.—No information could be obtained in 62 percent of the cases concerning psychopathic determinants in the parents and grandparents. Alcoholism occurred in 21 percent of the families; criminalism in 13 percent; nervous breakdown, unspecified, ir 8 percent; insanity in 5 percent; and feeble-mindedness in 2 percent. More than likely a tainted heredity is present in more than 50 percent of the subjects, if adequate information could be obtained.

Continuity of home.—Only 35 percent of the subjects came from a home intact up to the time they became 18 years of age. Comparable data are not available for the civilian population. Nevertheless, the high percentage of psychopaths coming from disrupted homes suggests some relationship between the continuity of the home and psychopathy. At least it warrants further investigation. The disruption of the home occurred for the following reasons: Death of mother, 6 percent; death of father, 11 percent; death of both parents, 4 percent; separation or divorce of parents, 18 percent; reared by various relatives, 11 percent; brought up in foster homes, 10 percent; brought up in an orphanage, 2 percent; and other conditions, 3 percent.

Economic status of parents.—It is surprising that in 43 percent of the cases the parents were in comfortable economic circumstances, and in

5 percent the parents were well-to-do. Thirty-seven percent of the parents were in marginal economic circumstances, and 15 percent submarginal, if not actually dependent. Apparently the continuity of the home is a more important factor than the economic status of the parents, as far as criminal psychopathy is concerned.

Familial likes and dislikes.—In 14 percent of the cases there existed an unusual attachment to the mother or stepmother, and in 2 percent of the cases an unusual attachment to the father or stepfather. On the other hand, 19 percent of the subjects expressed an unusual dislike for their fathers or stepfathers, 5 percent an unusual dislike for their mothers or stepmothers, and 5 percent an unusual dislike for both parents. Perhaps, by the use of psychoanalytic technique, these factors could be more fully explored as to their relationship to psychopathic criminality.

Sibling constellation.—Fifteen percent of the cases were only children; 21 percent, the oldest of the siblings; 22 percent, the youngest; and 42 percent, intermediate. The sibling position probably has little to do with the presence or absence of psychopathic tendencies.

INTRAMURAL RECORDS

Under this heading are included data of an objective character compiled from examinations, observations, and reports submitted by the hospital personnel. Some errors also creep into this type of information, but in general it is more reliable than subjective information.

Intelligence.—The distribution of the subjects according to intelligence is as follows: Very superior (I. Q. 120 and over), 7 percent; bright normal (I. Q. 110-119), 17 percent; average (I. Q. 90-109), 44 percent; dull normal (I. Q. 80-89), 17 percent; borderline (I. Q. 70-79), 7 percent; high-grade moron (I. Q. 55-69), 6 percent; low-grade moron (I. Q. 40-54), 2 percent. The mean I. Q. is 97, and the median I. Q. is 102. This confirms the observation frequently made, that psychopaths possess normal intelligence. It will be noted that a small percentage of the subjects were intellectually classified as morons. Some objection may be made to the inclusion of morons among psychopaths. However, the individuals in question displayed the typical behavior of psychopaths at the referring institutions, and as an administrative convenience they were transferred to the psychopathic unit at the Medical Center.

As a matter of fact, there is no reason why psychopathy and feeble-mindedness cannot coexist. The outstanding characteristic of a psychopath is his lack of capacity for becoming a socialized human being. This suggests that we are dealing with a deficiency type of disorder analogous to that found in the feeble-minded person. It fits in with Thorndike's theory that there are three types or aspects of intelligence (8). First is the abstract which enables us to learn

academic subjects like reading, writing, mathematics, philosophy, and so on. Second is the concrete which enables us to do things with our hands, to acquire manual skill, and also artistic skill in painting, sculpture, or playing a musical instrument. Third is the social which enables us to live with our fellow men in at least a semblance of law and order. It is in social intelligence that the ordinary psychopath is found wanting. The feeble-minded psychopath is simply deficient in all three types of intelligence.

Psychiatric classification.—Although all the subjects at one time or another were considered psychopathic personalities, the final diagnoses were made as follows: Psychopathic personality with asocial and amoral trends, 42 percent; with pathologic sexuality, 32 percent; with emotional instability, 16 percent; mental deficiency, 5 percent; psychosis, 4 percent; and other, 1 percent. In other words, 90 percent were uncomplicated cases of psychopathic personality, and 10 percent had the complicating feature of a psychosis or mental deficiency added to psychopathic traits.

Physical disabilities.—Eighty-nine percent of the subjects had no physical defects, or had only minor defects, and were capable of normal physical exertion; 9 percent had chronic diseases or physical disabilities for which hospitalization was not needed, and 2 percent had chronic diseases necessitating hospitalization.

By Selective Service standards, all the subjects would be rejected for military service on the basis of the psychiatric classification. However, if physical defects alone are considered 26 percent of the psychopaths would be rejected. According to the 1943 Selective Service report 36 percent of the registrants examined at Induction Stations were found unsuitable for military service. However; this figure includes those who were turned down for mental disease, mental deficiency, educational deficiency, and for nonmedical reasons. Correcting for these factors leaves a residual of 28 percent rejected for purely medical conditions. Thus psychopaths compare favorably with registrants as far as their physical condition is concerned. The comparative results on physical defects as shown in table 5 likewise

Table 5.—Principal medical diagnosis for physically defective psychopathic prisoners compared with principal physical cause for rejection of civilian registrants for military service

Physical defect	Psycho- paths	Regis- trants	Physical defect	Psycho- paths	Regis- trants
Dental, mouth, gums	Percent 4 20 4 12 16 3 7	Percent 3 11 1 13 12 1 12	Nose, sinus, throat Lungs ! Hemorrhoids. Neurological EarOther	Percent 2 8 5 8 3 8	Percent 1 8 1 8 7 22

¹ Includes tuberculosis.

reveal no significant differences except for the higher proportion of visual defects among psychopaths.

Work record.—Thirteen percent of the psychopathic subjects were unemployable for one reason or another, 12 percent were assigned as orderlies or common laborers, 54 percent were placed on maintenance work, 10 percent worked in the industries, 3 percent were employed as technical assistants, 7 percent as clerks, and 1 percent were given other assignments. Inmates working in the industries have the best assignment, inasmuch as they earn industrial good time as well as a small monetary wage. The industrial good time simply means that the individual is released from the institution at an earlier date as a reward for his work. The average number of work assignments per year per man was 1.4, or 2.2 assignments for the period of time spent at the Medical Center.

Although psychopaths are generally described as poor workers, 6 percent made an excellent work adjustment, 36 percent a good work adjustment, and 18 percent a satisfactory work adjustment. In other words, the work reports were satisfactory or better in 60 percent of the cases. Of the remaining 40 percent, 13 percent were unemployable, 12 percent were poor workers, and 15 percent were fair, that is, only did what they were told to do and did not take any initiative.

Institutional adjustment.—Forty-three percent of the subjects made a poor dormitory adjustment, 17 percent an average adjustment, and 40 percent an above-average adjustment. In other words, more than 50 percent were not any worse in their behavior than the average inmate of a penitentiary.

Analysis of adverse behavior reports also confirms this impression. Thirty-four percent were not reported for misbehavior during their stay in the institution, 32 percent were reported only for minor infractions, 15 percent were reported for insolence, 15 percent for fighting, 12 percent for agitating, 7 percent for destruction of property, 5 percent for paranoid attitude, 5 percent for "assaultiveness," 5 percent for engaging in homosexual practices, and 4 percent for conniving. It is understood that duplications occur, some individuals engaging in all types of misbehavior. The average number of disciplinary reports per year was 1.4, or 2.2 for the period of time spent at the Medical Center.

The disciplinary action taken on adverse behavior reports was distributed as follows: No action or no report of action, 35 percent; reprimand and warning, 13 percent; loss of privileges, 45 percent; segregation, 40 percent; loss of good time, 11 percent; new sentence, 2 percent; reprimand and loss of privileges, 7 percent; loss of privileges and segregation, 27 percent; and segregation and loss of good time, 9 percent.

Those who were placed in punitive segregation spent an average of 14.8 weeks per year in segregation. Those who were placed in isolation for administrative or therapeutic reasons, of which there were 7 percent, spent an average of 10 weeks per year in such segregation. If this is prorated among all the subjects, punitive segregation averages 6.1 weeks per year, and administrative or therapeutic segregation averages 0.7 week per year.

Treatment.—All the subjects received routine psychiatric care, and this care consisted principally of occasional interviews in regard to progress in the institution, assignment to work and quarters, and participation in various recreational and religious activities. Approximately one-third of the subjects took part in group therapy programs. In addition, upwards of 8 percent were given more intensive individual psychotherapeutic interviews. Two percent were given electric shock treatment. Fifty-two percent required medical attention, and 14 percent surgical treatment.

Sixty-four percent of the subjects did not participate in any sort of educational program either at the referring institution or at the Medical Center, 18 percent enrolled in school but showed little or no progress, 15 percent completed correspondence courses, 2 percent completed formal school work, and only 1 percent completed vocational training.

The treatment record for the psychopathic prisoners leaves much to be desired. However, treatment cannot be forced on prisoners. If they are unwilling to cooperate, nothing can be done about it. Cooperativeness is not one of the virtues of psychopaths, and they do not react very favorably to anything forced upon them. The best that one can do is to present the opportunity, and hope that the individual will take advantage of it.

Yet, whatever the treatment, it was not entirely ineffective. Thirteen percent of the subjects improved physically during their sojourn at the Medical Center, 85 percent showed no change in their physical condition, and 2 percent became worse from a physical standpoint. In regard to their behavior, 31 percent improved, 11 percent became worse, and 58 percent remained unchanged.

The prognosis given on discharge was as follows: Medical good, 76 percent; medical fair, 15 percent; and medical poor, 9 percent; delinquency good, 9 percent; delinquency fair, 23 percent; and delinquency poor, 68 percent.

Discharge data.—The subjects served an average of 33.9 months on their sentences, of which 18.5 months were spent at the Medical Center. Eight percent were discharged from the Medical Center by commutation of sentence, remission of sentence, or executive clemency; only 2 percent were released on parole; 64 percent were discharged

on conditional release; 14 percent were set free after completing their maximum sentences; 11 percent were transferred to other institutions; and 1 percent died. Comparable figures for all male Federal offenders show that 40 percent were discharged on conditional release, 32 percent on maximum expiration of sentence, 26 percent on parole, and 2 percent under other conditions exclusive of transfer. In other words, far fewer psychopathic prisoners than Federal prisoners are released on parole. On the other hand, a substantially larger number of Federal prisoners are required to serve their full sentences. This is probably due to the fact that a good many Federal offenders served sentences of less than 1 year and 1 day. The conditional release law does not apply to such cases.

FOLLOW-UP DATA

The only satisfactory follow-up is to have a social worker trace each case individually. Since that could not be done, the Federal Bureau of Investigation reports of subsequent arrests were used. Hence the only follow-up data available concerns antisocial activity resulting in arrest after the individual was discharged from the Medical Center.

Two of the subjects were picked up on detainers and given new sentences to serve, 5 were admitted to mental hospitals, and 4 died. These 11 cases are excluded from the ensuing follow-up statistics. There were 51 cases who were transferred to other Federal penal and correctional institutions. These cases were also excluded from the follow-up data since their sentences had not expired.

The follow-up results on the remaining 438 cases are shown in table 6. The subjects had been out in the civilian population an average of 19.2 months and a median of 16.8 months.

Table 6.—Recidivism according to time elapsed since release from Medical Center based on follow-up reports for 438 male psychopathic prisoners

	Time	elapsed sin	ice release ((years)
	0.0-0.9	1.0-1.9	2.0-2.9	3.0-4.9
Recidivist	Percent 21 79	Percent 31 69	Percent 37 63	Percent 37 63

These results are encouraging. Psychopaths may be bad prisoners, but the majority of them managed to stay out of trouble with the law even after they had been out 3 years or more. It appears that those who relapsed to antisocial behavior did so during the first 3 years of freedom. In fact, more than half of those who relapsed did so during the first year, and this indicates the need for some kind of assistance during this transition period. Of course, the subjects after

release were in the general civilian population during a time when it was easy to get a job, and this may account for the comparatively good showing.

Whether or not the individual had some supervision after release makes some difference. Of those who had no supervision, 36 percent became recidivists. Of those who had supervision, 29 percent became recidivists. Since this supervision is rather nominal, the results might be further improved by a more effective type of supervision, that is, by decreasing the case load of probation officers so that they could devote more time to each individual. Of those subjects who ran afoul of the law after release from the Medical Center, 32 percent were returned to Federal institutions, 61 percent were returned to non-Federal institutions, and 7 percent served time in both Federal and non-Federal institutions.

DISCUSSION

One of the values of a statistical study such as this lies in finding leads for further research. One of these leads is the relationship of age to psychopathy. A suggested method of tackling this problem would be to review the records of prisoners admitted to Federal penal and correctional institutions some 25 years ago, and attempt to pick out a group of psychopaths on the basis of these records. The later careers of these individuals could then be followed to see what has happened to them.

Another promising lead is the relationship of marital status to psychopathy. By using the group mentioned above, one might determine how many psychopaths remain single, whether or not marital failures continue, and if psychopaths reproduced to the same extent as normal individuals.

Why psychopaths tend to come from urban areas is another question which should be investigated further. To investigate this problem, one would have to select a group of psychopaths and make a detailed study of their places of residence from birth on, what parts of cities they lived in, where their parents came from, the type of home, and other data having to do with the physical environment.

The relationship of car stealing to psychopathy is another factor which is worth investigating. Violators of the National Motor Vehicle Theft Act among the psychopaths should be studied with a view to finding out the reason for car thievery, whether or not the parents owned a car, whether use of the family car was denied, whether or not the best girl friend had to be impressed, and so on.

The large percentage of subjects who came from disrupted homes presents a problem which is also worth further attention. In order to investigate this question properly, it would be necessary to use a

control group of normal individuals. We have only a vague idea concerning the number of disrupted homes among the general civilian population.

There are other factors which should be analyzed in greater detail, such as the influence of heredity, training in early childhood, interpersonal relationships between members of the family, etc. It might be possible to clarify some of these topics by using hypnoanalysis on a group of subjects. Other problems would require painstaking histories and search for verified information and records in the field.

SUMMARY

The present investigation consists of a general statistical analysis of the clinical records of 500 psychopathic prisoners admitted to and subsequently discharged from the Medical Center for Federal Prisoners at Springfield, Mo. The subjects were discharged from the institution during the period July 2, 1940, to December 31, 1944, inclusive.

The easiest way to summarize the findings is to describe a "statistical" criminal psychopath composed of medians and highest frequencies. Such a composite individual would be a white, male prisoner, 22 years of age at the time of his admission to one of the Federal penal and correctional institutions, to which he would be committed for violation of the National Motor Vehicle Theft Act for a term of 43 months. His family history would be negative for psychopathic determinants such as insanity, alcoholism, etc. The continuity of his parental home would be disrupted before he attained his eighteenth birthday by the death of one or both parents or by the separation or divorce of his parents. The chances are about equal that his parents would be in poor or comfortable economic circumstances. He would have a normal attachment to his parents and siblings. Among the latter he would occupy an intermediate position, that is, he would be neither the youngest nor the oldest child.

This hypothetical person would be brought up in the Protestant faith, but would discontinue church affiliations as an adult. He would be native born, of native parentage, and of Nordic descent. He would not quite finish the eighth grade, and his occupation would be that of a more or less unskilled laborer or operative. He would live in a city of 5,000 or more population. He would be single, in poor economic circumstances, and as a child would be described as head-strong, willful, and difficult to manage, or in frequent mischief. He

would make a normal heterosexual adjustment. He very probably would have a history of alcoholism, nomadism, or shiftlessness. In general he would not give a history of military service, but if he did, he would have been given a discharge other than honorable.

He would have a bad antisocial record, his first arrest occurring at the age of 16 for larceny or some other crime against property, for which he would be sent to a penal or correctional institution. He would have a total of 3 commitments under sentence of 1 year or less, and at least one prior commitment under sentence of more than 1 year. His principal antisocial activity would be committing crimes against property, ostensibly because he was inadequately trained or brought up in an undesirable home. He would serve most of his time in adult penal institutions and jails. He would be transferred from a Federal penitentiary to the Medical Center.

He would give a history of the usual diseases of childhood without sequelae, but would deny venereal disease and mental disease. He would have an I. Q. of 102, indicating normal intelligence. He would have no incapacitating physical defects, and would be capable of normal physical exertion. The most important medical diagnosis would be some kind of visual defect, in addition to the psychiatric diagnosis of psychopathic personality with asocial and amoral trends. He would serve 28 months on his current sentence, and 16 of these months would be spent at the Medical Center.

During his stay at the Medical Center he would be assigned to some type of maintenance work, and would have at least one change of work assignment. His work would be good or satisfactory. He would make an average or above-average dormitory adjustment. He would have one disciplinary report for some minor infraction of the rules, and as punishment would be deprived of certain privileges for a time. During his stay at the institution, he would receive routine psychiatric care, and would require attention for some medical condition. He would not take part in an educational program. He would pass through and out of the institution without any appreciable change, either from a physical or behavioral standpoint. He would be discharged on conditional release, with a poor prognosis regarding delinquency, and he would not be recommended for any further treatment. Despite the poor delinquency prognosis, 17 months after release he would still be on the good side of the law, indicating that a bad prisoner is not necessarily an unrehabilitated criminal.

ACKNOWLEDGMENT

The authors wish to express appreciation to Dr. Henry Coe Langher, of the Bureau of Prisons, for his helpful suggestions and assistance in tabulating the data.

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PREVALENCE OF COMMUNICABLE DISEASES IN THE UNITED **STATES**

February 24-March 23, 1946

The accompanying table summarizes the prevalence of nine important communicable diseases, based on weekly telegraphic reports from State health departments. The reports from each State for each week are published in the Public Health Reports under the section "Prevalence of disease." The table gives the number of cases of these diseases for the 4 weeks ended March 23, 1946, the number reported for the corresponding period in 1945, and the median number for the years 1941-45.

DISEASES ABOVE MEDIAN PREVALENCE

Diphtheria.—For the 4 weeks ended March 23 there were 1,399 cases of diphtheria reported as compared with 1,062, 972, and 957 for the corresponding 4 weeks in 1945, 1944, and 1943, respectively. The preceding 5-year median was represented by the 1945 figure (1,062 cases). In the Middle Atlantic and Mountain sections the numbers of cases were about normal, but in all other sections the incidence was relatively high, the increases ranging from 1.2 times the preceding 5-year median in the West South Central section to 2.3 times the median in the East North Central section. For the country as a whole the current incidence was the highest reported for this period since 1939 when 1,724 cases were reported for the corresponding 4-week period.

Influenza.—The number of cases of influenza (18,400) reported for the current period was about 40 percent higher than the 1945 incidence, but it was only slightly above the preceding 5-year median (17,615 cases). The greatest excess over the normal seasonal expectancy was reported from the West South Central section, with minor increases in the New England, East North Central, and Pacific regions; in all other sections the incidence was relatively low.

Measles.—The number of cases of measles rose from 48,914 during the preceding 4 weeks to 117,342 during the 4 weeks ended March 23. The number of cases was 8 times the number reported for the corresponding period in 1945 and 1.4 times the 1941–45 median. Each section of the country reported an increase over the 1945 figures and each one except the New England, West North Central, and South Atlantic sections reported an increase over the normal (median) seasonal expectancy; in each of the 3 sections mentioned the incidence was considerably below the 1941–45 median. The highest incidence was reported from the Middle Atlantic, East North Central, and Pacific sections.

Smallpox.—The smallpox incidence during the current 4-week period was about the same as during the corresponding weeks in 1945, but the number of cases (41) was less than 50 percent of the 1941–45 median. Of the total cases 11 were reported from the West South Central and 12 occurred in the Pacific section, as compared with median expectancies of 13 and 2 cases, respectively. In other sections where cases occurred the numbers either closely approximated or fell below the median. Including the last week in March there were 34 cases in the 5-week period; 26 in Washington and 8 in California.

Typhoid and paratyphoid fever.—The incidence of these diseases during the current 4-week period stood at the 1945 level, but the number of cases (198) was only about 80 percent of the 1941–45 median. In the New England and Mountain sections the incidence was higher than the median expectancy, and in the West South Central region the incidence was about normal, but in all other sections the incidence was relatively low.

Whooping cough.—The number of reported cases of whooping cough (7,406) was 70 percent of the 1945 incidence during the corresponding 4 weeks and 50 percent of the 1941–45 median figure. For the country as a whole the current incidence is the lowest for this period in the 9 years for which these data are available. The greatest declines from the preceding 5-year medians occurred in the Middle Atlantic and East North Central regions, but in each section of the country the incidence was considerably below the seasonal expectancy.

Number of reported cases of 9 communicable diseases in the United States during the 4-week period Feb. 24-Mar. 23, 1946, the number for the corresponding period in 1945, and the median number of cases reported for the corresponding period, 1941-45.

Division	Cur- rent· period	1945	5-year me- dian	Cur- rent period	1945	5-year me- dian	Cur- rent period	1945	5-year me- dian	
	D	iphthe	ria	I	nfluenza	3, 1	1	Measles	2	
United States. New England Middle Atlantic. East North Central. West North Central. South Atlantic. East South Central West South Central West South Central Mountain Pacific.	1, 399 44 148 328 111 200 128 260 50 130	1, 062 29 107 127 117 138 108 183 51 202	1, 062 25 140 142 80 156 88 209 52 99	18, 400 94 71 710 134 4, 299 1, 391 9, 939 1, 144 618	13, 358 113 48 311 103 4, 414 888 6, 662 656 163	17, 615 83 108 533 231 6, 029 1, 609 6, 921 1, 257 553	117, 342 3, 099 35, 849 29, 382 7, 371 9, 193 4, 305 7, 343 4, 969 15, 831	14, 337 1, 159 1, 239 1, 018 490 1, 475 525 2, 737 640 5, 054	87, 789 6, 153 21, 783 13, 993 7, 699 13, 329 3, 863 5, 634 4, 004 8, 469	
		ningoco ieningit		Po	liomyel	itis	Scarlet fever			
United States. New England Middle Atlantic. East North Central. West North Central. South Atlantic. East South Central. West South Central. West South Central. Mountain Pacific.	756 37 147 148 55 121 72 86 12 78	1, 018 45 239 188 70 158 93 101 13	1, 018 50 239 188 70 158 93 101 13	142 9 15 13 2 34 8 19 10	112 5 32 9 7 17 13 16 1	80 4 7 9 7 10 9 12 5	16, 020 1, 364 4, 844 4, 413 1, 386 1, 522 455 465 517 1, 054	26, 097 2, 361 6, 739 6, 713 2, 256 2, 869 775 791 1, 182 2, 411	18, 079 2, 361 5, 269 5, 420 2, 005 1, 184 775 429 848 897	
	S	mallpo	ĸ		oid and phoid fe		Whooping cough 2			
United States. New England. Middle Atlantic. East North Central West North Central. South Atlantic. East South Central West South Central Mountain. Pacific.	41 0 0 6 5 2 5 11 0 12	39 0 0 13 10 2 6 5 3	90 0 0 18 12 2 6 13 3	198 19 25 24 7 38 16 39 12 18	196 13 43 28 8 35 17 23 23 6	241 8 44 31 10 59 18 40 9 24	7, 406 1, 168 1, 778 1, 467 252 863 220 747 353 558	10, 667 1, 599 2, 137 1, 569 377 1, 521 435 1, 196 399 1, 434	15, 039 1, 465 3, 230 3, 041 632 1, 626 566 6, 196 1, 497	

¹ Mississippi and New York excluded; New York City included.

² Mississippi excluded.

MORTALITY, ALL CAUSES

For the 4 weeks ended March 23 there were 39,097 deaths from all causes reported to the Bureau of the Census by 93 large cities. The preceding 3-year average was 39,079 deaths. During the first week of the 4-week period the number of deaths was 5.3 percent above the 3-year average and there was a minor increase in the second week; in the third and fourth weeks, however, the declines from the averages were 4.5 and 1.8 percent, respectively, making the increase during the current 4 weeks less than 0.05 percent over the 1943–45 average.

Poliomyelitis.—For the 4 weeks ended March 23 there were 142 cases of poliomyelitis reported, the number being 1.3 times the 1945 figure for the corresponding weeks and 1.8 times the 1941–45 median.

Compared with the 1945 figures the current incidence was higher in 6 of the geographic sections and lower in 3 sections, the Middle Atlantic, West North Central and East South Central. As compared with the preceding 5-year medians the current incidence was higher in 7 sections, being lower in the West North Central and about the same in the East South Central section. The greatest increases over the normal seasonal expectancy were reported from the Atlantic and Pacific coast sections.

DISEASES BELOW MEDIAN PREVALENCE

Meningococcus meningitis.—For the 4 weeks ended March 23 there were 756 cases of this disease reported, as compared with 733 during the preceding 4 weeks. The number of cases was 75 percent of the 1941–45 median, which is represented by the 1945 figure (1,018 cases). In the Mountain section the number of cases was about normal, but in all other sections the incidence was considerably below the preceding 5-year median figures.

Scarlet fever.—The number of reported cases of scarlet fever (16,020) was about 60 percent of the number reported for the corresponding period in 1945 and 90 percent of the 1941–45 median. The South Atlantic and West South Central sections reported a few more cases than might normally be expected, but in all other sections the incidence was considerably below the preceding 5-year median.

DEATHS DURING WEEK ENDED MARCH 23, 1946

[From the Weekly Mortality index, issued by the Bureau of the Census, Department of Commerce]

Data for 93 large cities of the United States: Total deaths Average for 3 prior years Total deaths, first 12 weeks of year	9, 569 9, 747	9, 640
A verage for 3 prior years Total deaths, first 12 weeks of year	9, 747	9, 640
Total deaths, first 12 weeks of year		
	123, 115	117, 103
Deaths under 1 year of age	582	650
Average for 3 prior years	651	
Deaths under 1 year of age, first 12 weeks of year Data from industrial insurance companies:	7, 253	7, 672
	67, 174, 982	67, 158, 424
Number of death claims.	14, 354	15, 526
Death claims per 1,000 policies in force, annual rate	11. 1	12.1
Death claims per 1,000 policies, first 12 weeks of year, annual rate	11.4	11.0

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

REPORTS FROM STATES FOR WEEK ENDED MARCH 30, 1946 Summary

Of the total of 28 cases of smallpox, as compared with 14 last week and 31 for the 5-year median, 19 occurred in the State of Washington. Up to March 30, 26 cases with 5 deaths had been reported in the Seattle-King County area. To the same date, 7 cases, with no deaths, had been reported in San Francisco, Calif.¹

Following increases during the past 2 weeks, the incidence of diphtheria declined. A total of 327 cases of diphtheria was reported for the current week, as compared with 368 last week and a 5-year median of 242. States reporting more than 10 cases each are New York (27), Pennsylvania (24), Ohio (21), Illinois (25), Maryland (18), Texas (19), and California (29). The cumulative total, 4,938, is more than reported for a corresponding period since 1940.

Of 35,676 cases of measles, as compared with 34,300 last week and 26,183 for the 5-year median, 20,030 cases, or 56 percent, occurred in the Middle Atlantic and East North Central areas. In the 4 other widely separated States reporting more than 660 cases each, Massachusetts (1,149), Kansas (1,077), Texas (1,923) and California (3,047), an aggregate of 7,196 cases occurred. The total to date is 222,217, as compared with 306,417 for the corresponding period in 1944, and a 5-year median of 210,408.

A total of 149 cases of meningococcus meningitis was reported (as compared with 166 last week and a 5-year median of 216), of which New York reported 24, Ohio 12, Illinois 17, and California 9. The cumulative total, 2,548 cases, is a smaller number than reported for the corresponding period of any of the past 3 years.

Of the total of 25 cases of poliomyelitis, New Mexico and California reported 4 each and New York and Florida 3 each. Although the current incidence is only slightly above the median, the total to date, 518 cases, due to slow decline in some localities early in the year, is more than for the corresponding period of any year since 1928. In that year, while the figure for the period was 586, the incidence throughout the remainder of the year was not excessively high.

Deaths recorded for the week in 92 large cities of the United States aggregated 9,426, as compared with 9,533 last week, 9,112 and 9,442 for the corresponding weeks of 1945 and 1944, and a 3-year average of 9,507. The cumulative total is 132,127, as compared with 125,811 for the corresponding period last year.

¹ See p. 585.

Telegraphic morbidity reports from State health officers for the week ended Mar. 30, 1946, and comparison with corresponding week of 1945 and 5-year median

In these tables a zero indicates a definite report, while leaders imply that, although none was reported, cases may have occurred.

	D	iphthe	ria		Influen	za		Measle	es		feningl ningoco	
Division and State	w	eek ed—	Me-		Veek ded—	Me- dian		Veek ded—	Me-		eek led—	Me- dian
	Mar. 30, 1946	Mar. 31, 1945	1941- 45	Mar. 30, 1946	Mar. 31, 1945	1941- 45	Mar 30, 1946	31.	1041	Mar. 30, 1946	Mar. 31, 1945	1941~ 45
NEW ENGLAND												
Maine	0	0 0 0 6 0	0		3 1 49 5		1, 14	3 5 9 198 5	1,085		0 0 9 1	0 0 9 1
MIDDLE ATLANTIC												
New York New Jersey Pennsylvania	27 4 24	16 3 12	17 3 11		1 3			1 63	1, 653	5	5	30 5 11
EAST NORTH CENTRAL		10						۔ ا				_
Ohio Indiana. Illinois Michigan 3	21 6 25 7	10 7 6 55	. 9 6 15 8	8	33	23 23 4	1, 04, 1, 62, 2, 410	39 102 104	294 1, 271 1, 295	1 17	2 17	7 2 17 7
Wisconsin	0	0	1	22	46	55	2, 548	42	1, 447	2	1	1
Minnesota	5	1	1			<u></u>	32	11	126	5	3	3
Missouri North Dakota	4 5 1 5 3	0 10 1 2	2 4 0 2	1 10		5 3	118 434 16	18 8	157	0 5 1 0	2 6 1 5	2 6 0 0
Nebraska Kansas	3 2	4 2	4	<u>1</u>	2	9	194		125 646	1 1	0	0 2
SOUTH ATLANTIC			1			_	,				1	
Delaware Maryland ² District of Columbia Virginia	1 18 0	0 11 1	0 4 1	7	2	8 1	26 582 350	53 6	22 393 91	0 2 1	1 6 0	1 5 2
West Virginia North Carolina	4	2	5	180 3	215 7	311 22	628 130	52	621 209	4 3 3 1	6	5 4
South Carolina Georgia Florida	9 5 4 4	5 6 4 1	8 5 4 3	482 7 3	389 13 2	26 473 45 5	470 584 267 231		1, 090 347 264 260	3 1 2 3	5 2 2 2	3 2 4 2
EAST SOUTH CENTRAL		1							i	l		
Kentucky Tennessee Alabama Mississippi ³	7 7 8 5	5 8 7 6	5 4 7 3	69 22 93	27 66	9 57 324	342 297 164	12 81 13	111 378 320	2 3 6 3	5 7 8 3	5 7 5 3
WEST SOUTH CENTRAL			- 1							1	1	
Arkansas Louisiana Oklahoma Texas	10 5 5 19	4 9 5 33	4 3 2 34	98 109 73 1, 105	33 55 131 1, 153	87 8 141 1, 143	222 310 213 1, 923	54 24 26 718	264 121 95 1, 825	3 5 0 4	2 2 3 16	1 2 1 16
MOUNTAIN		l						1		- 1		
MontanaIdaho	3 2	0	0	2 25	21 1	13	45 103	10 14	150 27	1	1	0
W yoming	2 3 9	07	1 -	35	23	12 40	27 639	11 11	104 354	Ŏ	0	0 2
Arizona.	0	2	0	4 111	1 92	96	21 136	10 11	133 109	1	1	0
Utah ²	5 0 0	0	0 -	13	15	15	658	156	156	Ö	ŏ	0
PACIFIC			1				7		1	٦	٦	v
Washington Oregon California	7 8 29	10 15 21	6 3 19	<u>2</u> 55	12 13	2 22 109	625 352 3, 047	234 86 1, 142	261 135 1, 142	2 2 9	1 0 23	3 1 23
. Total	327	307	242	2, 571	2, 431	3, 465	5, 676	4, 206 2		149	216	216
3 weeks	4, 938	, 020	3, 820 1	75, 984	51, 155	61, 452 2	22,217					3, 232

¹ New York City only.

² Period ended earlier than Saturday.

Telegraphic morbidity reports from State health officers for the week ended Mar. 30, 1946, and comparison with corresponding week of 1945 and 5-year median—Con.

	Pol	iomyel	lit is	80	arlet fe	ver	8	mallpo	x	Typho typ	oid and hoid fe	para-
Division and State	end	eek ed	Me- dian		eek ed—	Me-	w end	eek ed—	Me- dian	w end	eek ed—	Me-
	Mar. 30, 1946	Mar. 31, 1945	1941- 45	Mar. 30, 1946	Mar. 31, 1945	1941- 45	Mar. 30, 1946	Mar. 31, 1945	1941- 45	Mar. 30, 1946	'Mar. 31, 1945	1941- 45
NEW ENGLAND												
Maine	0 0 0 0 0	0	l ó	6 11 222 7	18 6 434 33	13 14 11 431 17 71	0 0 0 0	00000	0 0 0 0	0 0 1 0 0	0 0 0 0	0 0 0 0
MIDDLE ATLANTIC New York New Jersey Pennsylvania	3 0 0	4 0 0	1 0 0	895 167 472	161	640 204 494	0	0	0	2 0 1	3 2 9	4 1 2
EAST NORTH CENTRAL Ohio	1 0 0	1 2 0 0	0000	97 246 111	122 341 328	414 154 341 328	3 0 0	0 3 1 4	0 1 1 0	3 1 4 3	1 0 3 0	1 0 3 2
WEST NORTH CENTRAL Minnesota	0	0	0	49	317 116	317 89	0	0	0	0	0	0
Iowa Missouri North Dakota South Dakota Nebraska Kansas	0000	0 1 0 0 1 1	0 0 0 0 0	60 55 16 8 41 71	82 98 25 11 82 81	64 80 21 11 55 81	1 0 0 0 0	0 0 0 0 1 1	1 0 0 0 0	0 1 3 0 0	0 2 0 0 0	0 1 0 0 0
SOUTH ATLANTIC Delaware Maryland 2	0	0	0	9 85	11 173	11 146	0	0	0	0	0	0
District of Codumbia Virginia West Virginia North Carolina South Carolina Georgia Florida	0 1 0 2 0 0 3	0 0 0 3 1 1	00000	25 104 50 39 18 12	50 114 38 69 10 27 7	20 76 39 32 5 15	00000	0 0 0 0 0 1	0000	0 1 0 1 0 2 0	0 0 1 0 1 3 1	0 2 1 0 1 3 2
EAST SOUTH CENTRAL Kentucky Tennessee Alabama Mississippi	0 0 1 0	3 0 1 0	1 0 0 1	31 35 44 6	68 38 16 38	71 48 16 9	0 0 1 0	0 0 0 2	0 0 0 1	1 2 5 0	0 1 3 0	1 2 2 1
WEST SOUTH CENTRAL Arkansas Louisiana Oklahoma Texas MOUNTAIN	2 0 0 2	1 0 1 5	0 0 0	11 13 8 53	10 15 24 118	7 7 17 118	0 1 0 0	1 0 1 0	1 0 1 3	2 2 0 13	2 2 2 4	1 2 1 5
Montana Idaho Wyoming Colorado New Mexico Arizona	0 0 1 4	00000	0000	6 8 5 27 7 13	14 51 12 72 18 49	32 7 19 39 4 19	0 0 0 0	0 0 2 0 0	00000	0 0 0 2 1	0 1 0 0 1	0 0 0 0 1
Vtan P	0	0	0	25 0 41 29	69 1 160 43	49 1 40 12	0 0 19	1	1	0	0	0
Oregon	0 4	0	1	229	318	136	0	0	0	2	45	3
Total	25	28	19	4, 139	5, 897	4, 465	26	18	31	55		
3 weeks	518	453	330	44, 541	73, 991	52, 173	125	136	302	573	719	953

Period ended earlier than Saturday.
 Including paratyphoid fever reported separately, as follows: Vermont 1; Connecticut 1; Indiana 1; Georgia 1; Texas 1.

Telegraphic morbidity reports from State health officers for the week ended Mar. 30, 1946, and comparison with corresponding week of 1945 and 5-year median—Con.

	Wh	ooping	cough			Wee	k ende	dMar. 3	0, 1946		
Diminion 3 C4-4-	Week	ended-	Me-		ysent	ery	En-	Rocky	T	Ту-	, , , , ,
Division and State	Mar. 30, 1946	Mar. 31, 1945	dian 1941- 45	Ame	Bacil- lary	Un- speci- fied	ceph- alitis, infec- tious	spot-	Tula- remia		du- lant
NEW ENGLAND										-	
Maine	12	3	3 33	sls		l			1		ļ.
New Hampshire	1 2	1	il ii								
Vermont.	50 150										:
Massachusetts	21				1						
Connecticut	60			1							
MIDDLE ATLANTIC					Į	l		1	1		
New York	200				1				.] {
New Jersey. Pennsylvania.	141 117] 1		·		- -	
•	***	122	100	1							١ '
EAST NORTH CENTRAL						l		l			1.
OhioIndiana	70 26										3
Illinois	78	57	7 95	1			. 2	!			}
Michigan 3	101						. 1				
Wisconsin	81	53	101	ļ					1		18
WEST NORTH CENTRAL		1		l	ŀ	1	l		l		İ
Minnesota	7										1 . 4
Iowa Missouri	8										4 54
North Dakota			. 2								
South Dakota		3									2
Nebraska Kansas	25	11 47									
SOUTH ATLANTIC		1 *	1 **								'
		١.,									
Delaware Maryland ²	1 20	10 51				i					<u>î</u>
District of Columbia	5	4				l					
Virginia	14	48				37					1
West Virginia North Carolina	15 98	14 94									
South Carolina	67	88			3						
Georgia	22	28	28		2				1	4	4
Florida	22	7	18	1		·	2	-		8	
EAST SOUTH CENTRAL				1		1	İ				
Kentucky	24	28	49			<u>-</u>					
Tennessee Alabama	18 18	14 21	23 51			7	3		2	2	1 5
Mississippi *									i		
WEST SOUTH CENTRAL											
Arkansas	4	17	17	1							1
Louisiana	2	5	5							2	ī
Oklahoma Texas	132	13 302	13 302	1 4	198	12		<u>1</u>	<u>2</u>	<u>1</u> 2	1 14
	102	302	302	3	130	12		. •	4	12	14
MOUNTAIN	_										
MontanaIdaho	1 7	9	10 5						1		
Wyoming	i	3	3								<u>2</u>
Colorado	22	30	30								
New Mexico	15	19	13 40			16					
Utah 2	24	57	51						1		····i
Nevada											 -
PACIFIC	I								1		
Washington	31	22	34								2
Oregon	7 83	28 344	28 344	6	3		;			i	4
]-											
Total	1, 817	2, 551	3, 414	24	208	74	9	1	16	33	95
Same week, 1945	2, 551			38	291	71	5	0	20	43	85
Verage, 1945	2, 905			46	223	70	9	8 2	18	5 29 L	
3 weeks: 1946	23, 619 31, 641			483 370	3, 667 6, 203	1, 386 1, 619	106 93	6 4	267 246	609 656	972 1, 099

Period ended earlier than Saturday.
 Delayed reports, included in cumulative total only.
 5-year median, 1941-45.

WEEKLY REPORTS FROM CITIES

City reports for week ended Mar. 23, 1946

This table lists the reports from 88 cities of more than 10,000 population distributed throughout the United States, and represents a cross section of the current urban incidence of the diseases included in the table.

	eria	itis, ous,	Influ	ienza	8868	ccus,	sing	litis	fever	cases	and boid	ping cases
-	Diphthe	Encephalitis, infectious, cases	Cases	Deaths	Measles cases	Meningitis, meningococcus, cases	Pneumonia deaths	Poliomyelitis cases	Scarlet fe	Smallpox cases	Typhoid and paratyphoid lever cases	Whop cough ca
NEW ENGLAND												
Maine: Portland	0	0	2	0	1	0	0	0	3	0	0	18
New Hampshire: Concord	0	0		0		0	2	0	1	0	0	
Vermont: Barre	0	0		0		0	0	0	0	0	0	
Massachusetts: Boston	1	0		0	231	1	17	0	38	0	0	11
Boston Fall River Springfield Worcester	0	0		0	12 6	1 0	0	0	3 14	0	1 0	6 1
Worcester	0	0		0	41	0	5	0	8	0	0	17
Providence Connecticut:	2	0	1	0	4	0	3	0	0	0	0	36
Bridgeport New Haven	0	0		0	3 44	0	1 3	0	3 4	0	0	1 3
MIDDLE ATLANTIC												
New York:	0	o		0	252	0	4	1	10	0	o	14
Buffalo	13 0	ŏ	3	0	1, 335 582	14 0	65 3	0	402 18	Ŏ	i 0	25 2 3
Syracuse	ŏ	ŏ		ŏ	187	ŏ	1	ŏ	25	ŏ	ŏ	3
Camden	0	ó		0	71	0	1	0	4	Ó	0	8 31
Newark Trenton	0	0	1	0	919 5	2 0	6	0	18 2	0	0	1
Pennsylvania: Philadelphia	2	o	3	1	1,052	o	29	o	71	0	0	25
Pittsburgh	0	0	1	1 0	517	5 1	15 3	0	31 5	0	0	25 5 9
EAST NORTH CENTRAL												
Ohio:	4	اه	- 1	2	137	3	8	o	7	0	0	2
Cincinnati	0	ŏ	1	ō	22 5	1 0	8 3 4	ŏ	41 13	ŏ	0 2	2 17 3
Indiana	0	0		0	5	0	1	0	4	0	0	1
Fort Wayne Indianapolis South Bend Terre Haute	2	ŏ		1	628	1	5 0	0	19 4	0	0	4
Terre Haute	0	ŏ		0		0	ŏ	0	i	0	ŏ	
Illinois: Chicago	2	o l		1	815	4	37	0	99	o	o o	36
Springfield	0	0		0	2	0	3	0	0	0	0	
Detroit	0	0		0	1,783	0	12 2 2	0	54 2	0	0	30
Grand Rapids Wisconsin:	0	0		0	110	0		0	1	0	0	11
Kenosha Milwaukee	0	0		0	873	0	8	0	1 31	0	0	42
Racine Superior	0	0		0	2	0	8	0	1 0	0	0	1
WEST NORTH CENTRAL	İ											
Minnesota: Duluth	0	0		0	4	0	2	0	4	0	0	
Minneapolis	4	0		ŏ	21 1	0 2	5 6	ŏ	5 15	ŏ	ö	1 3
St. Paul Missouri:	0	0		1	151	- {	6	0	5	0	0	5
Kansas City St. Joseph St. Louis	0	0 -	1	0	14	1 0 3	0 8	0	1 18	00	0 3	<u>-</u>

City reports for week ended Mar. 23, 1946—Continued

	eria	Infl		Influenza		itis, ococ-	onia	olitis	fever	Cases	bond	cough
	Diphtheria	Encephalitis infectious	Cases	Deaths	Measles cases	Meningitis, meningococ- cus, cases	Pneumoni deaths	Poliomyelitis cases	Scarlet fe	Smallpox cases	Typhoid and paratyphoid	Whooping cough
WEST NORTH CENTRAL— continued												
North Dakota:					1	1					İ	
Fargo Nebraska:	0	0		0	2	0	0	0	3	0	0	
Omaha Kansas:	1	0		0	35	0	3	0	8	0	0	
TopekaWichita	0	0		0	86 77	0	0 1	0	10 3	.0	0	7
SOUTH ATLANTIC												
Delaware: Wilmington	0	0		0	23	0	3	0	5	0	0	
Maryland: Baltimore	12	0		1	333	3	5	0	39	0	0	8
Cumberland	0	0		0		0	1	0	4	0	0	
Frederick District of Columbia:	0	0		0		0	0	0	0	0	0	
Washington Virginia:	0	0		0	214	5	9	0	25	0	1	7
Lynchburg Richmond Roanoke	0 1	0		0	17 15	0	0 2	0	2 14	0	0	1 2
Roanoke West Virginia:	2	ŏ		ŏ	19	ŏ	ō	ŏ	4	ŏ	ŏ	
West Virginia: Charleston Wheeling North Carolina: Relaich	0	0		0	<u>1</u>	0	0 1	0	3 0	0	0	10
North Carolina: Raleigh	0	0		0	52	o	1	0	2	0	0	2 2
Raleigh Wilmington South Carolina:	0	0		0	36	0	0	0	0	Ō	Ō	2
Charleston	1	0	11	0	17	0	0	0	0	0	0	3
Atlanta Brunswick	0	0	1	0	6 2	0	1 0	0	2 0	0	0	2
Savannah Florida: Tampa	0	0	1	0	5 29	0	1	0	0	0	0	
EAST SOUTH CENTRAL	-						1				Ū	
Tennessee:				_			_		_			
Memphis Nashville	1 0	0	1	1	41 23	0	7 4	0	7 2	0	0	6
Alabama: Birmingham	0	0	1	2	9	0	0	0	1	0	0	
Mobile	0	0	1	2	2	ō	2	ŏ	Ō	ŏ	ŏ	
WEST SOUTH CENTRAL	- 1		Ì						1	ı		
Arkansas: Little Rock	0	0		0	6	1	0	0	6	0	0	
Louisiana: New Orleans	0	0		0	7	2	5	2	5	0	2	
Shreveport Texas:	0	0		0		Ō	2	ō	3	ŏ	õ	
Dallas	1 0	0		0	13	o l	3 1 9	0	5	o l	o l	
Houston	2	0 .		0	6	0		0	0 2	0	0	
San Antonio	1	0	2	2	42	1	5	0	0	1	0	
Montana:	l	1			i	l			- 1		ŀ	
Billings	0	0 -		0		0	0	1	0	0	o l	
Great Falls Helena	0	0		0	5	0	0	8	0	0	0	
MissoulaIdaho:	0			0	34	0	1	0	1	0	0	
Boise Colorado:	0	0 -		0	21	0	1	0	0 .	0	0	
DenverPueblo	1 0	0	4	0	355 12	0	5	0	10	0	0	16 4
Utah: Salt Lake City	0	0		2	112	0	1	0	6	0	0	10

City reports for week ended Mar. 23, 1946-Continued

	28.863	i, in-	influer			me-	n i s	litis	ever	cases	and boid	cough
	Diphtheria o	Encephalitis, in- fectious, cases	Cases	Deaths	Measles cases	Meningitis, meningeoccus,	Pneumo deaths	Poliomyel cases	Scarlet fe	Smallpox car	Typhoid s paratyph fever cases	Whooping of
PACIFIC												
Washington: Seattle	2 0 3	0 0 0		0 0 0	199 149 23	0 0 0	3 3 0	0 0 0	6 2 4	1 0 0	2 0 0	4 5 5
Los Angeles Sacramento San Francisco	2 0 0	0 0 0	8 1 4	2 0 1	333 206 324	3 0 2	9 0 7	0 0 0	38 1 16	0 0 1	0 0 0	10 1 2
Total	66	0	495	22	12,749	57	374	4	1, 227	3	13	482
Corresponding week, 1945. Average, 1941-45	46 63		54 188	29 1 39	931 26,668		436 1 474		1,851 1,785	1 1	8 13	692 812

¹ 3-year average, 1943-45. ² 5-year median, 1941-45.

Rates (annual basis) per 100,000 population, by geographic groups, for the 88 cities in the preceding table (estimated population, 1943, 34,151,900)

,	case	ig S Infli		Influenza		men-	death	88	0880	rates	para- fever	qgno
	Diphtheria rates	Encephalitis, fectious, rates	Case rates	Death rates	Measles case rates	Meningitis, in ingococcus, rates	Pneumonia d rates	Poliomyelitis rates	Scarlet fever	Smallpox case rates	Typhoid and property from typhoid from case rates	Whooping cough case rates
New England Middle Atlantic. East North Central West North Central South Atlantic. East South Central West South Central Mountain Pacific	9. 0 6. 9 6. 7 13. 9 28. 4 5. 9 11. 5 7. 9 11. 1	0. 0 0. 0 0. 0 0. 0 0. 0 0. 0 0. 0 0. 0	9. 0 3. 7 0. 6 4. 0 21. 7 17. 7 5. 7 31. 8 20. 6	0.0 0.9 3.0 2.0 1.7 35.4 5.7 15.9 4.7	979 2, 280 2, 669 780 1, 284 443 235 4, 281 1, 952	5. 7 10. 2 5. 5 13. 9 13. 4 0. 0 11. 5 0. 0 7. 9	91. 6 61. 6 51. 7 61. 7 41. 8 76. 7 71. 7 63. 5 34. 8	0. 0 0. 5 0. 0 0. 0 0. 0 0. 0 5. 7 7. 9 0. 0	212 271 169 143 169 59 60 143 106	0. 0 0. 0 0. 0 0. 0 0. 0 0. 0 2. 9 0. 0 3. 2	2.9 0.5 1.2 6.0 1.7 0.0 8.6 0.0 3.2	266 57 89 36 62 41 0 238 43
Total	10. 1	0.0	7. 5		1, 952	8.7	57. 3	0. 6	188	0.5	2.0	74

Dysentery, amebic.—Cases: New York, 6; Chicago, 1; Detroit, 3.

Dysentery, bacullary.—Cases: Providence, 1; New York, 1; Chicago, 1; Detroit, 2; St. Louis, 1; Los Angeles, 3.

Dysentery, unspecified.—Cases: San Antonio, 6.

Tularemia.—Cases: Chicago, 1; New Orleans, 1.

Typhus fever, endemic.—Cases: Savannah, 1; Mobile, 1; New Orleans, 1; Houston, 1.

SMALLPOX IN SAN FRANCISCO, CALIF., AND SEATTLE, WASH.

No new cases of smallpox were reported in San Francisco during the week ended March 30. To that date seven cases had been reported in San Francisco and one case in San Diego, with no fatalities. Doctor Geiger, the city health officer, reports the application of mass immunization.

Dr. Arthur L. Ringle, director of health of Washington State, reports a total of 31 cases, 2 suspect cases, and 5 deaths in the Seattle-King County area up to April 1. Of these cases, 12 were varioloid. All deaths were in cases of the hemorrhagic type of the disease. Doctor Ringle estimated that 200,000 vaccinations had been done during the week ended March 30, and advocated State-wide immunization.

The latest previously reported smallpox in these cities was 1 case in San Francisco in 1939, 5 cases in Seattle in the same year, and 1 case in San Diego in 1942. No case has been reported in Los Angeles since 1939, in which year 18 cases occurred.

FOREIGN REPORTS

CANADA

Provinces—Communicable diseases—Week ended March 2, 1946.— During the week ended March 2, 1946, cases of certain communicable diseases were reported by the Dominion Bureau of Statistics of Canada as follows:

	,	. — —								
Disease	Prince Edward Island	Nova Scotia	New Bruns- wick	Que- bec	On- tario	Mani- toba	Sas- katch- ewan	Alber- ta	British Colum- bia	Total
Chickenpox		9 31 136	3 23 2	69 22 56 592	280 7 9 55 1,521	19 7 1 2 2	57 2 3 5	30 1 7 14	106 2 7 45 41	569 45 92 133 2,334
Mumps Poliomyelitis			1	84 1	211 69	43	14 <u>-</u> -	51	127 13	531 1 207
Scarlet fever		15	10 3	85 153	81	10 9	7	12 27	33	328
_ phoid fever				4 1	7		1	1	6	18 2
Gonorrhea Syphilis Other forms		27 15	4	109 120 1	182 109	49 16	19 5	51 13	124 52	565 334 1
Whooping cough				56	39	3		2	1	101

JAMAICA

Notifiable diseases—4 weeks ended March 9, 1946.—During the 4 weeks ended March 9, 1946, cases of certain notifiable diseases were reported in Kingston, Jamaica, and in the island outside of Kingston, as follows:

Disease	Kingston	Other localities	Disease	Kingston	Other localities
Cerebrospinal meningitis Chickenpox Diphtheria Dysentery, unspecified Erysipelas Lethargic encephalitis	3 3 2 1	3 8 6 3 2 1	Puerperal fever Scarlet fever Tuberculosis (pulmonary) Typhold fever Typhus fever (murine)	2 14 8 3	40 103

NEW ZEALAND

Notifiable diseases—4 weeks ended December 29, 1945.1—During the 4 weeks ended December 29, 1945, certain notifiable diseases were reported in New Zealand as follows:

Disease	Cases	Deaths	Disease	Cases	Deaths
Cerebrospinal meningitis. Diphtheria Dysentery: Amebic Bacillary Erysipelas Food poisoning Influenza A alaria	6 60 5 5 8 2 1	1 1	Ophthalmia neonatorum Poliomyelitis. Puerperal fever Scarlet fever Tetanus. Trachoma. Tuberculosis (all forms) Typhoid fever Undulant fever	2 3 3 85 2 3 123 8 4	43

¹ No report was received for the week ended Dec. 15, 1945.

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

NOTE.—Except in cases of unusual incidence, only those places are included which had not previously reported any of the above-mentioned diseases, except yellow fever, during recent months. All reports of yellow fever are published currently.

A table showing the accumulated figures for these diseases for the year to date is published in the Public Health Reports for the last Friday in each month.

Cholera

China—Canton.—For the period March 1–26, 1946, 11 cases of cholera were reported in Canton, China. All precautionary measures have been taken.

India—Calcutta.—Cholera has been reported in Calcutta, India, as follows: Weeks ended—March 2, 1946, 57 cases, 31 deaths; March 9, 1946, 60 cases, 30 deaths.

Philippine Islands—Negros Province.—For the period November 25 to December 15, 1945, 1 case of cholera with 1 death was reported in Negros Province, Philippine Islands.

Plague

China—Fukien Province.—During the period March 1-26, 1946, 4 cases of plague (1 case each in Changpu, Haiteng, Pinghwo, and Yingting) were reported in Fukien Province, China.

Manchuria—Liaopeh Province—Szepingkai.—For the 2 days March 7 and 8, 1946, a total of 5 deaths from pneumonic plague was reported in Szepingkai, Liaopeh Province, Manchuria.

Smallpox

Brazil—Maranhao State—San Luiz.—Information dated March 19, 1946, states that a mild outbreak of smallpox had occurred in San Luiz, Maranhao State, Brazil. No reliable figures as to the number of cases are available but it is said that not more than 30 cases occurred on any one day. Vaccination is being carried on.

British East Africa—Tanganyika.—For the week ended February 23, 1946, 700 cases of smallpox with 98 deaths were reported in Tanganyika, British East Africa. These figures presumably include delayed reports.

Japan.—For the week ended January 19, 1946, 334 cases of small-pox were reported in Japan, including 171 cases reported in Hyogo, Japan.

Typhus Fever

Ecuador.—For the month of February 1946, 63 cases of typhus fever with 2 deaths were reported in Ecuador. Provinces reporting the highest incidence are: Chimborazo, 18 cases; Tungurahua, 11 cases; Azuay, 7 cases, 1 death; Cotopaxi, 7 cases, 1 death.

Egypt.—For the week ended February 23, 1946, 117 cases of typhus fever with 7 deaths were reported in all of Egypt.

Japan.—For the week ended January 19, 1946, 86 cases of typhus fever were reported in Japan. For the week ended January 5, 1946, 1 case each was reported in Tokyo and Niigata and 3 cases were reported in Fukuoka, Japan.

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