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Psychiatric Aspects of Civilian Defense: This is a preliminary outline for a suggested action program concerning the psychiatric aspects of civilian defense. The main problems are: (1) panic control; (2) prevention of persistent psychiatric disorders due to exposure to bombing; (3) prevention of psychiatric disorders in children who are evacuated or separated from their parents; (4) the special problems of the aged; and (5) the continuation and expansion of an effective and practical peace-time preventive psychiatric program. The chief aim of such a program is to reduce the drain on our civil defense machinery that would come from predictable mental breakdowns on a wide scale.

I. Panic Control

In England, panic was chiefly manifest at the beginning of the war when accidents occurred in air-raid shelters which were dark because of blackout and power failure. Later, casualties due to panic were at a minimum. Nevertheless, adequate preparations for a possible panic here should be made for the following reasons:

a. Fear of the atomic bomb may cause panic. Prior to the dropping of the atom bomb the Japanese, like the English, had become accustomed to bombing fairly soon, had not even sought shelter and had gone about their work as usual. After the Hiroshima explosion, the Japanese would seek shelter whenever any light or spark suggested the light flash of the explosion, or when any noise resembled the noise of an airplane. They would dive into shelters so frequently that many did not eat or sleep and were unable to work.

b. Cultural and educational differences in various population groups in America make it rather difficult to predict conclusively the resistance of Americans against panic by comparing them with the English or Japanese population.

Recommendations for the Prevention of Panic

A. Before disaster strikes:

a. Provide adequate shelters and light them with flashlights.

b. Educate the public so that realities are faced, panic and casualties are diminished, and yet anxiety is not created or increased. In this respect, timing of information is extremely important. Release of funds for adequate civilian defense planning depends upon a sufficiently informed and interested public. However, informing the public of dangers without a master plan to help each individual to find an active place in the defense may create panic.

B. After disaster strikes:

a. There must be a known reliable information source working as quickly as possible after a disaster.

b. Mobile facilities for taking care of acute psychiatric casualties (perhaps in trailers) should be set up. Panic is infectious; therefore the immediate removal and treatment of acutely disturbed people is requisite. Mobile units should be equipped with provisions for restraint and quick sedation (intravenous or intramuscular injections of sedative) for immediate results.

c. Means of strengthening the morale in a bombed area are suggested:

1. Having uniformed civilian defense members appear on the scene as quickly as possible, thus providing a person in authority.
2. Providing hot food via mobile kitchens.
3. Providing mobile laundry units to remove such bombing debris as glass splinters, grime and dust. In England, it was found that clean clothing and blankets provided a real boost to morale.
4. Social welfare organization. Among civilians who had nervous breakdowns in England during the war, disorganization due to loss of property, loss of work or loss of home played a greater role than the fright of actual bombing. Prompt rehabilitation of bomb victims by welfare agencies therefore seems imperative and should be planned for now.

II. Prevention of Persistent Psychiatric Disorders Due to Exposure to Bombing

Recommendations:

A. According to statistics, it would seem advisable to evacuate people with known history of nervous instability or with strong hereditary tainting.

B. It is extremely important to have mobile units for immediate treatment of acute disturbances as well as evacuation hospitals having facilities for immediate, active treatment of casualties. War experience has shown that traumatic neuroses respond very well to quick, intensive treatment, but that treatment becomes exceedingly more difficult with the length of the interval between the onset of symptoms and the beginning of treatment.

C. There are various ways through which people ordinarily tend to alleviate their own anxiety which should be encouraged: (1) seeking company, (2) doing something in conjunction with others, such as group singing, discussion groups, story telling, etc., (3) jobs in civilian defense, (4) reassuring others, (5) clinging to the leaders, (6) visible evidence of adequate defense, such as antiaircraft guns and gas masks, (7) sense of humor, (8) griping.

III. Prevention of Psychiatric Disorders in Children Who are Evacuated or Separated from their Parents

The most common problems of the evacuated children in England were unmanageability, stealing and destructiveness, disturbances in intellectual

and personality development, and bedwetting and other psychosomatic disorders. It was found that children under 2 years of age reacted primarily to the mother's feeling of calm or fear. Thus, children whose house fell down on them, who were buried in debris, cried a short time and then ate and slept as usual if their mother was with them and calm, but also were helped if they were accompanied by older children. Frequently, they showed anxiety reactions: vomiting, sleeplessness and bedwetting; but the fundamental problem was unmanageability and aggressiveness. School children seemed to derive less damage if their class unit was kept intact than if their home unit was kept intact.

The reaction of the children was largely determined by suddenness of separation from the parents, suddenness of change to new physical environment and to new adults, and the type of placement and the organization. The greatest damage was shown if children were suddenly separated from their parents and placed in a completely new and strange environment. This resulted in very serious reactions in infants, i.e., shock and death, severe apathy, depression, interruption of physical and mental development, and most deep-lying personality disorders. Research data available suggest that damage might persist and might require extensive hospitalization or care for those victims.

Recommendations:

- A. Evacuation should be planned for in advance, either to relatives and friends in safe areas, or to volunteer mothers who would be paid for such service. Enlist the aid of trained child care groups, such as educators who have camping experience, nursery school teachers, Boy Scout and Campfire leaders, etc.
- B. As soon as possible, start training courses for key people of stable personality who will handle groups of children in the psychiatric and psychological aspects of education for mental health.
- C. After such training has taken place, plan carefully the evacuation placement of children and, if possible, provide some type of experience for the children that will acquaint them with their potential new home and new parent surrogates and, if possible, get the children used to separation from their mothers.
- D. Volunteer organizations and transportation pools may have to be organized to furnish transportation both for training visits and for real visits if evacuation should become necessary. Visits by parents should not be considered a luxury, but a necessity.
- E. Screening centers for children where their emotional fitness for placement can be determined should be set up.
- F. Acute treatment centers for disturbed children where they can stay for short periods of treatment will be needed.

G. Long-term treatment centers for seriously mentally ill or delinquent youth are urgently needed.

H. In England it was found very helpful to have guidance centers where mothers and volunteer mothers could get help in the handling of behavior problems among the children assigned them.

I. Existing child guidance clinics for out-patient treatment of disturbed children should be better staffed to handle larger case-loads, and new clinics opened.

J. Information centers where parents and children could inquire concerning the state of health of relatives, especially after heavy bombing raids, have been found to be of great importance.

K. Organized recreation for evacuated children tends to diminish delinquency. Parent education on the new problems arising may also be a helpful preparatory step.

L. Visits by psychiatric social workers to boarding homes proved helpful in England.

IV. The Special Problems of the Aged

While aged people who are unable to participate in defense work should be evacuated, preparation of the care of the aged should be made regardless of war since they constitute 38 percent of the present admissions to mental hospitals.

V. The Continuation and Expansion of an Effective and Practical Over-All Preventive Psychiatric Program

Because it is hoped that bombing of our cities will not actually take place, priority should probably be given to work that would be of as great a peace-time as a war-time benefit. It is of utmost importance that our youth be raised in such a fashion that they will be psychologically fit for the stresses of war as well as peace. During the last war, according to Dr. W. C. Menninger, "1,800,000 men were rejected for military service... and an additional 700,000 men were discharged from service because of personality disorders... Mental health is our No. 1 national health problem. More than half of all hospital beds in the country are occupied by mental patients. Over 1,000,000 children are suffering today from severe behavior disorders. At least 50 percent of physical complaints are primarily due to emotional conflicts. Ninety percent of industrial accidents have their roots in personality problems."

In view of these facts, establishment or expansion of the following type of peace-time mental health program seems urgently needed: (1) integration of

mental hygiene into all phases of health department activities through teaching and consultation with health department personnel; (2) prenatal and well-baby clinic preventive programs; (3) intensive work with nursery school and school personnel; (4) parent education; (5) continued attempts to work toward the solution of the problems posed by tensions between employers and employees: industrial psychiatry, prevention of alcoholism, accident proneness, and intercultural tensions. (Am. J. Psychiat., January '51, K. Fantl)

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Urinary Diastase in Mumps: Elevation of serum diastase has been found in the great majority of adult patients with mumps. It is believed that increased levels may assist in establishing the diagnosis in doubtful cases. Most of the studies were performed on soldiers during epidemics of parotitis in war time. The examination of serum diastase in children has been rare. Since an elevated level of diastase in the serum brings an increase in the urinary output of the enzyme, it was to be expected that the urinary diastase would be elevated.

The author studied the urinary diastase output in 30 cases of mumps, of which 27 were children. In addition, 10 patients with swelling on the face due to other conditions were examined. All cases of mumps showed a markedly increased value for the enzyme. When the swelling in the face was from other causes, such as cervical adenitis, or cellulitis of the jaw, the urinary diastase was normal. It was noted that in 1 case in which the swelling remained limited to the submaxillary glands, there was an elevation of urinary diastase to 2,100 units. It was also noted that when the swelling of the glands began unilaterally and then the opposite side became involved in a few days, the urinary diastase which had started to drop or had even reached normal values started to rise again with the enlargement of the 2d gland.

The Somogyi method was used in the determination of the urinary diastase; the normal range varies between 80 and 350 units. However, in the cases of mumps under study the increase was markedly evident in every case and the increase frequently went over 1,000 units, the highest being 7,700 units. The rise of the urinary diastase begins on the 1st or 2d day after the swelling of the parotid gland is seen and may last 5 to 6 days, or even longer.

The author concludes that the elevation of urinary diastase in mumps is of value in establishing a diagnosis, particularly in doubtful cases or in those with only swelling of the submaxillary glands, and in the differential diagnosis in all cases with swelling about the jaw of obscure nature. (New England J. Med., 4 January '51, M. M. Nothman)

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Impressions Concerning the Putti-Platt Reconstruction Operation for Recurrent Shoulder Dislocation: It has been stated that over 200 operative procedures have been described for the surgical correction of recurrent or habitual dislocation of the shoulder. There have been continued attempts to devise an operation which will combine simplicity with effectiveness and reduce the high percentage of recurrences which have attended most of the older procedures. This study deals with experiences in the Tripler General Hospital, Honolulu, T. H., between 1 July 1948 and 1 January 1950. During this 18-month period, 39 patients with recurrent dislocation of the shoulder were examined and 20 were operated upon because of attendant disability. All of these operations followed the technic used independently for many years by Putti and Platt and described in detail by Osmond-Clarke in 1948. The impressions gained through experience with this technic in the 20 patients are as follows:

1. The end results are as yet undetermined but the procedure seems to be effective, highly satisfactory to the patient, and unaccompanied by significant weakness or limitation of shoulder motion.
2. The operation is simple, requires no special instruments, and is available to the average qualified surgeon.
3. The procedure seems to offer reasonable chance of success regardless of the underlying cause of the recurrent dislocation or the existing pathology.
4. Selection of cases for operation is of greatest importance. Only patients presenting significant disability should be subjected to operative correction.
5. Deltoid and biceps shrugging exercises should be taught preoperatively and instituted 10 days after operation to prevent atrophy and assist in early return of shoulder movement. Postoperative physical and occupational therapy are highly important in accomplishing a return of function.
6. The number of patients with bilateral recurrent shoulder dislocation and the substantial proportion of patients who give no history of severe trauma associated with the original dislocation seem to suggest the likelihood of some congenital defect as a predisposing factor.
7. The minimal limitation of external rotation resulting from this procedure suggests that its effectiveness is not due to attachment of the subscapularis insertion to the glenoid margin but is based on the shortening and transposition of the anterior muscle and capsular structures. (Surgery, January '51, Col. E. A. Brav, MC, USA, and Cdr. W. H. Gullidge, MC, USN)

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Do Children Born of Offspring of Mothers Irradiated for Sterility Show Abnormal Genetic Effects?: A report is made of 3 children, born of children born to mothers irradiated for sterility, demonstrating conclusively that one cannot properly interpolate genetic effects on animals to human beings.

Adverse criticism regarding the effects of irradiation on the oncoming progeny of irradiated females has been based upon experimental investigation on

animals, especially on *Drosophilla* flies. Such estimates of genetic hazards of radiation cannot be compared with humans, or even with mammals. There is a great deal of uncertainty about the amount of irradiation needed to appreciably alter the gene mutation rate in man. Furthermore, it is authoritatively recognized that no reliable basic data has yet been obtained to demonstrate specific deleterious genetic effects of irradiation in humans when such irradiation has been employed therapeutically for the treatment of female sterility.

Over a period of 26 years, the author has treated more than 400 women with therapeutic x-rays for female sterility. These women gave birth to 185 perfectly normal children, demonstrating that there was no deleterious genetic effect manifested in these first generation children from x-ray irradiation of their mothers. In order to determine whether possible genetic effects would occur in subsequent generations, that is, in the offspring of these first generation children, one had to wait for the maturing of this first generation, their marriage and production of offspring. The author reports the birth of three perfectly normal children to three of the children born of irradiated mothers, in this way further demonstrating the absence of genetic injury in this second generation of irradiated mothers.

Patient No. I was referred for amenorrhea, dysmenorrhea and sterility on 9 June 1925. A course of x-ray therapy to the ovaries was given in the prescribed manner. She became pregnant and a normal baby girl was born. The baby matured normally and was married in March 1946. In October 1948 the daughter gave birth to a normal baby boy.

Patient No. II was referred in February 1927 for x-ray treatment for sterility. Treatment was given, she became pregnant; in November 1928 she gave birth to a normal baby boy, in August 1930 a girl, in August 1934 a girl, and in July 1940 a girl. The first child, the boy born in November 1928, developed normally and in 1949 married. In March 1950 his wife gave birth to a normal boy.

Patient No. III was referred in March 1925 for sterility. Treatment was given and in January 1926 she gave birth to a normal baby girl. The baby developed normally, was married in March 1949, and in August 1950 gave birth to a normal baby boy.

These children have all been carefully examined by qualified pediatricians and all of these children have been found to be perfectly normal in every respect, physically and mentally.

These observations offer an assurance that normal children of irradiated mothers may expect to subsequently produce normal offspring. (Arch. Pediat., December '50, I. I. Kaplan)

A Study of Workers Exposed to the Insecticides Chlordan, Aldrin, Dieldrin:

The toxicity of new compounds can never be predicted without adequate investigation. However, a substance can be considered relatively safe for ordinary use when the concentrations in which it is employed produce no harmful effects on those exposed to it. For this reason, the present study of 22 workers who had been exposed to the insecticides chlordan, aldrin and dieldrin was carried out.

Animal experimentation had suggested that if adverse effects were present, they would be manifested by loss of weight, anorexia, headache, nausea, nervous disorders and disturbances of vision and respiration. Under the conditions of this study, none of the organ systems of the human subjects seem to have been affected by concentrations of these substances encountered in the air of a manufacturing and formulation plant (more than 5 mg. per cubic meter) for periods of from 1 to 3 years. Within certain limits, both length of exposure and atmospheric concentrations must have varied; however, if delayed symptoms were to have been expected, they should have become apparent during the period of this study.

During the process of manufacture of these insecticides and under the atmospheric conditions which were observed and determined, there was no measurable effect on the respiratory system. It is logical to suppose that a certain amount of absorption of these compounds occurred in the body, not only by inhalation but also by skin absorption. There was no evidence, however, of any deleterious effects on the central nervous system, the liver, the kidneys or the hemopoietic system.

Allergic phenomena were not found in this study. Nevertheless, the fact that such manifestations may occur and that sensitivities to these compounds may develop must be seriously considered. More widespread use and exposures of many more individuals will be necessary before such sensitivities can be accurately determined.

It is thought reasonable to assume that under the present conditions of formulation and use, chlordan, aldrin and dieldrin will not produce measurable harmful effects among those persons who are continuously exposed to concentrations which are encountered under ordinary conditions of use. All ordinary precautions should be continued, however, to prevent excessive accidental exposure and skin absorption.

The conclusions and recommendations which are expressed in this report are based entirely on a study of persons whose exposures occurred during the manufacture and formulation of these insecticides. Further studies are necessary to determine the consequences of field use. (A.M.A. Arch. Indust. Hyg. & Occup. Med., January '51, F. Princi and G. H. Spurbeck)

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Pergastric Intestinal Perfusion for Uremia: Improved understanding of the clinical course and mechanism of lower nephron nephrosis has emphasized the reversible nature of this form of acute uremia. In chronic nephritis also, acute episodes of uremia induced by extraneous factors may develop at a time when the kidneys are still anatomically adequate to avoid uremia. If patients in both categories can be kept alive long enough to recover from the acute episode, the uremic symptoms may be mitigated and the patients may recover--permanently in the case of lower nephron nephrosis, or temporarily in the case of chronic nephritis. Implicit in the recognition of these facts is the need in selected cases of uremia for an artificial means of excretion of some of the metabolic products which contribute to the development of uremia, so that the patient may be tided over the critical period.

Among the schemes that have been utilized for vicarious excretion, the best known are the artificial kidney, peritoneal irrigation and intestinal perfusion. The relative merits and limitations of the first two of these procedures have been discussed in a number of recent papers. The use of the intestine as a dialyzing membrane is not so well known but it too has been investigated in the last few years with variable success. The most promising scheme appears to be that involving the use of a Miller-Abbott tube to perfuse the small intestine. This procedure has the advantage that it requires no surgical manipulation, no formidable apparatus, and probably no aseptic technic with sterile solutions. It involves no fear of peritonitis or thrombosis.

The authors' method of pergastric perfusion developed as a modification of the Miller-Abbott technic during an effort to evaluate the latter scheme of intestinal perfusion. Experiments with perfusion with the use of the Miller-Abbott tube soon showed its disadvantages: (1) 24 or more hours were usually required for passage of the tube through the pylorus to the proper place in the ileum; (2) when the perfusing fluid was allowed to enter the jejunum through the proximal opening of the tube and suction was applied to the distal opening through the second lumen, a large portion of the perfusate continued flowing past the aspirating lumen to be expelled as a liquid stool; (3) the concentration of nonprotein nitrogen in the perfusate obtained by suction was lower than that of the liquid stool. Accordingly, it was believed that there was no advantage in using a Miller-Abbott tube and that perfusion through a tube in the stomach with collection of the perfusate from the rectum might be simpler and more efficacious. That either scheme had clinical possibilities was suggested by the fact that the first patient on whom the Miller-Abbott tube technic was utilized, in intermittent perfusion over a period of 36 hours, showed a loss of 18.1 Gm. of nonprotein nitrogen with a consequent drop in serum nonprotein nitrogen concentration from 310 to 235 mg. per 100 cc. Subsequently this patient showed a further spontaneous drop to 90 mg. per 100 cc. In spite of the fact that she had been regarded as moribund when first treated, she was discharged to her home, alert and ambulatory. Unfortunately, the patient returned in uremic coma 5 months later and died in spite of a second attempt at perfusion.

The present studies were carried out on 9 subjects; 8 were semi-comatose uremic patients with chronic Bright's disease and 1 a patient with severe mercuric chloride poisoning with anuria. These studies were undertaken to determine quantitatively the potentialities of intestinal perfusion when the whole intestine was used as a dialyzing membrane. None of these patients was clinically regarded as having a reversible renal lesion, and the experimental studies were not undertaken for the purpose of passing judgment on the clinical value of the method. Rather the attempt was made to determine such factors as optimal speed of perfusion, maximal excretion of nitrogenous and other products, and the difficulties involved in the maintenance of water and electrolyte balance. Such data, it was believed, might aid in the final evaluation of the clinical results with this method in suitable cases, and might even indicate the direction of improvement required to make this a practicable method.

Perfusion of the whole intestine was carried out in the 9 subjects by passage of fluid through a two-lumen gastric tube and collection of the intestinal perfusate at the anal canal with the help of a rectal tube. Suction was applied to the second lumen with an opening at the cardia to prevent over-distention of the stomach. This latter collection constituted the gastric perfusate. The rate of flow of intestinal perfusate varied from 1 to 3.1 liters per hour. The perfusing fluid contained 147 or (or 142) mEq. sodium, 5 (or 10) mEq. potassium, 103 mEq. chloride, 52 mEq. bicarbonate, 3 mEq. magnesium, and 20 Gm. glucose per liter. The duration of the perfusion varied from 8 to 28 hours.

Urea and nonprotein nitrogen were well excreted in the intestinal perfusate but only slightly in the gastric perfusate. Serum nonprotein nitrogen levels dropped an average of 59 mg. per 100 cc. The calculated urea clearance of the perfusion was as high as 21 cc. per minute. The excretion of creatinine was much less significant, and that of phosphate and phenols was not appreciable. Two of the 9 subjects were markedly improved clinically and their deaths from uremia were delayed.

Losses of potassium up to 12.7 Gm. occurred even when the concentration of potassium in the perfusing fluid was twice as high as that of the serum. The serum potassium concentration dropped considerably in all instances but one, but most of the lost potassium came from the cells. The rapid drop in serum potassium concentration to 2.9 mEq. per liter may have been a factor in the death of 1 patient.

Retention of water, sodium, chloride, and bicarbonate occurred in all subjects, with increases in the concentration of these ions in the serum. In the dehydrated patient this retention was beneficial, but in others the increase in extracellular fluid and rise of serum sodium levels above normal were potentially harmful. For this reason much lower concentrations of sodium and chloride in the perfusion fluid would have been more desirable.

The optimal rate of perfusion was about 2.5 liters per hour. At this rate the urea excretion was greatest and the absorption of sodium and chloride as well as the loss of potassium was relatively low.

Perfusion periods should be limited to 6 to 8 hours, and should be accompanied by frequent analyses of the serum and careful clinical attention. (J. Lab. & Clin. Med., December '50, L. Bernstein et al.)

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Tumor Metastases in Bone Marrow: Some tumors tend to metastasize by way of the blood stream and lodge in the bone marrow. Individuals who have fever, pain, weight loss, etc., due to widespread neoplastic disease before there are local signs or symptoms of tumor growth usually present difficult diagnostic problems. Infiltration of the bone marrow with tumor tissue may lead to blood abnormalities, such as progressive anemia, sometimes with immature granulocytes and nucleated red cells in the circulating blood, thrombocytopenic purpura, etc. Skeletal disease, another common result of blood-borne metastases, may resemble primary bone tumor, multiple myeloma, hyperparathyroidism, lipid granuloma or Paget's disease.

The possibility of recognizing tumor cells in bone marrow aspirated from the sternum was first studied in 1936 by Rohr and Heggin. They found tumor cells in 11 of 75 patients with neoplastic disease. Many investigators were subsequently able to identify tumor implants in aspirated bone marrow. After Henning suggested using bones other than the sternum and choosing the site for aspiration by the presence of tumor nodules, roentgen abnormalities or areas of bone pain, an even higher percentage of positive findings was obtained.

The present study was undertaken (1) to ascertain the reliability and practical usefulness of bone marrow aspiration in the diagnosis of tumor metastases in a large series of patients, (2) to correlate the morphology of tumor cells if possible with the site of their origin, and (3) to study the role of marrow infiltration in producing the anemia commonly associated with neoplasm. One hundred and fifty-two patients with tumors of different types were chosen for study. Many had tumors that had spread locally or were suspected of having metastasized. A considerable number were first seen as diagnostic problems.

Tumor implants were demonstrated by aspiration in 71 of the 152 patients. This high percentage of positive findings was due in part to the selection of patients, but probably more to the careful selection of the site for marrow aspiration. The sternum, ribs and other superficial bones were carefully examined for nodules or tender areas which suggested local growth and a favorable site for aspiration. When collapsed vertebrae or roentgen evidence of disease in deeper bones was present, a long, number 18 spinal needle was implanted and its

correct position verified by roentgen films before the aspiration was done. Tumor cells were found in the sternal marrow in 50 instances, and in 21 cases elsewhere--skull, clavicles, vertebrae, etc.

Metastases to bone marrow were found most frequently in patients with neuroblastoma, carcinoma of the prostate, breast and in those in whom the primary tumor could not be located during life. There were 3 patients with carcinoma of the colon who were not representative of all patients with this neoplasm. One had multiple polyposis and presented with a tumor involving the sternoclavicular joint. A second patient, however, was found to have metastatic cells in an area of bony destruction in the ischium and a carcinoma of the descending colon was discovered in a search for the primary tumor.

The hemoglobin was less than 12 Gm. per 100 cc. in 90 patients. In 29 individuals, anemia was present without evidence from roentgen study or bone marrow aspiration of tumor metastases. Bleeding, infection, fever, etc., seemed to adequately account for the anemia in these patients. In 30 individuals without anemia, localized tumor metastases were present in bone marrow. In only 1 patient the anemia seemed to result from increased red cell destruction.

Twenty-two patients had so-called leukoerythroblastic anemia with immature granulocytes and nucleated red cells in the circulating blood. All of them had bone marrow metastases. Nucleated red cells and immature granulocytes were not seen in the blood of patients in whom the hemoglobin was 12 Gm. per 100 cc. or more, and usually not until the hemoglobin was reduced below 8.5 Gm. per 100 cc. The most severe degrees of anemia occurred in those with most extensive bony involvement as judged by marrow films and by roentgen abnormalities. Metastases from prostatic carcinoma and neuroblastoma tended to produce generalized infiltration of the bone marrow and were the tumors most frequently productive of leukoerythroblastic anemia. When the response to hormone therapy was good in patients with prostatic carcinoma, the anemia regressed and fewer tumor cells could be demonstrated in the bone marrow. The tumor cells that persisted developed eccentric and pyknotic nuclei, and basophilic cytoplasm.

The demonstration of tumor metastases by bone marrow aspiration was in many instances a valuable supplement to the formerly relied upon roentgen methods in demonstrating bony metastases. Of the 71 patients in whom tumor implants were found in the bone marrow, there were 12 with no x-ray evidence of skeletal involvement, and equivocal changes in 3. Of the 81 patients in whom tumor implants were not demonstrated in the marrow, 23 were thought to have x-ray evidence of neoplastic skeletal involvement, and in 6 the changes were doubtful.

This suggests that bone marrow examinations should be performed in patients thought to have malignant disease before extensive surgery is performed. This is particularly true if the patient is thought to have a tumor that is likely to

spread to the skeleton or has any symptoms or signs suggesting bone involvement. (Blood, January '51, U. Jonsson and R. W. Rundles)

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Chronic Involvement of the Liver in Intestinal Amoebiasis. (Chronic Amoebic Hepatitis): The author reports a series of 47 cases of amoebic hepatitis in 180 cases of amoebiasis seen in the last 4 years, an incidence of 26 percent. It is pointed out, however, that because no exact criterion for severity of symptoms can be established for introducing cases into the series, the stated incidence may not be exact. His patients were all Jewish workers and clerks from settlements in the south of Israel.

The form of hepatic amoebiasis usually mentioned in the literature is abscess formation; acute hepatitis in amoebiasis is generally thought of merely as a precursor of abscess formation. In the author's opinion, however, chronic amoebic hepatitis is the most frequent complication of chronic intestinal amoebiasis. He also cites the experience of Payne (1945), who found it in 50 percent of 1,000 cases of chronic amoebiasis in India.

The pathology of this condition is not yet well understood. It is not known whether the presence of amoebae in the liver is essential, or whether some toxic influence suffices to induce the pathologic changes. Some investigations on the histologic changes in the absence of abscess or outside the immediate sphere of abscess have been made. These have shown an increase in portal connective tissue with infiltration of lymphocytes and monocytes, and with no involvement of the parenchyma except for some congestion. Numerous patches of these fibrotic areas have been found simultaneously with active amoebic lesions in the intestines. It seems probable that the reaction in the liver is produced by constant invasion of amoebae from an active intestinal process, the invading amoebae soon being destroyed. This postulate is strengthened by the observation in this series that Endamoeba histolytica was found in 72 percent of the stool specimens, usually associated with clinical symptoms of active intestinal disease. The liver condition improved together with the intestinal symptoms after treatment of the latter.

Characteristically, symptoms are chronic; many features of the acute phase of hepatitis, such as fever, severe pains, and liver enlargement are absent or minimal. The chief symptom is liver tenderness. Constitutional symptoms are far more prominent than in chronic amoebiasis and suggest early liver disease. X-rays are, for the most part, negative.

Because early diagnosis is essential, one cannot afford to wait for the absolute signs of the developed disease to appear. Suggestive findings must therefore be relied upon: the clinical picture of the liver plus intestinal disease, the finding of Endamoeba histolytica in the stools, and/or a positive complement

fixation test. This test was found to be positive in 20 of the 25 cases in this series in which it was performed. Failure to find bile pigments in the urine is suggestive. No shift to the left in the leukocytes was found, even when leukocytosis was present. With increasing chronicity, the blood sedimentation rate tends to become normal; thus, a normal rate does not rule out the need for treatment. Correlations of several liver tests, performed several times during the course of the disease, often indicated degree of involvement and progress of the illness where a single test would be insufficient.

Emetine has no conspicuous effect in the chronic form of amebic hepatitis. Treatment of the disease is mainly preventive, i.e., the parasite must be eradicated in the intestines and active therapy instituted there. This regime, combined with proper nutrition, gave good results in this series. (Am. J. Digest. Dis., January '51, R. Sandler)

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Disseminated Lupus Erythematosus in the Male: In most reports, disseminated lupus erythematosus has been considered to be a diffuse disease of the collagen system occurring almost exclusively in young adult women. It has been stated that the occurrence of this entity in the male is unusual, and that the most striking characteristic of the disease is its predominant incidence (95 percent) in young women. In one series of 20, all of the patients were women. However, 3 of 12 cases reported by Rose and Pillsbury were in males. In 1943, Fox and Rosahn, reviewing most of the reported cases, found that in 277 cases, 228 were females and 49 (17.7 percent) were males.

At the Philadelphia General Hospital, the clinical diagnosis of disseminated lupus erythematosus has been made in 36 cases since 1936. Of this number, 10 were in males. This 27 percent incidence roughly corresponds to that noted by Rose and Pillsbury.

The authors report 5 male patients observed at Philadelphia General Hospital in whom there was pathological confirmation of the diagnosis.

Discussion. Attempts have been made to classify lupus erythematosus as acute disseminated, subacute disseminated, chronic disseminated and chronic discoid (localized) forms. The clearest distinction has been between the localized and disseminated types. Differentiation of acute and subacute types is based merely on the severity of the constitutional symptoms and the rapidity of the course.

The most frequently reported clinical and laboratory features are fever, toxicity, arthralgia, acute arthritis, purpura, cardiac murmurs, tachycardia, lymphadenopathy, polyserositis and cutaneous lesions, associated with anemia,

leukopenia, thrombocytopenia, albuminuria, microscopical hematuria, reversal of the albumin-globulin ratio, false-positive serologic tests for syphilis and the absence of bacteremia.

The cutaneous eruption may vary from a faint, nonspecific erythema to the more characteristic discoid lesion or from an erythematous infiltrative plaque with dilated hair follicles containing white scales to hyperpigmented or depigmented atrophic scars. The lesions may involve the "butterfly" area of the face, the scalp, ears, upper trunk, fingers, toes and oral mucosa.

The pathological features of the cutaneous lesions are believed by Montgomery to be typical and diagnostic, and he describes them in some detail. Klemperer interprets the earliest cutaneous change as a homogenization of collagen fibrils in the most superficial layer of the corium. Fibrinoid degeneration occurs next, and in the most advanced lesion, the clumped fibrinoid masses break up and become basophilic. Secondary degenerative changes take place in the epidermis. Vacuolization occurs and may progress to necrosis of the basal cell layer.

The heart is involved in a large percentage of cases. The fully developed endocardial lesions, first described by Libman and Sacks, are, according to Klemperer, pathognomonic. The vegetations are dry, granular, tawny or pink, and vary from 1 to 4 mm. in size. The lesions are on the valves, in the sinuses, on the arterial side of the semilunar cusps, on the endocardium of the ventricular outflow tract, on the chordae tendineae and papillary muscles, and in the angles between the auriculoventricular valves and the mural endocardium. In addition to the endocardial lesions, which are small, swollen masses of altered ground substance, there are similar changes in the collagen of the deeper endocardial layers and the vascular and supporting tissues of the myocardium. Secondary changes are found in the muscle fibers.

Polyserositis is a frequent finding. Diffuse or localized fibrinous pericarditis is not specific, but there may be a more characteristic change, which varies from fibrinoid degeneration to a grossly thick gelatinous adherent pericardium. Similar involvement of the pleura may be seen, but more commonly there is only fibrinous pleuritis associated with underlying pneumonia, a frequent complication. Perihepatitis and perisplenitis occur in about half the cases.

The renal involvement produces striking urinary changes, described in some detail by Krupp. In the same specimen, red blood cells, white blood cells, red-cell casts, fat bodies, and fatty and waxy casts may be present. There are always abnormal amounts of protein. These changes, if they occurred in glomerulonephritis, would represent stages of the disease usually separated by years or decades. They would never all be found concurrently. The underlying renal lesion is most characteristically a peculiar alteration of the glomerular loops, which are

irregularly thickened, rigid and deeply stained by eosin. This has been termed "wire looping" because of a fancied resemblance to bent wire.

Diffuse changes in the blood vessels of all the organs are found. These consist of deposits of fibrinoid that progress to destruction of all the muscular and elastic elements. Most authors agree that the leukopenia is a characteristic and important feature of the disease, and secondary anemia is common and frequently severe.

One of the most consistent early clinical features of the disease is the arthritis, frequently mistaken for early rheumatoid arthritis or rheumatic fever. The subsequent involvement of the renal and cardiovascular systems and the polyserositis and the progressively downhill course are helpful in differentiating disseminated lupus from these clinical entities. (New England J. Med., 18 January '51, B. H. Pastor et al.)

* * * * *

Observations on the Mechanism of Blackwater Fever (An Experimental Study in the Monkey): The authors conducted certain experiments on the mechanism of blackwater fever. Their experimental observations suggested that the destruction of the red cells by the plasmodia was the basis for the cellular debris and liberation of pigments occurring in malaria. These pigments and debris are readily removed from the circulating blood by the reticulo-endothelial system; much of it accumulates in the spleen with ultimate splenomegaly. As the number of parasites increases, enough red cells may be destroyed within a specific interval so that the debris and pigments can no longer be removed by phagocytosis. With such a high plasma concentration, filtration of the pigments occurs through the renal glomeruli, resulting in hemoglobinuria. The primary process in malaria that may result in blackwater fever is a disproportion between the rate of destruction of red cells and the rate of removal of the residue by the reticulo-endothelial system. It must be remembered that the spleen enlarges to accommodate additional pigments and debris. Much of this debris may not be incorporated at first within the cytoplasm of the phagocytic cells. At this time during the disease any process causing the spleen to contract may squeeze the cellular debris and pigments into the circulating plasma. With the plasma concentration then greatly increased, filtration through the renal glomeruli is the only major route by which it can be eliminated. When this occurs, the urine shows the presence of this excess pigmentation and the process is referred to as hemoglobinuria. Histologic studies of the kidneys from monkeys with blackwater fever have shown that some of the pigments that filter through the glomeruli are present in the epithelial cells of the convoluted portion of the renal tubules.

Factors affecting the process of filtration in malaria apparently are the same as those governing all processes of renal filtration. Some of the pigments resulting from the infection are filtrable, while some of the debris may not pass

through the glomeruli. Hemoglobinuria may also decrease or subside as a result of a diminution in the blood pressure level. This may readily occur in those animals that develop a severe anemia with an accompanying anoxia. The effect of anoxia on the myocardium and kidneys results in inefficient renal filtration.

The presence of a "hemolysin" to explain the mechanism of hemoglobinuria in monkey malaria has apparently never been proved. When enough red cells have been destroyed by the parasites and the spleen has enlarged from the accumulation of these pigments and debris, the stage is set for the occurrence of hemoglobinuria. A contraction of the spleen from any cause may now result in hemoglobinuria. The continued destruction of red blood cells by the malarial parasites, when the spleen is enlarged, may result directly in hemoglobinuria. Adrenalin has been shown to produce hemoglobinuria in the monkey infected with *P. knowlesi*. At no time in the monkey has hemoglobinuria been observed following the injection of quinine. However, it may occur since quinine intravenously may produce convulsions. Hemoglobinuria might also occur in malarial infected monkeys following contraction of the spleen produced by excessive exercise and fear associated with handling. Hemoglobinuria following quinine therapy has been observed in man, and attacks have occurred following violent emotions. The inhibition of the attacks of blackwater fever with barbiturates lends support to the significance of splenic contractions.

No evidence was developed in this study to support the idea that the complication of hemoglobinuria is related to sensitivity.

The authors conclude that the phenomenon of hemoglobinuria results from a disproportion between the rate of destruction of the erythrocytes and the ability of the reticulo-endothelial system to remove the pigments from the plasma. (J. Nat. Malaria Soc., December '50, R. H. Rigdon and J. E. Quattlebaum)

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Effectiveness of Penicillin in the Prevention of Congenital Syphilis: This report is a study of the incidence of congenital syphilis in the offspring of 631 syphilitic pregnant women treated with penicillin and delivered during 1948 and 1949. The incidence of abortions, miscarriages, stillbirths and neonatal deaths in this series closely paralleled that reported for nonsyphilitic pregnancies.

The authors classified as syphilitic 5 infants, 1 stillbirth and 1 neonatal death, or 1.1 percent. It was believed that placental shock may have been the cause of the 1 stillbirth classified as syphilitic. The neonatal death and the presence of congenital syphilis in 4 of the infants were due to relapse or reinfection late in pregnancy in women who failed to remain under observation. The remaining infant diagnosed as syphilitic was treated at 1 month on the basis of a positive serologic reaction and may not have had syphilis.

Women who have been adequately treated and have become seronegative do not need to be re-treated during pregnancy if the serologic reaction remains continuously negative. Those with seroresistant cases, particularly of late syphilis with low titer, also need not be re-treated. However, the increase in disastrous results that occurred in the seropositive cases suggests that the pregnant woman should be re-treated if there is doubt concerning unsatisfactory response to previous therapy or her willingness to remain under close observation.

Positive reactions to serologic tests on cord blood are not diagnostic of congenital syphilis, especially in well-treated mothers. The reaction to the Kahn test on the cord blood was positive in 100 infants from 227 mothers whose serologic reactions were positive at delivery. Only 4 cases of congenital syphilis were diagnosed in these 100 infants. The babies of mothers treated late in pregnancy may show persistent but gradually decreasing titers that may require several months to become negative. These are probably infants infected in utero responding in a satisfactory manner to the treatment administered to the mother. Osteitis of the long bones as demonstrated by x-rays in such infants also does not necessarily call for further treatment.

Penicillin therapy should be given at any time in pregnancy short of actual delivery. If it is too late to prevent infection, such treatment is very effective in "curing" the condition of an infected fetus in utero. Adequate penicillin therapy given during pregnancy is nearly 100 percent effective in the prevention of congenital syphilis or in curing an already infected fetus in utero, provided further serologic and clinical progress is satisfactory. (A.M.A. Arch. Dermat. & Syph., January '51, L. W. Shaffer and C. J. Courville.

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Third Annual Navy Industrial Health Conference: The Third Annual Navy Industrial Health Conference will be held in Atlantic City, 22 through 27 April 1951. All medical officers at field activities having Civil Service employees are urged to initiate action to acquaint commanding officers with the importance of their commands being represented at this Conference.

Through the courtesy of the American Association of Industrial Physicians and Surgeons an auditorium has been made available for 5 daily section meetings of Navy occupational medical and industrial hygiene representatives. The Conference this year, as in the past 2 years, is to be held concurrent with the annual joint meeting of:

American Association of Industrial Physicians and Surgeons
American Conference of Governmental Industrial Hygienists
American Industrial Hygiene Association
American Association of Industrial Dentists
American Association of Industrial Nurses, Inc.

The Navy meetings have been scheduled so as to permit Navy delegates to attend association meetings of most pertinent interest.

As soon as printed programs are ready, letters will be sent to commanding officers of activities having 1500 or more civilian employees, urging that travel funds be provided officers or civilians of the Medical Department engaged in occupational medicine and industrial hygiene. Where civilian nurses are primarily responsible for the administration of the civilian medical services, under the supervision of a medical officer, such nurses should be sent to the Conference. Efforts to acquire authorization of travel funds from local commands should not be delayed until the arrival of a Bureau letter. It is emphasized that travel funds for officers and civilian must be provided by either the local commands or the Bureau having management control of the command. Current instructions (NCPI 88) stipulate that the senior medical officer is directly responsible as the operating head for the industrial health program of the activity. It is incumbent upon each senior medical officer to discuss with his commanding officer the need for and advantages of attendance at the Conference of key personnel engaged in civilian industrial health services.

This annual Navy Industrial Health Conference will provide an opportunity for industrial medical officers, industrial hygienists, and industrial nurses from the Navy field activities to discuss Navy occupational health problems of common concern and to meet leaders of national prominence in the field of occupational medicine and industrial hygiene. It will provide these men with information on the latest developments in the rapidly developing fields of occupational medicine and industrial hygiene.

The more than 50 officers and civilian industrial hygienists who attended the Conference last year were almost all representatives of the larger naval shore establishments, especially shipyards. It is important this year that all field establishments having 1500 or more civilian employees send an officer of the Medical Department to this Conference. Medical officers from smaller plants, and indeed, from any activity, are urged to attend, provided that the local command will provide TAD funds.

The national mobilization effort has focused attention on the need for peak production which is achievable only through peak worker efficiency. A good plant medical department can contribute greatly to increasing the worker's efficiency and level of productivity. In an earlier stage of its development, the objectives of industrial medicine were essentially limited to surgical care of industrial injuries and the medical treatment of occupational diseases for the purpose of minimizing compensation charges for management. Today, it also includes the application of the modern principles of preventive medicine for the health conservation of the worker and the executive with the ultimate goal of maximum pro-

duction efficiency. Medical officers unfamiliar with this development would do well to read NCPI 88 carefully.

This Conference will serve as a postgraduate course for officers and civilians of the Medical Department engaged in the industrial health services. There is a paucity of doctors trained in occupational medicine, not only in the Navy but nationally. Frequently, it has been necessary for the senior medical officer to assign medical officers with no previous experience to the civilian occupational medical service. This Conference will be especially beneficial to such officers.

The senior medical officer will find commands readily acquiescent for the provision of travel funds for civilian employees, but they may face some difficulty in acquiring approval for travel funds for medical officers. Officers of the Medical Department of a command are on the staff of the commanding officer and are directly responsible to him for the provision of medical services required by Regulations, Orders, and Laws. The command, if it is interested in and aware of the advantages of and requirements for a Civil Service employees' occupational health service, will be amenable to the suggestion that the attendance of medical officers or Medical Service Corps officers in industrial health will benefit the command directly.

The National Association anticipates that more than 3000 doctors, industrial hygiene engineers, and nurses will be in Atlantic City for this Conference. It is advisable that hotel reservations be made early. Following is a list of hotels and charges:

	<u>Single</u>	<u>Twin</u>
Headquarters Hotel		
Chalfonte-Haddon Hall	\$6.00 - \$10.00	\$8.00 - \$18.00

Other hotels in order of convenience to the Headquarters Hotels:

Strand	\$4.50 - \$ 6.00	\$9.00 - \$12.00
Colton Manor	5.00 - 9.00	8.00 - 12.00
Lafayette	5.00 - 6.00	8.00 - 10.00
Morton	5.00 - 6.00	7.00 - 9.00
Senator	4.50 - 7.00	7.00 - 12.00
Mayflower	5.00 - 6.00	7.00 - 12.00
Sterling	4.00 - 5.00	6.00 - 7.00
Jefferson	6.00 -	7.00 - 10.00
Madison	4.50 - 6.00	7.00 - 10.00
Traymore	6.00 - 14.00	9.00 - 18.00
Claridge	6.00 - 14.00	9.00 - 17.00

(Preventive Med. Div., BuMed)

Selected Research Reports

Responses of Human Subjects to Immersion in Ice Water and to Slow and Fast Rewarming: Two nude subjects were immersed shoulder deep in ice water for about one hour until the toes became numb, then the exposure was terminated. The average water temperature varied from about 42° F. in the winter to as high as 50° F. in the summer. Following this drastic chilling the subjects were rewarmed by exposure to air at 73° to 100° F. or to water at 100° to 102° F. A third subject dressed in outdoor winter clothing was chilled in a cold chamber at -20° F. for about three hours, until his toes became numb. He was then rewarmed in air at 100° F. without changing clothes.

Rectal, gastric and oral temperatures following initial rise fell linearly during the cold exposure period. Following immersion, the deep body temperatures fell abruptly in a comparatively warm environment (air temperature 73° to 100° F.). In one experiment the fall of deep body temperature was greater during a period of 20 minutes with the individual in air (73° F.) than it was during the previous one-hour immersion in cold water (50° F.).

There were no untoward effects from the exposures to cold. The reduction or absence of pain after the initial immersion shock (except in the toes, and at the waterline skin areas protruding from the water) was noted. The feeling of intense cold occurred during the initial period of rewarming, despite a high surface temperature. The onset and maintenance of shivering was associated not with the cooling of the skin, but with the fall in deep body temperature.

The need for rapid rewarming of the chilled body, to prevent the precipitous "after drop" of deep temperatures under the conditions of chilling in these experiments, is emphasized. (Project X-189, Report No. 11, NMRI, NNMC, Bethesda, Md.)

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The Elastic Mechanism and Hydrogen Bonding in Actomyosin Threads:

Electron microscope studies of mixtures of actomyosin and substances capable of H-bonding to various extents, showed that the ability of a substance to H-bond roughly paralleled its ability to reduce the cross-linked character of an actomyosin gel. Likewise, H-bonding ability ran parallel to the ability to dissolve actomyosin threads. It was inferred that the H-bond, along with electrostatic links, plays an important role in cross-bonding actomyosin. (Project NM 000 018.04.01, NMRI, NNMC, Bethesda, Md.)

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From the Note Book

1. The civilian members of the Armed Forces Medical Policy Council are: Dr. I. S. Ravdin, Philadelphia, Pa.; Dr. W. R. Lovelace II, Albuquerque, N. Mex.; and Dr. J. P. Hollers, San Antonio, Texas. The Council consists of the three civilian members, the Surgeons General of the Army, Navy and Air Force with Dr. R. L. Meiling as chairman. The Committee has broad powers over Defense Department medical policy and operations in addition to advising on call-up of reserves. (J.A.M.A., Washington News, 3 February '51)

2. Serious deficiencies of concentrated rations designed for civilians in devastated areas and for combat troops have been uncovered by nutrition experts of the United Kingdom and U. S. as a result of a recent two-day conference in London. The conference was preceded by meetings at Oxford and Cambridge Universities under the direction of the Office of Naval Research.

The belief that hunger or stress of battle would compel men to eat food of low acceptability was found erroneous and detrimental, since men will reject unacceptable foods and suffer both hunger and great loss of weight rather than consume unpalatable food.

Research has revealed that soldiers allowed free choice of food will select a pattern which follows their natural food habits. It was also revealed that soldiers or civilians need the following items in any ration: bread, solid meat pack, milk, fruits and selected vegetables. Soldiers on the front line have evinced low acceptability for such processed food mixtures as hashes and meat and vegetable stews. (Bio Sciences Group, ONR)

3. The early care of the seriously wounded man is presented in an excellent paper in J.A.M.A., 27 January 1951, by H. K. Beecher.

4. Carefully controlled studies conducted at the University of Illinois College of Medicine and at the Chicago College of Optometry demonstrate that antihistaminic drugs do not prevent, abort, shorten, curtail, reduce or stop the common cold. Antihistaminic drugs are no more effective than placebos in aborting a cold and there is no validity to the contention that antihistaminic drugs are more effective if taken within a short time after the start of a cold. Attention was also called to the high incidence of side effects attributed to treatment. (A.M.A. Arch. Otolaryng., December '50, N. D. Fabricant)

5. The Senate has appointed a special subcommittee to investigate the ouster of VA Medical Director, Dr. P. B. Magnuson. The members of the committee are Senators Humphrey, Minnesota; Hill, Alabama; Douglas, Illinois; Morse, Oregon; and Nixon, California. (J.A.M.A., Washington News, 3 February '51)

6. Research now going on in several regions on the American continent and in Hawaii point the way to weather forecasting to apply to any particular day and any particular place a month ahead. (Science News Letter, 27 January '51)

7. The city of Milwaukee, Wisconsin, recently passed an ordinance relating to the use of x-ray shoe fitting fluoroscopes. The ordinance limits the intensity of the primary beam and stray radiation, specifies foot chamber filters, limits the maximum exposure time and requires a warning and instruction placard to be posted on the customer's side of the machine. (Indust. Hyg. Newsletter, February '51)

8. "Presentation of a Basic Defense Program" appears in New England J. Med. of 18 January 1951. (D. E. Currier and C. H. Bradford)

9. A wise solution to the problems of preservation of the health of the aged, especially their mental health, is the utilization of their limited productive capacity. Older persons should be given duties commensurate with their physical and mental faculties, rather than a dole or unearned pension. There is sound economic reason for this since a state cannot progress if a sizable and ever-growing segment of its population is non-productive. The British Royal Navy set a precedent in World War II in placing older high ranking personnel in junior berths with marked success. Man power was used effectively and the advance of younger men was not stultified. The beneficial results of this experiment might well be studied by those concerned with retirement problems. (Geriatrics, Nov-Dec '50, S. F. Dudley)

10. Nearly 500 physicians and public health workers from the Middle East met in Beirut, Lebanon, November 18 and 19, 1950, in the first medical symposium in that area on the Prophylactic and Therapeutic Aspects of Tropical Diseases. The conference was held under the auspices of the Division of Medicine of the American University of Beirut and was sponsored by the U. N. Relief and Works Agency for Palestine Refugees, the U. S. Navy Medical Research Unit in Cairo and WHO. Captain J. J. Saperro, MC, USN, Commanding Officer of the Research Unit in Cairo, and Surgeon Commander W. S. Miller, RN, attached to the Research Unit, Cairo, addressed the Conference. (PHS, FSA, January '51)

11. Twelve cases of rare benign lesions of the intestinal tract are discussed in Proceedings of the Staff Meeting of the Mayo Clinic, 17 January 1951, by C. F. Dixon and G. L. Kratzer.

12. A gasoline burner developed for military uses, but suitable for other purposes, is small in size and consumes 1/2 gallon of fuel per hour, but delivers enough heat for a 5-room house. Its electric fan can provide ventilation in warm weather. (Science News Letter, 3 February '51)

13. When the Brooklyn Bridge was opened to traffic in 1883, some refused to use it, believing it unsafe; today, the original steel cables, trusswork and suspenders carry 37,000 vehicles daily. (Science News Letter, 3 February '51)

14. A review of coccidiomycosis appears in the American Journal of the Medical Sciences, January 1951. (J. Schwarz and J. Muth)

15. "The Behavior of Carob Gum in the Gastro-Intestinal Tract of Man" is discussed in Am. J. Digest. Dis., January 1951. (A. A. Holbrook)

16. A review of tumors of the heart and a report of 150 cases appears in the A.M.A. Archives of Pathology, January 1951. (R. W. Prichard)

17. To produce 1 pound of aluminum 4 to 6 pounds of bauxite ore are required. (Science News Letter, 3 February '51)

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Prevention of Rheumatic Fever by Penicillin Treatment of Streptococcal Infection: A controlled study of 2,340 patients with exudate on the tonsils or the pharyngeal wall was conducted between 24 January 1949 and 22 February 1950 at Francis E. Warren Air Force Base in southeastern Wyoming. A total of 1,178 patients received penicillin treatment according to one of three different schedules. Of this group only 2 developed definite acute rheumatic fever. A total of 1,162 control patients selected by odd and even service numbers received no specific treatment; 28 of these developed definite rheumatic fever. The diagnosis of possible acute rheumatic fever was made in 3 patients in the treated group and in 7 patients in the untreated group. One of the 2 patients in the treated group who became ill with rheumatic fever was treated within 9 hours after onset of the symptoms of the streptococcal disease, and the other approximately 4 days after onset.

Serological studies of patients treated with three different schedules show that the use of three injections totaling 1,200,000 units of depot penicillin was twice as effective in suppressing antibody formation as a single injection of 600,000 units. The longer schedule was likewise more effective in clearing streptococci from the throats of infected people.

The following recommendations were accordingly included in the report, which was a joint product of the Streptococcal Diseases Laboratory, Francis E. Warren Air Force Base; the Commission on Acute Respiratory Diseases, Armed Forces Epidemiological Board; and the Department of Preventive Medicine, Western Reserve University, Cleveland, Ohio:

- "I. All Patients with Streptococcal Infections Should Receive Penicillin.
 - A. Selection of patients for treatment with penicillin.

a. All patients reporting to the dispensary or to the hospital presenting classical features of streptococcal respiratory disease should receive penicillin therapy. Streptococcal infections develop rapidly and are usually associated with sore throat (pain on swallowing), fever, diffuse redness and edema of the soft palate, tonsils and oropharynx, discrete or confluent exudate, and large and tender cervical lymph nodes. Classically, such patients develop a leucocytosis and show streptococci on culture.

b. In areas where streptococcal infections are epidemic, all patients with exudative tonsillitis or pharyngitis should be considered streptococcal in origin and receive treatment.

c. In military installations where non-streptococcal exudative tonsillitis or pharyngitis is common, a total leucocyte count should be obtained from each patient exhibiting exudative lesions. When the total leucocyte count is 10,000 or greater, treatment should be instituted.

d. All personnel admitted to the hospital with respiratory infections not characterized by exudative tonsillitis or pharyngitis should have a total leucocyte count. If this count is 10,000 or greater the disease should be considered streptococcal in origin. (Exclusion of other diagnostic categories by clinical or laboratory data should, of course, be made.)

e. In those hospitals where adequate bacteriological facilities are available, a throat culture should be obtained from each patient admitted to the hospital with respiratory disease. Those patients whose cultures show 10 or more colonies of beta-hemolytic streptococci on sheep blood agar plates should receive penicillin therapy.

B. Methods of treatment:-

a. For patients who do not give a past history of rheumatic fever or who have no evidence of rheumatic heart disease, one of the following treatment schedules should be employed.

(1) Six hundred thousand units of crystalline procaine penicillin G (suspended in peanut oil containing 2 percent aluminum monostearate) upon admission and again 72 to 96 hours after the first dose.

(2) Three hundred thousand units of depot penicillin on admission, 300,000 units at 48 hours, and 600,000 units at 96 hours.

b. Patients with streptococcal infections who give a past history of rheumatic fever or who have evidence of rheumatic heart disease should be

treated more intensively, as follows: Twenty-five thousand units of the sodium salt of penicillin every 3 hours for 8 to 10 days. (John H. Dingle, M.D., Director, Commission on Acute Respiratory Diseases, 15 January '51)"

Note: For the prevention of rheumatic fever, all cases of streptococcal infection proved or suspected should receive penicillin as soon as possible by a treatment schedule that will assure an effective blood level for 6 days or more. (Preventive Med. Div., BuMed)

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National Gastroenterological Association 1951 Award Contest: The National Gastroenterological Association announces that it is again awarding its annual prize of \$100 and a Certificate of Merit for the best unpublished contribution on Gastroenterology or allied subjects. Certificates will also be awarded those physicians whose contributions are deemed worthy.

Contestants residing in the United States must be members of the American Medical Association. Those residing in foreign countries must be members of a similar organization in their own country. The Association reserves the exclusive right of publishing the winning contribution, and those receiving Certificates of Merit, in The Review of Gastroenterology.

All entries for the 1951 prize should be limited to 5,000 words, be typewritten in English, prepared in manuscript form, submitted in five copies accompanied by an entry letter, and must be received not later than 1 June 1951. Entries and further inquiries should be addressed to the National Gastroenterological Association, 1819 Broadway, New York 23, N. Y.

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List of Recent Reports Issued by Naval Medical Research Activities:

Naval Medical Research Institute, NNMC, Bethesda, Maryland.

The Behavior of Free-Weighted Actomyosin Threads Under Pressure, Project NM 000 018.04.04, 23 June 1950.

Effect of Carbon Dioxide on the Rate of Denitrogenation in Human Subjects, Project NM 004 005.04.05, 8 August 1950.

The Effect of Distillers' Solubles Containing Fluorine on the Development of Dental Enamel in Swine's Teeth, Miscellaneous Report, 2 November 1950.

Medical Research Laboratory, U. S. Naval Submarine Base, New London, Conn.

Visual Acuity at Scotopic Levels of Illumination, MRL Report No. 162, Project NM 003 041.04.03, 4 December 1950.

The Relation of Dark Adaptation to Duration of Prior Red Adaptation, MRL Report No. 166, Project NM 003 041.49.01, 6 December 1950.

The Effect of Ultraviolet Radiation from Fluorescent Lights on Dark Adaptation and Visual Acuity, MRL Report No. 169, Project NM 003 041.38.01, 20 December 1950.

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Revised Aviation Physical Standards Section of Manual of the Medical Department: The Aviation Section of the new Manual of the Medical Department has been completed and has been approved by the Secretary of the Navy. The Bureau is mailing to all aviation activities mimeographed copies of the draft which has been so approved. When stations receive a copy of the approved new section in mimeographed form, they will employ the provisions of that copy in lieu of the provision set forth in Section XXV, Chapter 1 of Part II of the Manual of the Medical Department, 1945 edition. Activities involved in applying aviation physical standards which have not received a copy of the new section may obtain such copy by addressing a request to the Bureau of Medicine and Surgery, Attention Code 535. The new standards will be applied to all flight physical examinations arriving at the Bureau after 1 April 1951.

The following comments are presented to assist in calling attention to changes that appear in the new aviation section.

a. Examination of a candidate may be stopped when a permanent disqualifying defect is found.

b. Candidates must not only meet the basic standards for Class 1, Service Group I, but must also meet the special standards set forth in a separate article concerning candidates. For example, refraction and audiometer tests are required for all candidates and the blood pressure levels for candidates have been lowered.

c. In the examination for Class 1 (Pilots), Service Group I.

(1) Status of syphilis is clarified.

(2) A new standard of blood pressure is introduced; orthostatic drop in systolic pressure of more than 10 mm. is cause for disqualification.

(3) Visual standards are expressed in Snellen system. Minimum of 20/30 is required for Service Group I, provided it is corrected to 20/20.

(4) There is a new test for depth preception. (The Verhoeff apparatus is now on the supply table.)

(5) The status of phorias and prism divergence is clarified.

(6) Angle of convergence is omitted; instead the PC must be the same or less than PD.

(7) Color vision requirement is more lenient for designated pilots.

(8) Refraction is required when vision is less than 20/30 (unless already corrected).

(9) Defective hearing is expressed in terms of audiometer reading. The coin click and watch tick are omitted.

d. For Service Group II and III, visual standards are clarified and accommodation requirement is more lenient. Requirement for wearing lenses is clarified. Audiometer standards are set.

e. Remarks should be more comprehensive, especially when a report is controversial. The Bureau has a record of past history but unless proper notation is made on Standard Form 88, the Bureau cannot determine whether or not such past history has been considered. Recommendations should be made only after the flight surgeon has fully considered the past history.

f. There are special articles on persons who are actually in flight training.

g. "When to report to the Bureau" is stated clearly.

h. An aviator must be examined every twelve (12) months. Usually any complete flight physical in the calendar year will count as an annual.

i. Audiometers are a supply table item and may be obtained by requisition.

j. The most recent Bureau endorsed Form 88 should be in the Health Record. If the Health Record is not available, the endorsed Form 88 should be sent to the activity which has it on file. (AvMed. Div., BuMed)

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Note on Latest Form 88: Some flight surgeons have asked for clarification of the term "name of reviewing officer or approving authority" in item 82 of the revised Standard Form 88. This term, for Navy purposes, means the commanding officer of the person being examined. When the commanding officer of the person being examined is so inaccessible to the examining flight surgeon that to obtain either his signature or his permission for the flight surgeon to sign "by direction" would delay an important report, the original and one copy of Form 88 should be forwarded to the Bureau directly. In such cases, the flight surgeon should send a third copy to the commanding officer concerned for his information. This is especially important when the recommendation of the flight surgeon is not favorable to the examinee. In the case of civilians item 82 of the revised form may be left blank. (AvMed. Div., BuMed)

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Surgeon General's Symposium Planned: The Surgeon General of the Navy is planning to hold a 1951 symposium of all District Medical Officers and Commanding Officers of medical activities. At present, the tentative date is 16-17-18 May. Further information will be promulgated as the plans mature. (Assistant Chief of Bureau for Personnel and Professional Operations, BuMed)

BUMED CIRCULAR LETTER 51-19

26 January 1951

From: Chief, Bureau of Medicine and Surgery

To: All Dental Officers

Subj: Graduate and postgraduate training for dental officers, U. S. Navy

Ref: (a) BuMed Cir Ltr No. 50-42

1. Reference (a) is hereby canceled and superseded by this letter.

2. The following graduate and postgraduate training is available to officers of the Dental Corps, U. S. Navy:

Course	Place	Dur- ation	Com- mences	Bil- lets	Vac- ancies
General Postgraduate Course	U.S. Naval Dental School	6 mos	Jul 1951	16	0
Specialized Course on Prosthodontia	U.S. Naval Dental School	6 mos	Jul 1951	*2	2
Specialized Course on Oral Surgery	U.S. Naval Dental School	6 mos	Jul 1951	*2	2
Dental Internship	U.S. Naval Dental School & 7 NavHosp	12 mos	Aug 1951	Varies	Varies
Oral Surgery Residency	Naval Teaching Hospitals	12 mos	Jul 1951	6	6
Prosthodontia Residency	Major Dental Prosthetic Activities	12 mos	Jul 1951	4	4
Pathology Residency	U.S. Naval Medical School	12 mos	Jul 1951	1	1
Pathology Residency	Armed Forces Institute of Pathology	10 mos	Jul 1951	1	1
Short Postgraduate and Refresher Courses	Civilian Schools and Professional Societies	Varies	Varies	Not limited	Not limited
Dental Material Research	National Bureau of Standards, Wash.D.C.	12 mos	Jul 1951	2	2
Logistics Course	Naval War College, Newport, R.I.	10 mos	Jul 1951	1	1
Industrial College Armed Forces Course	Industrial College Armed Forces, Washington, D.C.	10 mos	Aug 1951	1	1
Amphibious Warfare School Senior Course	Marine Corps Schools Quantico, Va.	9 mos	Sep 1951	1	1
Armed Forces Staff College Course	Armed Forces Staff College, Norfolk, Va.	5 mos	Mar 1951	1	0

*Candidates will be selected from among officers who have attended the General Postgraduate Course at the U. S. Naval Dental School.

3. General Postgraduate Course at U. S. Naval Dental School.--Dental officers are eligible to apply for assignment to this course of instruction upon completion of at least one tour of duty at sea or outside the continental limits of the United States. Classes for this course convene in January and July of each year. This course is designed to acquaint experienced dental officers with the latest advances in the various branches of dentistry and naval dental administration. Officers who were originally appointed in the Regular Navy in the grade of lieutenant (junior grade) after 1 January 1944 are required to complete this course before they may be considered for long specialized graduate or postgraduate courses or for naval dental residencies. Exceptions may be made to this requirement in cases of dental officers having exceptional qualifications.

4. Specialized Courses at U. S. Naval Dental School.--These courses provide advanced training in prosthodontia and in oral surgery. Candidates for specialty training may be selected from among dental officers attending the current General Postgraduate Course on the basis of demonstrated ability and interest in such training. Other dental officers who have completed the General Postgraduate Course during a previous period may also apply for these courses.

5. Naval Dental Internship Program.--This program, which is designed to meet the American Dental Association Standards for rotating dental internships, is available to recent graduates in dentistry. Six months of training is given at the U. S. Naval Dental School and another six months at one of the following teaching naval hospitals: St. Albans, N. Y.; Philadelphia, Pa.; Portsmouth, Va.; Great Lakes, Ill.; San Diego, Calif.; Oakland, Calif.; and Chelsea, Mass.

6. Naval Dental Residency Program.--Each residency is designed to provide opportunity to acquire proficiency in a specialized field of practice or research and the educational background for continued development in a special field. This period of training, in addition to the 12 months spent in the General and Specialized Courses at the U. S. Naval Dental School, provides dental officers with two years of formal specialty training. Candidates for naval dental residency training are selected from among the dental officers who satisfactorily complete the training in a specialized course at the U. S. Naval Dental School. Dental officers who complete long courses in civilian colleges also may request assignment to naval dental residency training, especially if such training is necessary to complete requirements for graduate degrees.

7. Long Specialty, Research, and Science Courses in Civilian Schools.--During the present emergency and until such time as conditions again permit, these courses will not be made available to officers of the Naval Dental Corps.

8. Short Postgraduate and Refresher Courses.--Dental officers are encouraged to apply for short postgraduate and refresher courses given by civilian colleges and professional societies whenever such courses are available in the vicinity of their duty stations. When applications are submitted and approved in accordance with BuMed Circular Letter 50-136, 8 Dec 1950, tuition and other fees will be paid from BuMed training funds. However, funds are not available for travel and per diem expenses of officers authorized to attend these short courses.
9. Dental Material Research Training at National Bureau of Standards.--This training offers opportunity for participation in dental research projects under the guidance of the staff of the Dental Materials Section of the National Bureau of Standards, Washington, D. C., which includes one or more American Dental Association Research Fellows. Only candidates who have special aptitude in this field are considered for this advanced instruction.
10. Logistics Course, Naval War College, Newport, R. I.--This course is given to prepare experienced officers for high level functions of logistics planning, operational logistics, air logistics, and logistics administration. Ordinarily, announcement of the grades of officers eligible to attend this course are made in the Navy Department Bulletin. The candidate is determined each year by a selection board, which is convened in BuPers, from the applications which are received in that Bureau.
11. Industrial College of the Armed Forces, Washington, D. C.--This is a course for experienced officers. Its purpose is to train officers of the Armed Forces in all aspects of procurement, planning, and economic mobilization; to evaluate the economic war potential of foreign nations; and to study the social, political, and economic impact of war. Announcement of this course ordinarily appears in the Navy Department Bulletin. The candidate is determined each year by a selection board, which is convened in BuPers, from the applications which are received in that Bureau.
12. Amphibious Warfare School, Senior Course, Marine Corps Schools, Quantico, Virginia.--This course is designed primarily to cover the conduct of air-amphibious operations employing battalions, regiments, divisions, corps, and corresponding aviation organizations contained within the Fleet Marine Force. Instruction is designed to produce troop commanders on battalion and regimental levels and executive staff officers (and assistants) on all levels. Naval officers are selected for this training by a board, convened in BuPers, from applications which are received in that Bureau. Announcement of this course is ordinarily made in the Navy Department Bulletin.
13. Armed Forces Staff College, Norfolk, Virginia.--This course prepares experienced officers for the exercise of command and the performance of joint staff duties on theatre and major joint task force levels, to insure proper coordination

and team work of officers of the Armed Forces, and to foster mutual confidence and understanding among the Services. Announcement of this course is ordinarily made in the Navy Department Bulletin. Candidates are selected by a board, which is convened in BuPers for that purpose, from applications which are received in that Bureau.

-C. A. Swanson

The above letter will not be printed in the Navy Department Bulletin.

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BUMED CIRCULAR LETTER 51-20

26 January 1951

From: Chief, Bureau of Medicine and Surgery
 To: All Stations within the Continental United States

Subj: Care of the Dead when death occurs away from a station having a contract

Ref: (a) BuMed Circular Letter No. 50-68
 (b) Paragraph 341.1, Manual Medical Department, 1945
 (c) Paragraph 341.6, Manual Medical Department, 1945

1. Reference (a) is hereby superseded and cancelled. The material in paragraphs 2, 3, 4 and 6 below has been brought forward from reference (a). The instructions contained in paragraph 5 have been added for clarification.

2. Reference (c) provides that "When death occurs in the continental United States away from a naval command, the dispatch forms prescribed in paragraphs 341.1 and 341.8 shall be modified to conform with the circumstances. Item (j) of paragraph 341.1 shall include information as to the location of the body, the name and address of the person having custody, and, if known, the wishes of the next of kin as to disposition. The dispatch to the next of kin (par. 341.8) shall be appropriate to the circumstances. Unless death has occurred at the home of the deceased, the form of dispatch to the next of kin shall be altered only by elimination of the information regarding the furnishing of the escort. Upon receipt of instructions as to disposition desired, the Bureau will arrange either through the nearest naval activity or through a local civilian undertaker for preparation and encasement of the remains at a cost not to exceed \$200, with proper shipping instructions. An additional amount not to exceed \$75 (par. 3447.1) may be allowed to apply to funeral expenses at final destination."

3. This Bureau has experienced several embarrassing situations in handling remains in cases such as those covered by reference (c). The duty stations of the individuals concerned in these particular cases contacted the nearest naval

activity to the place of death and issued instructions rather than complying with reference (c). This Bureau not knowing of this action and assuming charge of the case in accordance with the regulations proceeded to issue instructions relative to preparation, encasement and disposition in accordance with reference (c). The information and instructions issued by this Bureau proved to be in conflict with action taken by the duty stations and, therefore, reflected very badly on this Bureau and the Navy Department as a whole.

4. In view of the foregoing and in order to facilitate efficient and expeditious disposition of remains in cases of this nature, it is requested that after initial instructions contained in references (b) and (c) have been complied with no further action be taken in order that the Bureau of Medicine and Surgery may assume charge and arrange for preparation, encasement and disposition in accordance with reference (c). In the event it is deemed necessary by the duty station to issue further instructions, the Bureau of Medicine and Surgery should be made an information addressee of the communication.

5. Deaths of Marine Corps personnel occurring away from naval activities having contracts for care of the dead are matters coming under the cognizance of the Marine Corps, and necessary instructions for preparation, encasement and disposition of the remains will be issued by Headquarters, U. S. Marine Corps.

6. The foregoing instructions should not be considered as covering those cases where death occurs sufficiently close to a naval activity having a contract for care of the dead to permit that activity to assume custody of the remains for transfer to the contract undertaker for preparation and encasement. If such transfer can be accomplished, the Bureau should be informed immediately.

-C. A. Swanson

The above letter will not be printed in the Navy Department Bulletin.

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BUMED CIRCULAR LETTER 51-21

29 January 1951

From: Chief, Bureau of Medicine and Surgery
 To: Holders of NavMed-P-1313, Instructions Governing Individual Statistical Report of Patient (NavMed-F)
 Subj: Instructions Governing Individual Statistical Report of Patient (NavMed-F), NavMed-P-1313; changes in
 Ref: (a) NavMed-P-1313, Instructions Governing Individual Statistical Report of Patient (NavMed-F)
 (b) BuMed C/L 50-120

Encl: (1) Changes to NavMed-P-1313

1. Reference (a) is hereby changed as indicated by enclosure (1). Reference (b) is superseded and cancelled by the change in enclosure (1) to article 23-213(3)(a).

2. A review and critical examination of the NavMed-F cards received during 1950 reveals that there is no uniform interpretation of certain instructions in NavMed-P-1313 concerning the completion of the Individual Statistical Reports of Patient. With some exceptions these differences appear to be related to D (Duty) and IS (Invalided From the Service) methods of disposition. It is essential that the disposition of patients be reported so that it is possible to differentiate between (1) those individuals who are physically able to return to work status when disposed of from the sick list, even though they are to be separated from the service for nonphysical reasons, and (2) those who, because of physical disability, are either separated from the service by the reporting activity or are sent to duty in order to have the separation effected at another activity.

3. The changes attached as enclosure (1) shall be made in NavMed-P-1313 in order to obtain uniform reporting.

-H. L. Pugh

The above letter will not be printed in the Navy Department Bulletin.

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BUMED CIRCULAR LETTER 51-22

30 January 1951

From: Chief, Bureau of Medicine and Surgery
To: Commanding Officers, U. S. Naval Hospitals

Subj: Hospital organization charts and personnel listings

Ref: (a) BuMed Cir Ltr No. 49-15 dtd 15 Feb 1949
(b) BuMed Cir Ltr No. 50-12 dtd 30 Jan 1950
(c) N.C.P.I. 156
(d) Par. 14053, BuSandA Manual

1. References.--References (a) and (b) are hereby canceled and superseded, however, enclosure (1)--a sample functional organization subchart--of reference (a) is still current and shall be brought forward. Reference (d), as recently revised, provides that organizational components performing Supply Corps functions which are located in field activities under the management control of the Bureau of Medicine and Surgery are to follow BuMed's instructions regarding the annual submission of structural and functional organization charts and personnel listings.

2. Purpose.--The Bureau frequently requires hospital organization charts in connection with organization and procedural studies, maintenance of hospital atlases, etc. To have data available in essentially the same form from all hospitals, the standards and reporting procedures outlined in paragraph 3 are established. The instructions in paragraph 4 will fulfill the requirements of reference (d).

3. Hospital Organization Charts.--

a. Two sets of the following charts shall be submitted to the Bureau annually by 1 February, depicting the organization as of 1 January:

(1) Structural organization master chart for the hospital as a whole.

(2) Functional organization subchart for each division and service in accordance with the format previously prescribed by enclosure (1) of reference (a). (In those instances where a division or service is not composed of too many organizational subcomponents, it may be practicable to include more than one division or service on the same chart.)

b. While it may be necessary to draft original charts in larger dimensions, the charts submitted to the Bureau shall be size 8" x 10-1/2".

c. Each chart should be properly identified and approved in the lower right-hand corner, as shown in the sample chart.

d. If any of the charts submitted in the previous year are still current, new charts need not be submitted; however, a listing of such charts shall be made in the letter transmitting the other new or revised charts. If it is not necessary to submit any new charts, a letter to that effect shall be submitted.

e. Copies of organization charts furnished Area Wage and Classification Offices in connection with the classification program, including classification surveys, as provided in reference (c), need not be submitted for approval of the Bureau provided the hospital certifies that the charts on file in the Bureau are still current.

4. Disbursing Division Organization Charts and Personnel Listings.--The following material concerning the Disbursing Divisions is needed to fulfill the requirements of reference (d).

a. In addition to the two functional organization charts of the Disbursing Division required by paragraph 3a(2), three additional charts of the Disbursing Division, and three copies of the personnel listings shall be submitted annually to BuMed. These additional charts and personnel listings will be forwarded by BuMed to the Bureau of Supplies and Accounts.

b. If the organization charts of the Disbursing Division submitted in the previous year are still current, a letter (in triplicate) specifically to that effect will serve in lieu of the submission of new charts. However, in this case, it will still be necessary to submit simultaneously the three copies of the personnel listings of the Disbursing Division.

c. The format to be used in the preparation of the personnel listings shall be the same as that outlined in reference (d), with one exception; that is, the personnel listing sheets shall be on size 8" x 10-1/2" paper instead of 8" x 14".

d. It should be noted that personnel listings will not be required regularly for any other organizational component of the naval hospitals.

-H. L. Pugh

The above letter will not be printed in the Navy Department Bulletin.

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BUMED CIRCULAR LETTER 51-23

31 January 1951

From: Chief, Bureau of Medicine and Surgery
 To: Holders of the Bulletin of BuMed Circular Letters
 Subj: BuMed circular letters; cancelation of

1. The following BuMed circular letters are canceled for the reasons indicated:

<u>Letter</u>	<u>Subject</u>	<u>Reason</u>
45-206	Mechanical resuscitators and inhalators	Served its purpose
49-158	Foremen Mechanics with reduction in force notices	Need for this reporting canceled by Under SecNav
50-31	Venereal disease contact investigations	Superseded by BuMed's Instruction Memo of 26 Oct 1950 with page changes for NavMed-P-1288 Interviewer's Aid

-H. L. Pugh

The above letter will not be printed in the Navy Department Bulletin.

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JOINT LETTER

BUMED CIRCULAR LETTER 51-24

1 February 1951

From: Chief, Bureau of Medicine and Surgery
Chief of Naval Personnel
Commandant of the Marine Corps

To: All Ships and Stations

Subj: Venereal disease control; elimination of all punitive measures in connection with

Ref: (a) BuPers C/L 179-47
(b) BuPers C/L 76-48
(c) General Order No. 18

1. References (a) and (b) are hereby canceled. Pursuant to a recent directive of the Secretary of Defense, all commands shall review their current policies concerning venereal disease control to insure compliance with the following:

(a) Punitive measures will not be taken against personnel on the basis of venereal infection alone.

(b) Venereal disease infection will not be considered sufficient indication of undesirable traits of character to warrant separation from the service, except cases of repeated infection which, judged upon their individual merit, may, as a determinant of unclean habits warrant separation.

2. Venereal disease control is a command responsibility. It is a function of command to impress moral responsibility and encourage self-discipline in the personnel of the Naval Establishment. Through education, personnel should continually be impressed with their moral responsibility and it should be made clear that continence is not incompatible with health and the fullest degree of physical and mental vigor. It is felt that this program will be successful with a large percentage of naval personnel; however, increased efforts must be directed toward "repeaters". Individuals in this category demonstrate willful indifference or careless neglect of elementary measures of self-protection and are of little value to the Navy.

3. The following instructions in amplification of reference (c) are promulgated:

(a) Make available in the regular training schedule periods for periodic lectures on citizenship and morality, such that all personnel of the command attend. It is suggested that coordinated lectures or talks be given in rotation by the more senior officers of the command. It is considered important that arrangements be

made in those commands not having a chaplain or medical officer attached for lectures by visiting chaplains on the moral and religious aspects of sex conduct and by medical officers on sex hygiene and venereal diseases.

(b) Encourage and provide maximum facilities for athletic and other wholesome recreation within the command.

(c) Arrange with the medical officer to keep the commanding officer informed of the venereal disease incidence and of flagrant cases of repeated venereal infections in individuals within the command who have not responded to special and individual instruction.

(d) Have the medical officer and the chaplain arrange to give instruction to smaller groups and individuals whose medical records show previous venereal infection.

(e) Place personnel under treatment for venereal disease under appropriate quarantine as recommended by the medical officer while they are in an infective stage.

(f) In flagrant cases of repeated venereal disease infections, recommendation for administrative separation for unclean habits shall be submitted to rid the service of personnel who have not responded to instruction and guidance. Such recommendation should contain a statement indicating that the person concerned has been thoroughly instructed as to the nature and dangers of venereal disease and the treatment therefor, in accordance with the provisions of this letter.

4. It is considered important that renewed and continuous attention be given to the development of leadership throughout all echelons in combating the conditions which have resulted in the present venereal disease problem. Special emphasis must be placed on the development of a sense of responsibility in petty officers. Attention is invited to the fact that specially trained venereal disease control officers are stationed at headquarters naval districts, river commands, fleet commands, and large shore stations. These officers are available to assist in the venereal disease control program.

5. Disciplinary action shall be taken against persons who willfully conceal venereal disease by failure to report for treatment after the appearance of symptoms of infection. No disciplinary action or other punitive measures will be taken against persons who voluntarily report for treatment. Quarantine when recommended by a medical officer to prevent infection of others is the only restrictive measure authorized solely because of venereal infection.

-C. A. Swanson

-C. B. Cates

-J. W. Roper

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BUREAU OF MEDICINE AND SURGERY
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