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HEALTH

31 JANUARY 1945

ARMY SERVICE FORCES ★ WAR DEPARTMENT

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HEALTH

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SUMMARY

MARIANAS CAMPAIGN Medical review of the Marianas Campaign reveals the need for mobile hospital units in Pacific operations and the necessity for planning possibly extensive medical care for civilians. See pages 2-7.

ADMISSIONS AND NONEFFECTIVES Admission rates for disease were comparatively favorable during December both in the U. S. and overseas, and also in the U. S. during January. The uncorrected noneffective rate for the U. S. reached a new peak of 66 per 1,000 strength during January because of a further increase in the census of overseas patients. See pages 8-10.

CAMPAIGN CASUALTIES The usual relationship between battle and nonbattle attrition, involving proportionately more nonbattle than battle casualties among troops of a task force, was reversed not only at Saipan and the Marshall Islands, but also in France during June and July. See pages 16-19 for a summary of campaigns from this standpoint.

MALARIA AND DYSENTERY Malaria is on the decline in all except the Asiatic theaters. Amebic dysentery constitutes an important military problem in Asia, and its effective control requires vigorous command support. See pages 20-23.

RESPIRATORY DISEASE For troops in the Z/I, the year 1944 saw the most favorable disease rate of the war period. Current respiratory rates in the U. S. can be described only as remarkable. On the European Continent admissions are also low. See page 24.

COLD INJURY Trench foot and frost bite continue to cause severe losses to ground troops on the European Continent, the reported number of cases through 12 January being 34,000. See page 25.

HOSPITALIZATION OVERSEAS Stated theater requirements for fixed hospital units through June 1945 will be fully met, according to present projections. On 31 December fixed beds were below WD authorized levels in the Southwest Pacific, Asiatic, and Mediterranean Theaters. Definite crowding of fixed beds was evident only in the European Theater, where 96 percent of the fixed T/O capacity present in the theater was occupied on 31 December. See pages 29-31.

EVACUATION During November the European Theater experienced severe difficulties in evacuating patients to base area hospitals. Subsequent difficulties are believed to have been even more acute. About 33,000 Army patients were debarked in the Z/I during January, the peak load of the war period. The lift is available for a continuation of this volume. Only about ten percent of the January evacuees arrived by air. See pages 32-34.

HOSPITALIZATION IN THE Z/I The patient census in the Z/I general hospital system increased by 24,000 during January, almost 75 percent of the Army evacuees received. Since proportionately more battle casualties are evacuated to the Z/I and since they are now being evacuated more quickly than before (page 35), evacuees are remaining longer in hospital in the U. S. Personnel shortages in the general hospital system total 30,800, including 700 Medical Corps officers and 4,500 nurses. If recruiting of nurses continues to be voluntary, it is estimated that the total deficit will amount to 9,000 by June and rise above this figure in relation to peak redeployment requirements. The patient census in ASF station and regional hospitals at the end of January was 58,000, almost equal to the total number of effective beds available. See pages 36-41.

ABUSE OF MEDICAL CHANNELS OF DISPOSITION Many individuals are placed into medical channels of disposition when they actually constitute not medical but administrative problems. This practice not only wastes manpower and medical facilities but also lowers the morale of those who remain in the Army. See pages 42-43.

MEDICAL ASPECTS OF MARIANAS CAMPAIGN

Designed to insure control of sea communications through the Central Pacific for the support of further attacks upon the Japanese and to secure the "anchored aircraft carriers" of Saipan and Tinian for air strikes against Japan, the assault upon the Marianas was essentially a naval operation. The Expeditionary Troops, organized as Task Force 56, were required to seize three fortified islands 1,200 miles from the nearest American base on Eniwetok in the Marshall Islands and from 4,000 to 7,000 miles from the areas where the troops were mounted. Despite its primarily naval character, two reinforced Army divisions were employed in the operation, and the land operations of two corps against heavily populated and fortified Japanese bases provide some guide to the medical problems likely to be met in future Pacific operations. The cardinal medical lessons of the campaign are:

1. One 400-bed evacuation hospital and one mobile field hospital, or their equivalent in mobile beds, are needed in support of each assault division. Some mobile units should be landed with the first assaults if there is any possibility that enemy action may force transports to retire. Front-line medical installations need better security measures. A convalescent camp, established sufficiently early, will ease the pressure upon hospitals and prevent the evacuation from the combat area of many men capable of returning to duty early.

2. Two hospital ships (capacity 500 patients, speed 12 knots) are required per assault division, but considerable lift by assault transport and by air can be assumed. The latter requires specially trained personnel.

3. Special provision must be made for the care of possibly extensive civilian casualties.

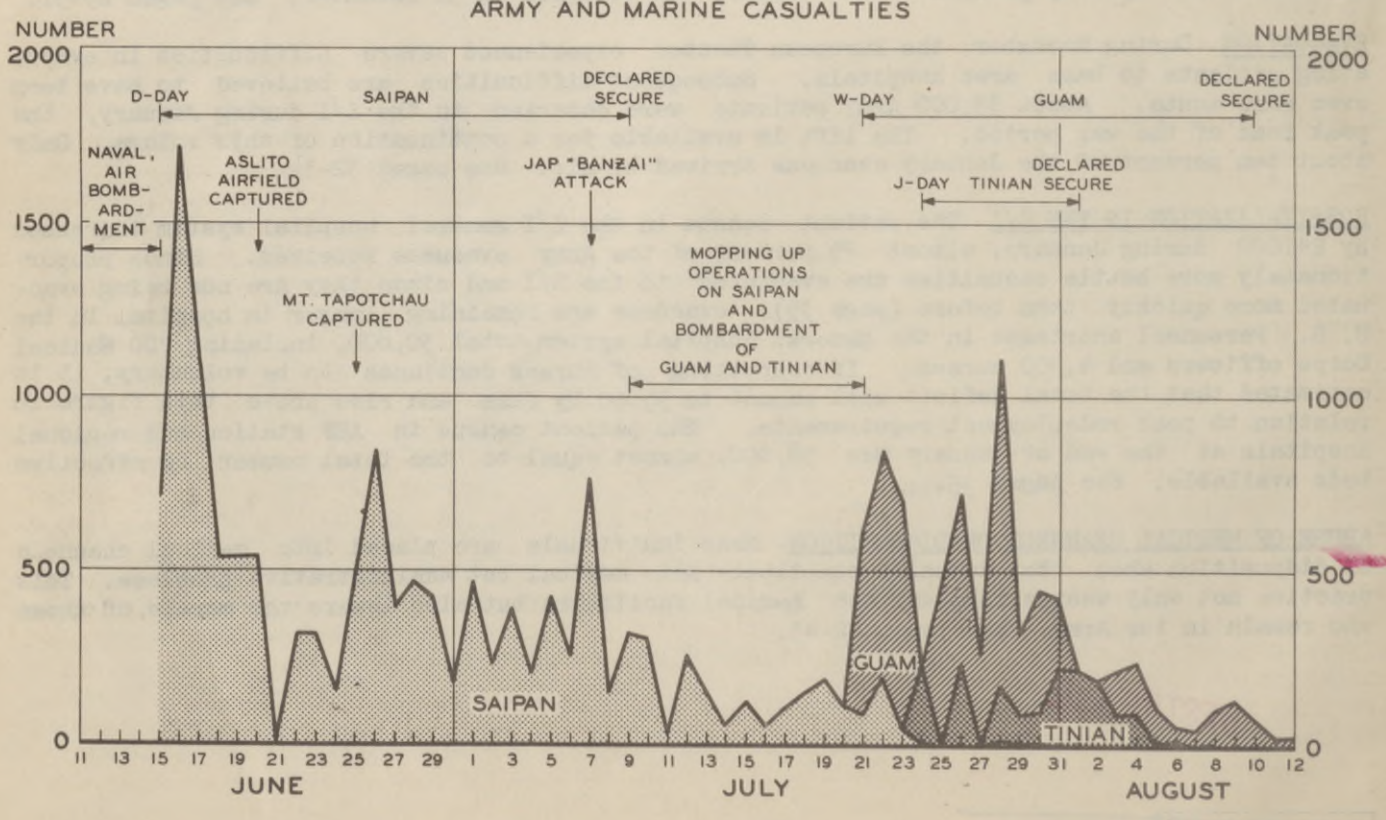
4. Sanitary details equipped to cope with the Aedes mosquito should be landed within the first week of an assault in an area where dengue is a threat, and water tidiness should be enforced.

Casualties

The campaign waged against the Japanese in the Marianas was the largest single operation undertaken in the Pacific prior to the landings in the Philippines, but the average

NUMBER OF MEN WOUNDED DURING THE MARIANAS OPERATION

ARMY AND MARINE CASUALTIES



MEDICAL ASPECTS OF MARIANAS CAMPAIGN (Continued)

casualty rates for the operation were not as great as those for the shorter battles fought in the Gilbert and Marshall Islands. The operation, as originally planned, envisaged a primary landing on Saipan on 15 June 1944 to be followed three days later by an assault on Guam. The force whose mission was the capture of Saipan and Tinian was composed of two Marine divisions and both Army and Marine corps troops. The capture of Guam was assigned to a force composed of one Marine division and a Marine brigade together with both Army and Marine corps troops. The 27th Army Infantry Division was loaded as reserve for the entire expeditionary force and the 77th Army Infantry Division was staged in Hawaii as additional reserve. Saipan was to be secured at all costs, even though this might necessitate the temporary abandonment of the Guam operation.

A landing on Saipan was achieved on 15 June. Moderate in the first few hours, Japanese resistance quickly mounted to such an extent that it became necessary to commit the 27th Division which began to debark on 16 June. Employment of the immediate troop reserve, coupled with the approach of a Japanese fleet on 16 June, resulted in the indefinite postponement of the landing on Guam, and the 77th division was ordered to embark as reserve for future operations in the Marianas. Saipan was declared secure on 9 July after an active campaign of 25 days. On 21 July Guam was attacked and 3 days later Tinian, both having been subjected to unprecedented air and naval bombardment prior to the landings. Guam was declared secured on 10 August, nine days after the end of organized resistance on Tinian.

About 128,000 assault troops participated in the Marianas operation and were opposed by an estimated 53,000 Japanese in Army and Navy units. The following table compares provisional U. S. assault strengths and casualties with similar figures for the Japanese for each phase of the operation. The Japanese casualties have been cumulated through 13 November while the U. S. figures are provisional but substantially complete counts from operational reports dated earlier. The ratio of U.S. to enemy killed was by far the greatest on Saipan.

COMPARISON OF JAPANESE AND AMERICAN STRENGTH AND CASUALTIES

Phase	Japanese Troops			United States Troops			Ratio, U.S. KIA to Japanese
	Estimated Strength	Casualties		Assault Strength	Casualties		
		Killed	Prisoner		Killed	Wounded	
Saipan	28,345	26,277	2,068	71,000	3,126	13,160	1:8.4
Tinian	7,209	6,893	316	42,000	290	1,514	1:23.8
Guam	17,701	17,238	463	57,000	1,165	5,263	1:14.8
Total	53,255	50,408	2,847	128,000*	4,581	19,937	1:11.0

* Not a sum of parts because same units fought on both Saipan and Tinian.

The chart above shows the number of men wounded each day in the three phases of the Marianas Campaign. The dates of termination indicate when the island was declared secured, not when all fighting had ceased. The series is preliminary, being the best approximation which could be developed from available operational reports. Apart from the large number of casualties associated with the initial breakthrough beyond the Saipan beaches into the interior of the island, the most notable casualty experience on the island was that associated with the Japanese "Banzai" attack which began on the morning of 7 July, and resulted in perhaps 1,000 American casualties before it was completely broken.

Supply

Initial supply was complicated by the difficulties of landing over the barrier of reefs fringing the island. As a precaution against air and submarine attacks by night the majority of shipping in the anchorage was ordered to sea the first two nights with the result that unloading could be accomplished only in the daytime. On the evening of D+2, all ships with the exception of four transports and the LST's were ordered to sea when reports were received of the approach of the Japanese fleet. Some of these ships returned in rotation on the next and subsequent days to continue unloading, but the rest remained at sea until carrier action on D+4 and D+5 removed the threat. The beaches were too limited both in depth and width to accommodate the shore parties and the vast quantities of cargo. For the first few days considerable confusion resulted from inability to locate supplies and equipment on the beach in order to establish dumps. As the campaign progressed, the inland penetration overtaxed available motor facilities and units were frequently unable to use all their organic medical equipment when the casualty load was heaviest. Approximately 50 percent of the

MEDICAL ASPECTS OF MARIANAS CAMPAIGN (Continued)

medical battalion equipment of the 4th Marine Division, which advanced farthest from the landing beaches, was still on the beaches on D+15. The number of Army medical supply personnel was inadequate for an operation of this magnitude.

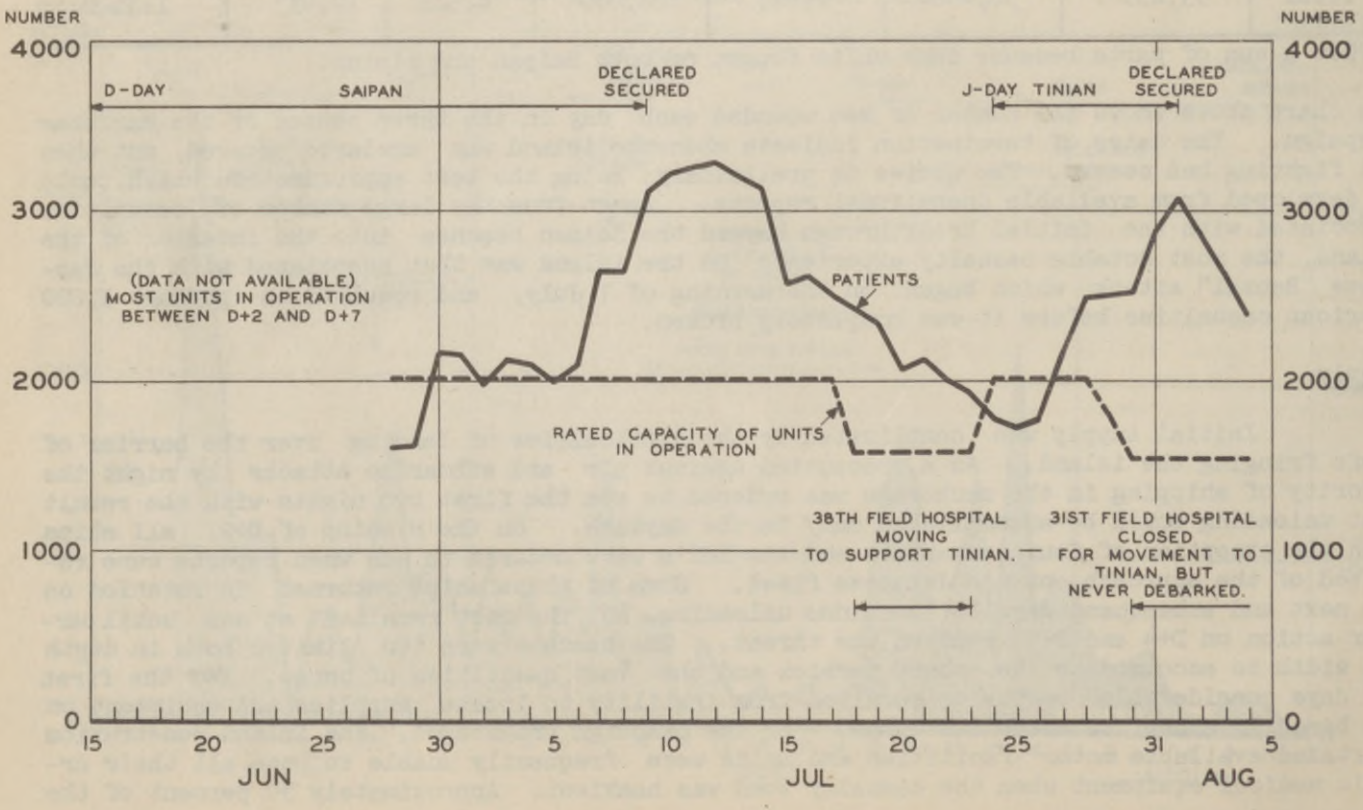
The Army supply plan was based on lessons learned in the invasions of the Gilbert and the Marshall Islands. An initial 30-day level of supplies was provided in the form of special Medical Maintenance Units sufficient for 2,000 men for 15 days. Resupply was not necessary for at least three days after debarkation, by which time the division medical supply was in position to function from dumps ashore. Marine medical supply was effected by a similar plan, resupply being achieved by the Navy equivalent of the Army Medical Maintenance Unit. Because all the needed items cannot be anticipated in the right proportions, excesses of certain items accumulated in the face of shortages in others. This imbalance existed long after the conclusion of the operation because of continued dependence upon Medical Maintenance Units and the failure to provide a larger number of items requisitioned according to a schedule of actual need. The majority of the Army medical supplies and equipment were palletized, in most cases to advantage. Supplies so packed were more easily located on the beaches, were transported quickly, and were well protected from the weather. On the whole, as discussed below, the shortage of hospitalization and the burden of civilian care were such that the supply situation was difficult.

Medical units of the divisions assaulting Tinian carried medical supplies for three days. Medical supplies and equipment were placed under a severe strain by the paucity of medical support landed and the transportation difficulties experienced during the combat phase. As at Saipan, the landing on Guam also necessitated trans-shipment of supplies over a reef and there were delays in the organization of supply. The 36th Field Hospital did not receive its organizational equipment until a week after its personnel had been landed. Except for some shortages in vehicles for transportation inland during the later phases, the provision of medical supplies and equipment for troops was adequate. No supplies were carried for civilian use, but large amounts of Japanese medical supplies were captured.

Hospitalization

Despite the achievement of tactical surprise and the failure of the Japanese to make the most of their defensive positions, casualties on Saipan were so heavy as to overtax

CAPACITY AND UTILIZATION OF ASSAULT FORCE HOSPITALS AND CLEARING COMPANIES — SAIPAN, 28 JUNE-5 AUGUST 1944



MEDICAL ASPECTS OF MARIANAS CAMPAIGN (Continued)

the limited hospital facilities provided with the assault forces. While the beachhead was being secured, only first aid was available on the beach, and patients were evacuated by LST to the attack transports for hospital-type care. The potential hazard incurred by reliance upon transports for emergency surgery prior to the arrival of hospital ships is illustrated by the fact that the transports were ordered to sea the evening of D+2 at the approach of the enemy fleet. The LST's remained, but were not fully equipped for life-saving surgery. However, the first hospital ships arrived on D+3 and the transports were soon able to return to relieve a critical supply and evacuation situation. The Marine medical battalions began unloading on D+2, and by D+5 all the medical battalions and the several Army hospitals were ashore. The two Army field hospitals and three portable surgical hospitals together had a T/O capacity of 875 beds. Together with the facilities of clearing companies and the Marine medical battalions, the medical units of the assault forces had a rated capacity sufficient for 2,011 patients. Despite a tremendous volume of evacuation, the patient census reached 2,165 on D+15 and 3,106 on 9 July, when Saipan was declared secured. The accompanying chart compares the capacity of available facilities with the total patient load from D+13 to D+50.

Medical reports on the operation reveal important weaknesses in the Army hospital units as employed on Saipan. Designed to serve as a small station hospital, the field hospital was actually employed as an evacuation hospital, and lacked the shelter, the equipment, and the personnel to care for the large load of combat casualties which developed. The 38th Field Hospital was able to care for 865 patients at one time only because it was heavily reinforced with personnel from other medical units. Its crowded condition necessitated the evacuation of some patients who should have been held for return to duty on the island and also required the return to duty of other patients before they were fully ready according to optimum medical standards. The serious overloading of hospitals and clearing companies on Saipan demonstrates the urgent need for one 400-bed evacuation hospital per infantry division in addition to the units actually employed. The field hospital is well suited to reinforce clearing companies and as a holding hospital on beachheads but is not designed to replace the evacuation hospital. At present there are no 400-bed evacuation hospitals in the Pacific Ocean Areas. A convalescent camp was definitely needed, but it was not until D+23 that it was possible to set one up. A replacement pool would have relieved hospitals earlier of many men whose return to duty was delayed by lack of transportation. The portable surgical hospitals functioned primarily in support of clearing stations and field hospitals. The lack of security and protection for patients and hospital personnel was painfully evident in all hospitals throughout the operation. Infantry or military police detachments appear to be necessary if foxholes are to be provided for patients and Japanese infiltration prevented in forward locations.

Adverse sea conditions prevented the movement to Tinian of all the divisional medical support for the two Marine divisions, and it also proved impossible to debark the 31st Field Hospital as planned. Evacuation to nearby Saipan made this situation relatively acceptable, although the burden upon the Marine medical companies on Tinian was exceptionally severe, and many patients arrived in the hospitals on Saipan after the optimum period for primary surgery had passed. This was especially true before air evacuation was established. As at Saipan, civilian casualties further increased the difficulty. On Guam the hospital situation was more favorable than it had been on Saipan. Before shore facilities could be set up, two ships were designated for holding patients capable of returning to duty within two weeks. A field hospital and a portable surgical hospital were attached to the 77th Infantry Division, and the augmented III Amphibious Corps Medical Battalion set up a 1,500 bed hospital which served the entire corps as an evacuation hospital. Casualties were of course fewer on Guam, and the civilian need was not nearly so extensive and acute as it had been on Saipan. The corps medical battalion had as many as 300 serious civilian cases on its hands at one time, however.

Evacuation

The cardinal fact concerning evacuation during the Marianas Campaign is that 16,000 men were evacuated during the combat period. Equivalent to 80 percent of the wounded, this number includes an unspecified number of the sick and 500 or more prisoners of war. For Saipan alone the loss by evacuation was 10,000 men, or about 14 percent of the Marine and Army assault troops. The initial casualties exceeded holding capacity ashore and afloat by a wide margin. Although one division of AP's was used for holding those able to return to duty within two weeks, it is believed that many of the casualties evacuated by ships departing the combat area in the early stages of the action might have been returned to duty within a short time had more holding capacity been available. No replacements had been planned for the assault period.

MEDICAL ASPECTS OF MARIANAS CAMPAIGN (Continued)

In accordance with plan, the attack transports received virtually all the initial casualties from the beaches via smaller assault craft and three specially fitted LST's, but by D+3, when the first hospital ships appeared, the LST's and APA's were already loaded beyond intended capacity and several APA's were forced to use other than medical personnel to care for casualties. The three LST's which had been given additional medical personnel and equipment to enable them to receive casualties were forced to accept patients while still unloading and otherwise proved unequal to the unexpected task thrust upon them. Most reports on the operation emphasize that LST's should not receive patients until they have been completely unloaded, cleaned, and suitably equipped with medical personnel and supplies, and that they should then be used for transporting wounded only short distances. Although three divisions participated in the assault on Saipan, only four hospital ships could be made available for the operation, and their effectiveness was further reduced by a number of long trips to the South Pacific. The recent Joint Chiefs of Staff study of hospital ships (see HEALTH for December) recommends the provision of two hospital ships (capacity 500 patients and speed 12 knots) per assault division. The first lift from Saipan was accomplished on D+3 by the hospital ships, Solace and Bountiful, carrying 1,099 patients. On D+6 one group of transports retired evacuating 1,474 casualties. By D+10, hospital ships had evacuated 2,500 while assault transports and other vessels had lifted another 3,500, or 6,000 in all. There were two particularly critical periods from the standpoint of evacuation, both prefaced by the withdrawal of the assault transports. Their temporary departure on D+2 threw a heavy burden on the LST's and upon the meager medical facilities already ashore. After D+11, both transport groups having retired from the combat area, the facilities available for both holding and evacuation remained inadequate in the light of the prevalent admission rates and the magnitude of the civilian problem. Partial relief was afforded by a lessening of the casualty rate. For the entire Marianas Campaign sea evacuation totaled 14,500, of which 6,700 was accomplished by hospital ship and 7,800 by other ships.

Although the medical plan of the operation did not provide specifically for air evacuation from the Marianas, the shortage of hospitalization and pressure upon the means of evacuation by sea encouraged trial of evacuation by air. On D+11 air evacuation was initiated, but without benefit of prior screening by flight medical officers and without suitably trained medical attendants en route. As soon as suitable personnel and equipment were provided air evacuation proved a valuable adjunct to sea evacuation, accomplishing a total lift of about 1,500 patients from Saipan and Tinian to the Marshalls. Early evacuation by air should be possible in future operations in the Pacific, according to this experience.

Air evacuation further proved its worth in providing badly needed lift from Tinian to Saipan beginning D+6 after the sea had become so rough that shore to ship evacuation across the three-mile channel ceased to be feasible. Approximately 1,500 casualties were evacuated by air to Saipan despite the hazards of high winds produced by a typhoon some distance away. In the attack on Guam facilities for evacuation by sea were ample, and it was not necessary to employ air evacuation.

Disease

The Marianas Campaign is one of an increasing number in which sickness has been decidedly secondary to battle casualty as a cause of admission and noneffectiveness. As the campaign closed, however, a serious dengue epidemic was getting under way, one which might well have prolonged the operation and materially increased its cost had it struck with full force a month earlier. During operations on Saipan diarrheal disease was moderately prevalent but not epidemic in extent, and the general incidence of disease was satisfactorily low. In the 27th Infantry Division, for example, among the roughly 4,300 admissions to sick report (excluding killed) 69 percent were wounded, 21 percent sick, 6 percent combat fatigue cases, and 4 percent injured. About 175 members of the 27th Infantry Division are believed to have acquired pharyngeal or cutaneous diphtheria on Saipan, but the disease did not appear in significant numbers until the unit arrived in Espiritu Santo in September. Similarly, the 4th Marine Division experienced an outbreak of infectious hepatitis shortly after leaving Saipan, although the disease did not appear during combat operations. Many minor skin infections were reported.

The great destruction visited upon the vegetation and animal life of Saipan, as well as upon stores of supplies and the enemy himself, provided a fertile breeding ground for flies, but military sanitation was acceptable on Saipan. Wreckage of the towns and villages by bombing and naval gunfire, as well as the common water catchments about human habitations, facilitated the breeding of the Aedes mosquito which transmits dengue. As breeding conditions improved during July they provided the basis for an explosive epidemic and by late Au-

MEDICAL ASPECTS OF MARIANAS CAMPAIGN (Continued)

gust dengue was rampant on Saipan (see HEALTH for October). For the week ending 8 September this acute short-lived disease attained a peak incidence of about 3,500 admissions per 1,000 strength per year among the garrison troops on the island. Its prompt control by DDT and other sanitary measures was a spectacular success.

The prevalence of neuropsychiatric disorders is not known for the Marine divisions on Saipan, but the 27th Infantry Division reported only 272 cases, a ratio of about one for each 11 wounded, and a rate of .66 per 1,000 men per day. In the first few months of fighting in France and the Lowlands the average ratio was one to 4.6, but it was one to 8.5 in June alone. Had the Marianas campaign lasted longer, with more sustained opposition of the quality met in the first few days, the ratio of neuropsychiatric to wounded casualties might well have increased. Operational and G-1 reports describe the morale of all troops as excellent, and this was furthered by the rapid attainment of decisive victory.

Medical Care of Civilians

Invasion of thickly populated, enemy-owned or mandated areas like Saipan and Tinian precipitates a severe problem in the amount of medical care needed by civilians. After 20 or more years of Japanese control, Saipan had a civilian population of about 30,000, ninety percent of whom were Japanese or Korean. Population was largely concentrated in two towns which were primary objectives in the assault on Saipan. The Japanese military rather effectively persuaded civilians that capture by the Americans meant torture and death, and their inclusion in the Japanese withdrawal plan was a major factor making for the high casualties suffered by the civilian population. Since no special hospital facilities had been provided for their care, the hospitalization of civilian casualties became a serious problem. One 31st Field Hospital platoon, reinforced by medical personnel from other units, was detached from the support of assault forces for the care of critical civilian cases. With a T/O capacity of only 135 beds, this augmented unit maintained a daily census of more than 500 patients during the period of greatest pressure.

At first there was inadequate internment capacity on Saipan and overcrowding aggravated an already deteriorated sanitary situation among a people with primitive sanitary habits. The general condition of the internees was deplorable. Many needed medical or surgical attention and were suffering from lack of food and water. There was too little personnel to handle all internees and the facilities for preparing food were inadequate. The wounded presented the most acute problem, but many also were ill, mostly from exposure, malnutrition, and dysentery. Because of the custom of using night-soil as fertilizer, the soil on Saipan is heavily seeded with tetanus and gas bacillus spores. In consequence the incidence of both gas bacillus and tetanus infections was unusually high among wounded civilians. By 4 August, 73 cases of tetanus and 52 deaths had been reported among civilian internees, although not one case was reported among U. S. troops who are protected by tetanus toxoid.

Enemy civilians created a problem of considerable magnitude on Tinian as on Saipan. Initially their care fell upon the divisional medical units, but by J+16 a small hospital manned by personnel drawn from various medical units was unloaded on Tinian for the care of civilian casualties. On Guam, on the other hand, because of the Japanese policy of internment, there were far fewer civilian casualties. Excluding Guam, where more than 20,000 civilians were processed but not interned, there were about 28,000 civilians interned in the entire Marianas Campaign.

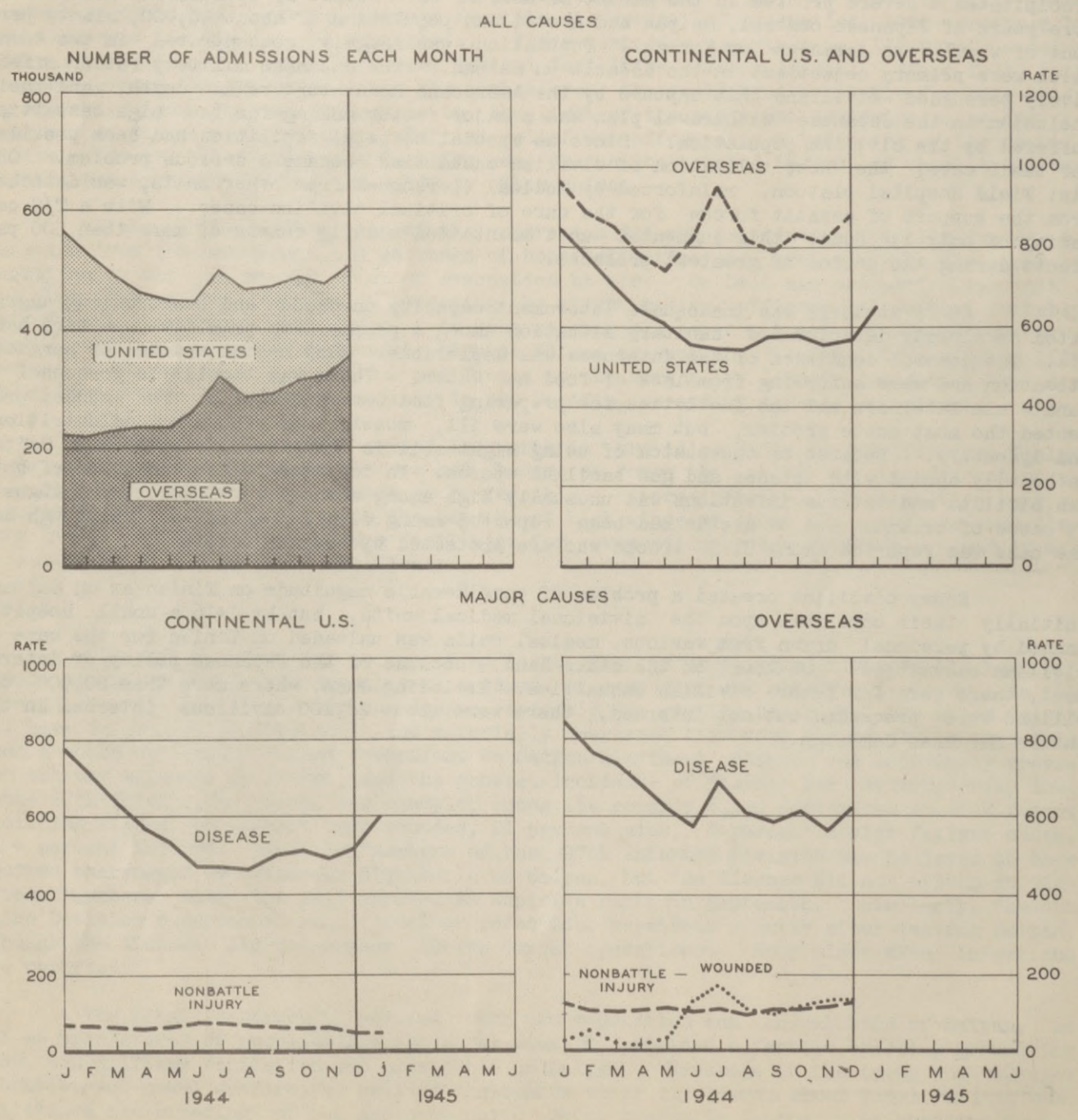
DISEASE AND INJURY

DISEASE, INJURY, AND BATTLE CASUALTY

The incidence of disease in the Continental U. S. increased during December and January, but remained well below the rates for comparable months of the preceding two winters. The overseas rate for disease is also quite favorable. The U. S. admission rate for all causes continues to be far below the overseas rates shown below in revised form, chiefly because of battle casualties and the higher accident rate overseas. Incomplete reporting from the European Theater makes the total overseas consolidations much less accurate than the parallel U. S. rates.

After continuous improvement in the admission rate for nonbattle injury during the first half of the year, reversal of this favorable trend during the latter half brought the provisional December rate to the high level of January 1944. Trench foot and frost bite in the European Theater contributed to the rise in November and December. Battle casualties increased under the influence of the European offensive in November, but the December reporting from the European Theater is uncertain, and the consolidated battle casualty rate for that month is none too firm in consequence.

DISEASE, INJURY, AND BATTLE CASUALTY, ADMISSIONS PER THOUSAND MEN PER YEAR



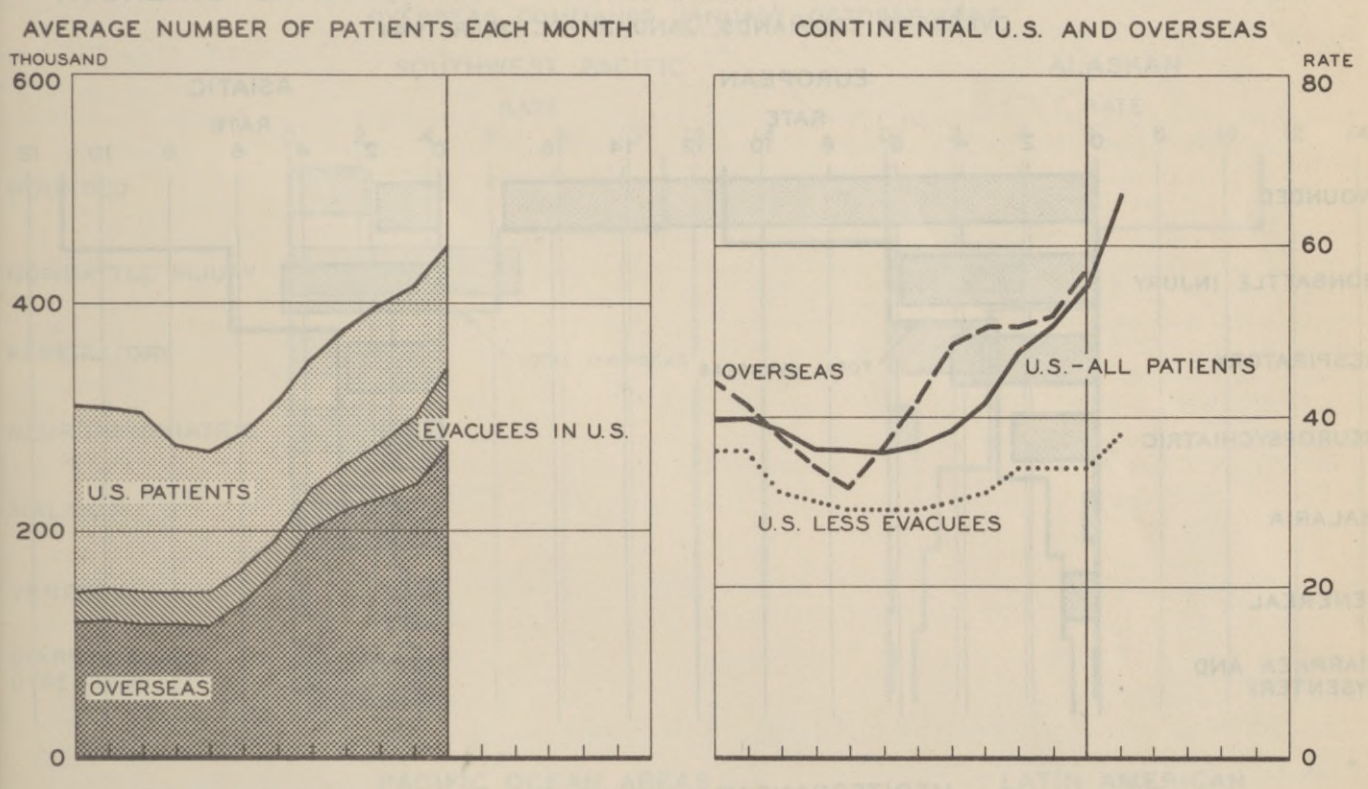
NONEFFECTIVE RATES, U. S. AND OVERSEAS

The continued influx of large numbers of evacuees from overseas brought the total U. S. noneffective rate for January to an unprecedented level of 66 per thousand U. S. strength. Corrected to exclude evacuees, the U. S. rate for January is only 38 per thousand strength as may be seen from the accompanying charts. The average number of noneffectives originating in the U. S. also rose, reflecting a slight increase in respiratory admissions.

The overseas noneffective rate for all causes increased by more than 10 percent during December, the disease, nonbattle injury, and battle casualty components each rising significantly. The overseas data, however, remain quite preliminary and cannot be shown in component form by theater until better reports are in hand from the Southwest Pacific Area, the Pacific Ocean Areas, and the European Theater.

AVERAGE NUMBER OF NONEFFECTIVES PER THOUSAND STRENGTH

ALL CAUSES



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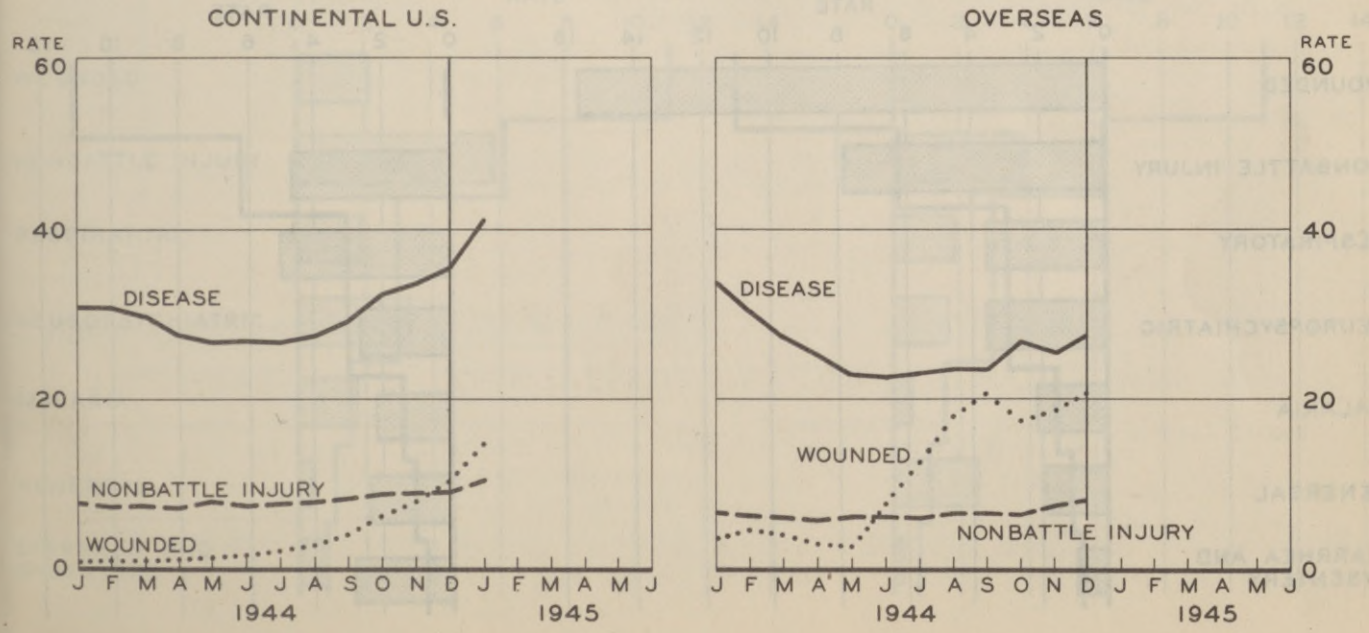
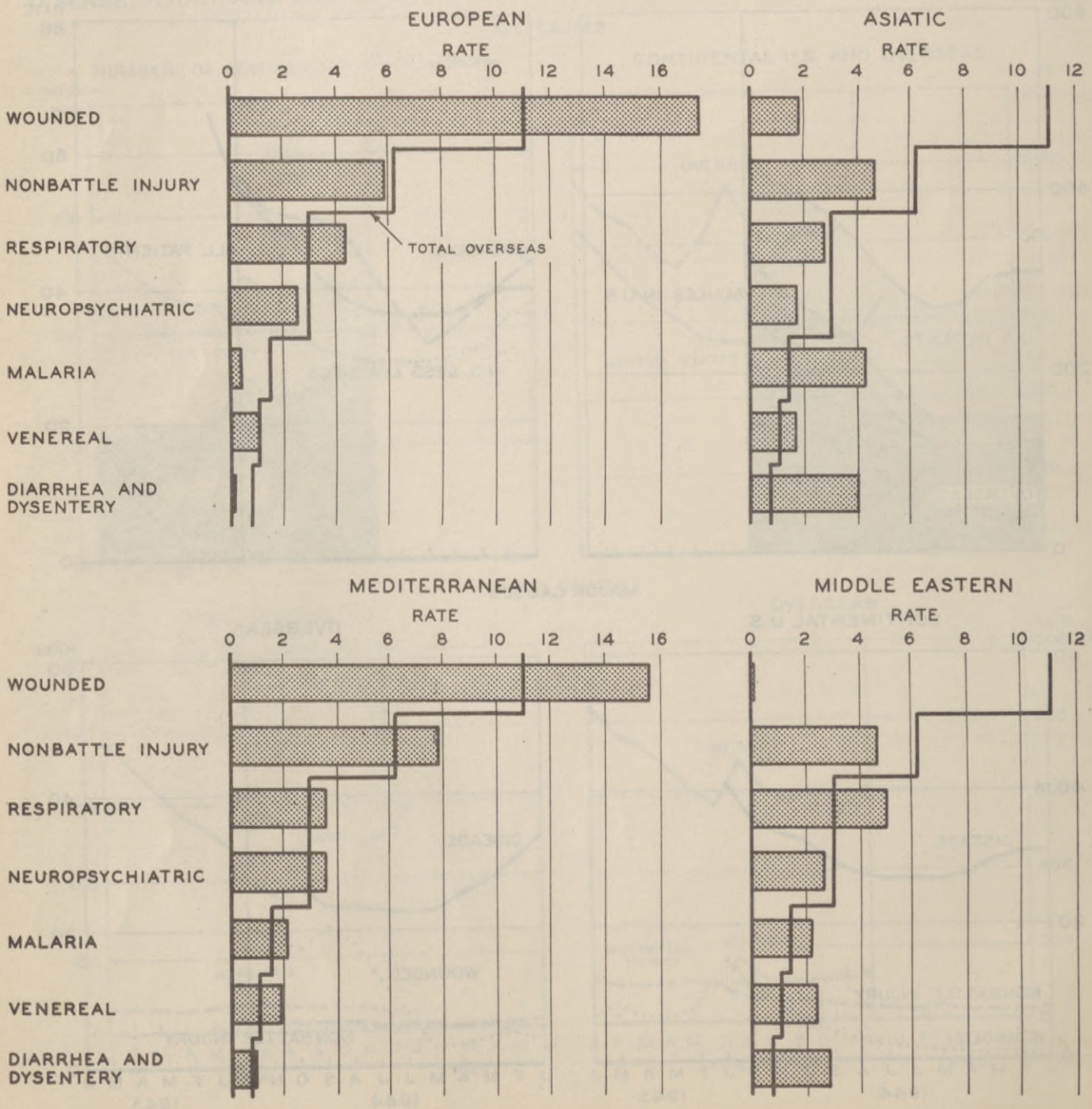


NONEFFECTIVE RATES OVERSEAS, SELECTED DIAGNOSES

Since January 1944 the overseas noneffective rate for disease has declined by about 20 percent, although noneffectiveness attributable to battle casualties has risen to entirely new levels, especially since the invasion of the Continent. In October about 35 percent of all noneffectives were battle casualties, more than four times the percentage of 8 reported for January 1944. There has been very little change in noneffectiveness from nonbattle injury, but the increasing total noneffective rate naturally tends to lower the proportionate importance of nonbattle injury. The accompanying charts compare the average noneffective rates for major causes in each theater from January through October with the comparable rates for all overseas commands combined. The diagnoses shown there account for over 60 percent of all noneffectiveness. Except for noneffectiveness attributable to wounded and nonbattle injury, the rates for the European Theater are based on the period January through June, since complete reports are not available for the later months. Because admissions in the European Theater for venereal disease and neuropsychiatric disorders have risen appreciably since June

MAJOR CAUSES OF NONEFFECTIVENESS, RATES PER THOUSAND STRENGTH

OVERSEAS COMMANDS, JANUARY-OCTOBER 1944



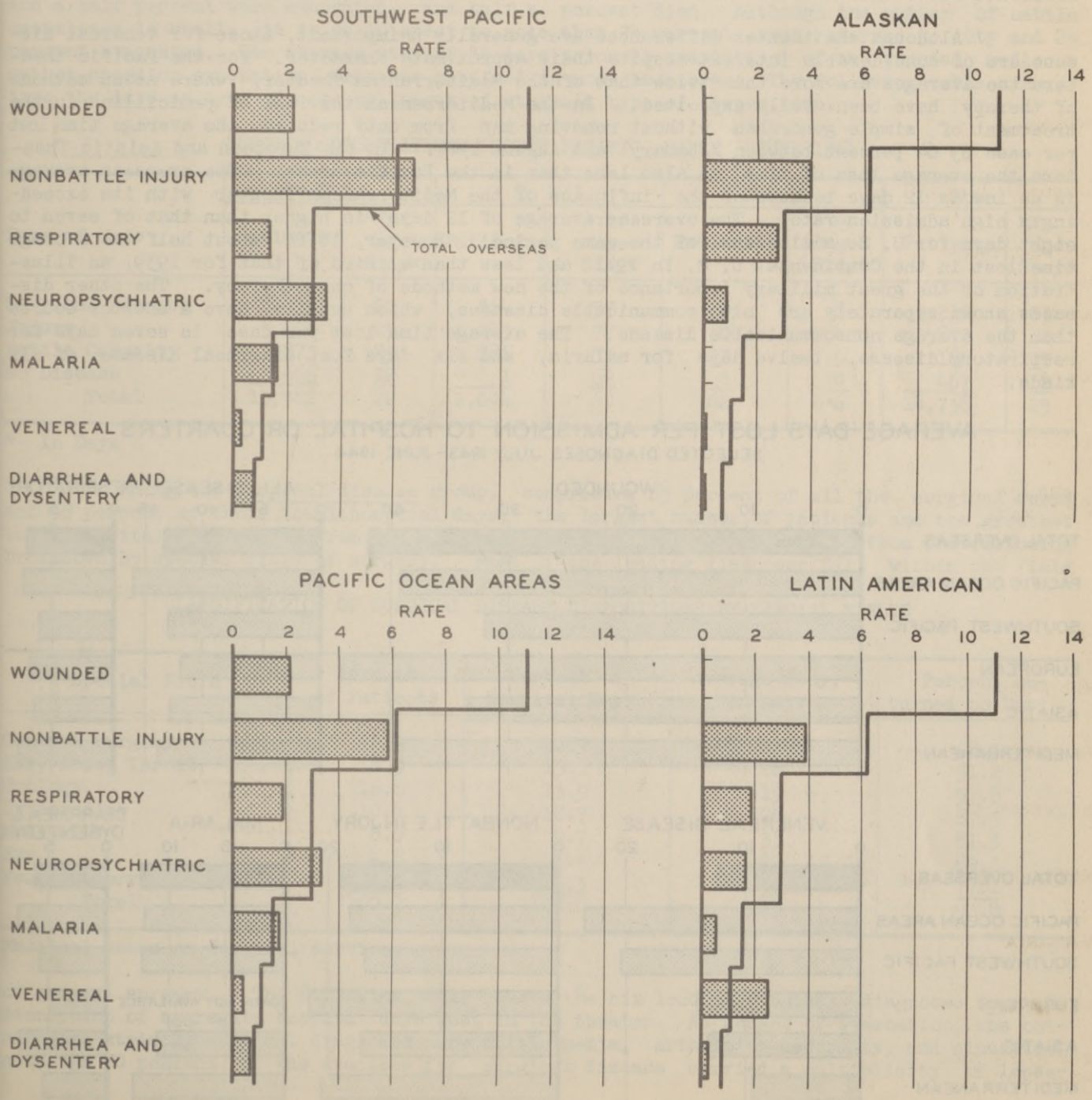
NONEFFECTIVE RATES OVERSEAS, SELECTED DIAGNOSES (Continued)

1944, the noneffective rates for these diagnoses are probably too low, and this is also true to a lesser extent of the total overseas rates for these causes.

The Mediterranean Theater is the only command for which all the rates shown exceed the average for all overseas theaters. Rates for the Alaskan and Latin American commands are uniformly below average except for the venereal disease noneffective rate in the Latin American area. Nonbattle injury and neuropsychiatric diseases are the leading causes of noneffectiveness in the Southwest Pacific and the Pacific Ocean Areas, with malaria ranking fourth. In the Asiatic theaters, malaria and the diarrheal diseases contributed 20 percent of the total noneffective rate, and are the highest for any theater. Noneffectiveness from respiratory infection and diarrheal diseases has been well above average in the European and Middle Eastern Theaters.

MAJOR CAUSES OF NONEFFECTIVENESS, RATES PER THOUSAND STRENGTH

OVERSEAS COMMANDS, JANUARY-OCTOBER 1944



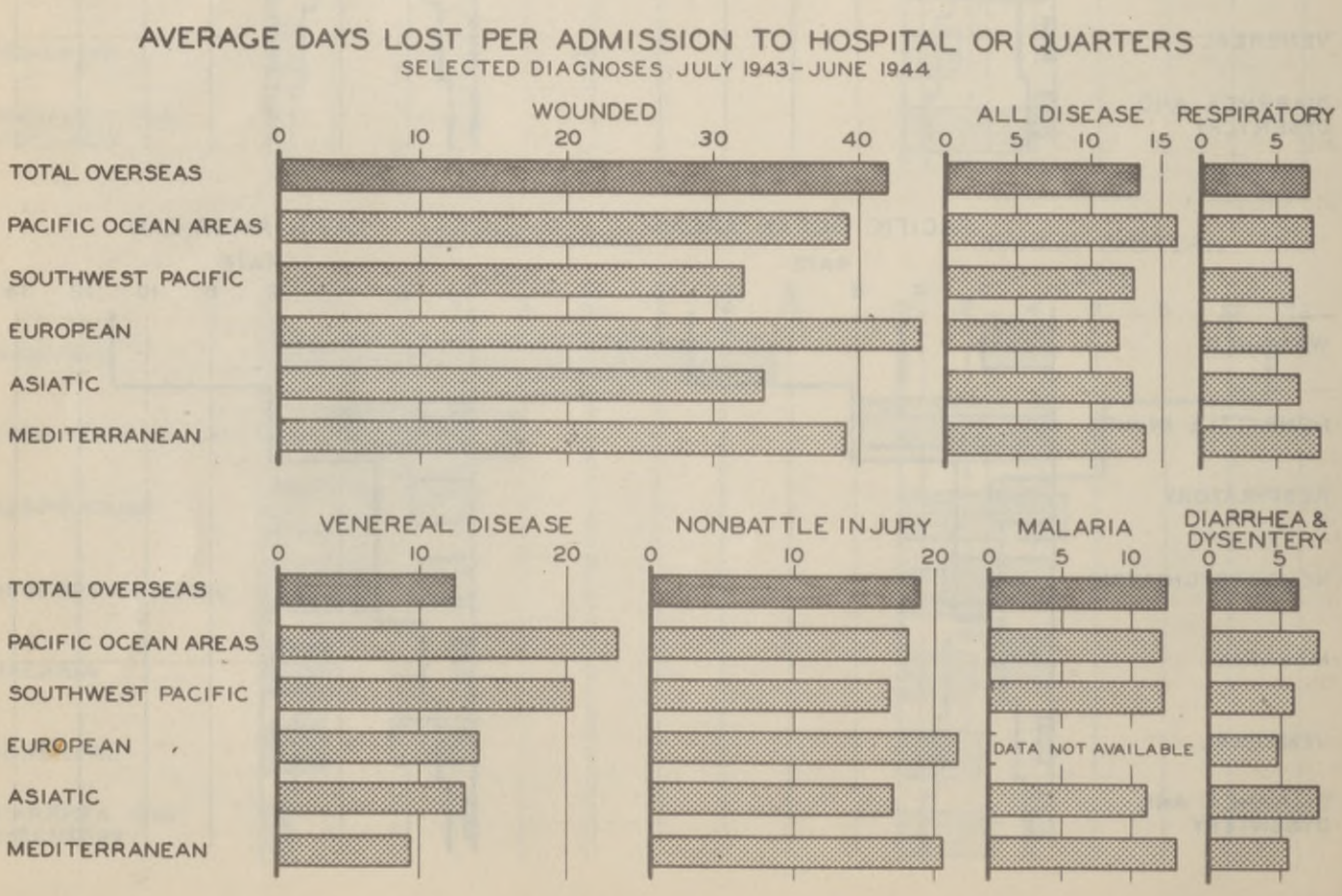
DISEASE AND INJURY

AVERAGE DAYS LOST PER ADMISSION TO HOSPITAL OR QUARTERS OVERSEAS

Much of the military significance of admission rates derives from the length of time patients remain noneffective. Hence average days lost per case constitute one significant index of the importance of any cause of admission. The average number of days lost per admission is shown below by theater for selected diagnoses for the year ending 30 June 1944. For wounded patients the estimates cover a period ending with October or November 1944 and thus encompass much of the recent battle casualty experience. The averages exclude time lost subsequent to evacuation to the U. S., and are lower than the average length of hospitalization for hospital admissions only. The data are provisional and will not support close comparisons among theaters. Except for venereal disease, the most significant aspect of the individual theater estimates, in fact, is their comparative stability for any diagnosis.

The average number of days lost per admission is 42 for wounded, 13 for disease, and 19 for nonbattle injury. The fact that the average patient suffering from an accidental injury loses 40 percent more time than the average disease patient helps to explain the tremendous drain on manpower which accidents cause overseas as well as at home. Similarly, the three to one ratio of the figures for wounded and disease patients explains why theater noneffective rates are so sensitive to combat activity.

Although the theater differences are generally unimportant, those for venereal disease are of considerable interest despite their approximate character. For the Pacific theaters the averages are more than twice that of the Mediterranean Theater, where newer methods of therapy have been fully exploited. In the Mediterranean the use of penicillin in the treatment of simple gonorrhea without removing men from duty reduced the average time lost per case by 64 percent between February and August 1944. In the European and Asiatic Theaters the average loss of time is also less than in the Pacific areas. The overseas average is as low as 12 days because of the influence of the Mediterranean Theater with its exceedingly high admission rate. The overseas average of 12 days is higher than that of seven to eight days for U. S. admissions of the same period. However, it is about half the average time lost in the Continental U. S. in 1941 and less than a third of that for 1939, an illustration of the great military importance of the new methods of chemotherapy. The other diseases shown separately are also communicable diseases, which usually have a shorter course than the average noncommunicable disease. The average time lost per case is seven days for respiratory disease, twelve days for malaria, and six days for diarrheal disease of all kinds.



SURGICAL CAUSES OF NONEFFECTIVENESS

A recent study by the South Pacific Base Command provides the first comprehensive review of surgical causes of noneffectiveness during the present war, revealing that surgical conditions were responsible for about a third of the hospital time lost by nonbattle patients over a four-month period ending with June 1944. During this interval the South Pacific reported a noneffective rate of 45 per 1,000 men per day, 39 of which represented days lost in hospital, and the remainder in quarters and in convalescent facilities. All surgical patients accounted for a hospital noneffective rate of 13.4, of which 7.7 represents patients with surgical disease, 4.0 patients with injuries, 1.5 patients with battle wounds, and .2 patients with no disease. It should be pointed out that the ratio of battle casualties to disease and injury varies with the proximity and magnitude of combat action, and the above proportions were observed during a period when the Bougainville Campaign was diminishing in intensity, the entire area soon lapsing into inactivity. From the standpoint of admissions, the surgical patients of this period probably represented about 20 percent of the volume, their greater length of stay being responsible for their proportionately larger contribution to the noneffective rate.

On the average, 92 percent of the surgical patients were returned to duty, seven and a half percent were evacuated, and half a percent died. Although the number of battle casualties is small, it is of interest to note that 74 percent were returned to duty and 24 percent evacuated. The average stay of 55 days prior to evacuation of the wounded reflects rather speedier evacuation than has obtained in most theaters. The following table summarizes the data on type of case by length of stay and type of disposition.

SURGICAL DISPOSITIONS, SOUTH PACIFIC, MARCH - JUNE 1944

Type of Case	To Duty		To Z/I		Death		Total	
	Patients	Average Stay*	Patients	Average Stay*	Patients	Average Stay*	Patients	Average Stay*
Surgical Disease	8,639	21	564	57	9	8	9,212	23
Injury	3,604	25	243	72	30	4	3,877	28
Battle Casualty	873	29	286	55	23	9	1,182	35
No Disease	466	12	1	62	0	0	467	12
Total	13,582	22	1,094	60	62	6	14,738	25

* In Days

Among the surgical disease group, comprising 63 percent of all the surgical cases and 58 percent of their total hospital days, the largest number of patients and the greatest total hospital time derive from the general surgery group, as may be seen from the following breakdown by special field of surgery. Most of the leading diagnoses fall within the field

CLASSIFICATION OF SURGICAL DISEASE DISPOSITIONS BY SPECIAL FIELDS

Special Field	Percent of Patients	Percent of Hospital Days	Average Stay, in Days	Percent Returned to Duty
General Surgery	40.9	40.9	23	98.3
Ear, Nose, Throat	18.9	15.1	18	91.2
Urology	16.6	13.9	19	97.8
Orthopedics	10.4	12.7	28	87.3
Medical *	6.6	9.7	33	81.5
Eye	4.6	4.4	22	89.3
Neurosurgery	2.0	3.3	37	77.1
Total	100.0	100.0	23	93.8

*Medical cases on surgical service.

of general surgery. The following table lists the six leading surgical diagnoses from the standpoint of aggregate hospital days lost in the theater. As causes of evacuation, the outstanding strictly surgical diagnoses are otitis media, arthritis, deformity, and sinusitis, although 70 percent of the evacuees for surgical disease carried a multiplicity of lesser

SURGICAL CAUSES OF NONEFFECTIVENESS (Continued)

LEADING SURGICAL DISEASES, BASED ON SURGICAL DISPOSITIONS

Diagnosis	Percent of Patients	Percent of Hospital Days	Average Stay, in Days	Percent Returned to Duty
Superficial Infection	11.7	7.8	15	99.3
Appendicitis	5.2	6.2	27	99.2
Hemorrhoids	5.9	5.0	19	99.6
Hernia	2.3	4.8	47	98.1
Tonsillitis	7.3	4.6	14	99.8
Pilonidal Cyst	2.0	4.0	46	97.8
Other	65.6	67.6	23	90.9
Total	100.0	100.0	23	93.8

diagnoses from this viewpoint. Greater than any of these, however, was the group of neuropsychiatric cases on the surgical service, half of whom were evacuated to the U. S.

The surgical injury patients comprise 26 percent of all the surgical patients and account for 30 percent of their hospital days. The basic data by surgical specialty are tabled below.

CLASSIFICATION OF SURGICAL INJURY DISPOSITIONS BY SPECIAL FIELDS

Special Field	Percent of Patients	Percent of Hospital Days	Average Stay, in Days	Percent Returned to Duty
Orthopedic	47.5	56.3	33	92.9
General	44.9	37.1	23	94.9
Neurosurgery	3.4	4.1	33	71.5
Eye	2.5	1.6	17	85.7
Ear, Nose, Throat	1.2	0.6	14	95.8
Urology	0.5	0.4	21	95.0
Total	100.0	100.0	28	93.0

By far the largest loss of time came from the simple fracture group, 670 cases with 28,000 hospital days, but 605 patients with wounds (not caused by missiles) lost 12,000 days, and 346 patients with burns lost 9,000 days. The most common causes of evacuation were simple fracture, and compound fracture. The 243 injured patients evacuated to the Z/I remained in hospital for an average of 72 days, 30 percent longer than the surgical disease patients or the wounded.

Among the 3,877 injuries were 3,430, or 88 percent, called "acute". A tabulation by cause shows that falls and jumps, moving objects, and organized athletics are the three causes responsible for the most injuries, although more time was lost by men injured by moving vehicles or by the accidental discharge of guns and ammunition than by organized athletics. The smallest proportion returned to duty was among those injured by firearms. During the four-month period, such acute injuries cost the theater almost 93,000 man-days, or the equivalent of an entire division for a week. Accidents are for the most part preventable and the magnitude of the manpower loss can be reduced only by vigorous command action. The accompanying chart gives the data on cause of injury.

The wounded comprised a small portion of the surgical load during the period under review, although the Bougainville campaign was still in progress. About 75 percent of the cases and 65 percent of the hospital days involved patients with soft-tissue wounds, while 17 percent of the cases and 26 percent of the days involved compound fractures. Among the soft-tissue wounds about half were penetrating. Of those soft-tissue wounds on which a report was made, 73 percent were caused by shell fragments, 24 percent by small calibre arms, and 3 percent by bomb fragments. The usual regional classification (see HEALTH for April) was found. As in the case of nonbattle injuries, compound fracture was the most frequent cause of evacuation to the U.S. Eighty-one percent of these cases were evacuated in comparison with 24 percent for all wounded.

SURGICAL CAUSES OF NONEFFECTIVENESS (Continued)

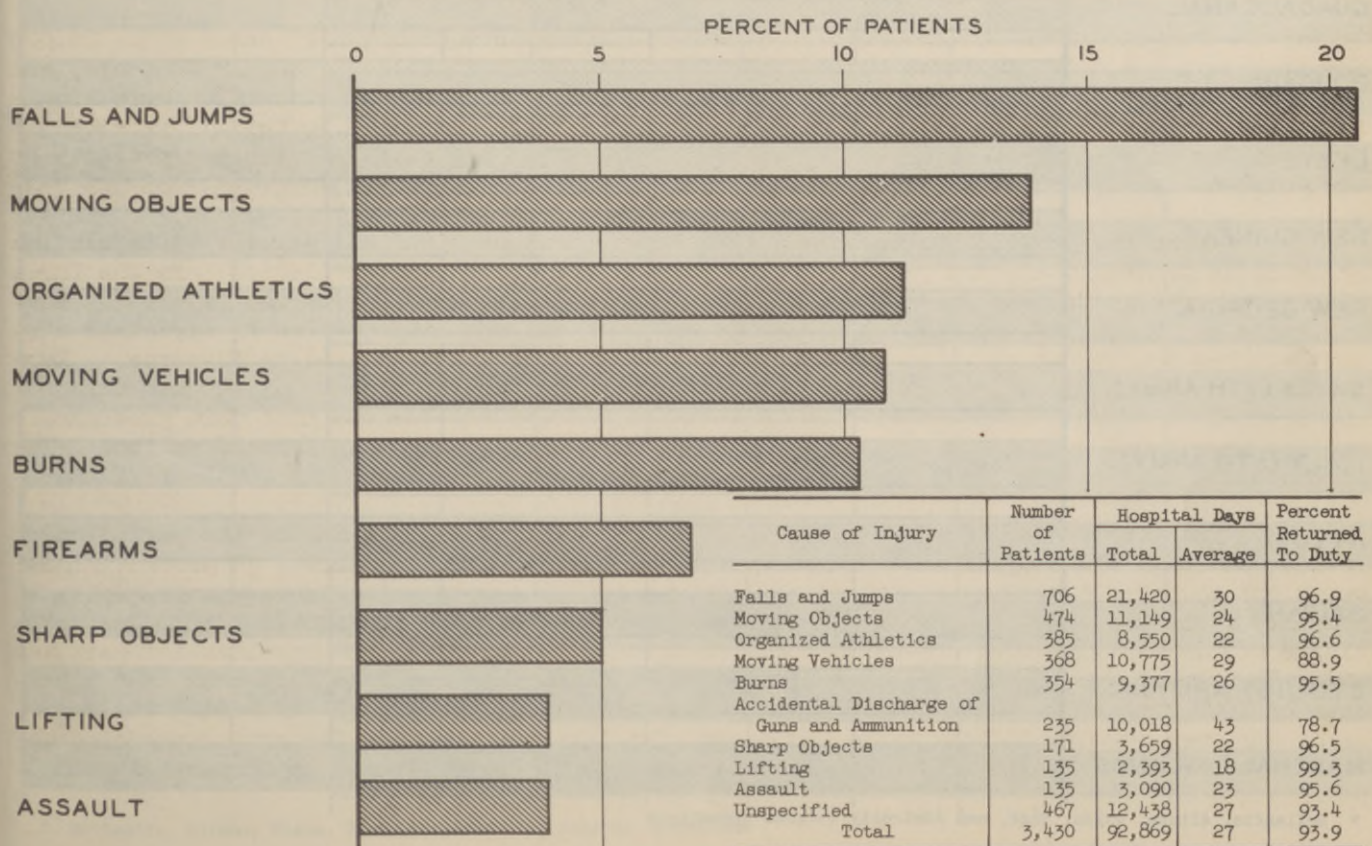
The classification of surgical diseases and nonbattle injuries by major surgical specialty has evident interest for the extent of the load to be expected upon each specialty and also for the type of patient likely to be evacuated to the U. S. The following table combines the data on both the nonbattle groups for this purpose. General surgery carries 40

PERCENTAGE OF PATIENTS, HOSPITAL DAYS, AND EVACUEES FALLING IN SPECIALIZED FIELDS
NONBATTLE CASES ONLY
(Excluding Medical Cases on Surgical Service)

Surgical Specialty	Percent of Patients	Percent of Hospital Days	Percent of Evacuees
General Surgery	44.1	42.3	19.1
Orthopedics	22.4	29.3	35.4
Ear, Nose, Throat	14.3	10.9	21.8
Urology	12.4	10.0	4.9
Eye	4.2	3.7	8.6
Neurosurgery	2.6	3.8	10.2

to 45 percent of the load according to both indices of volume of work, while orthopedics carries 20 to 30 percent depending on which index is used. The eye and neurosurgical fields carry a small part of the burden of nonbattle cases according to this study. The slight numerical importance attached to neurosurgery in this tabulation serves to illustrate the difference between battle and nonbattle surgical cases, for a tabulation of wounded in the Southwest Pacific, for example, shows that 7.4 percent of the wounded were neurosurgical cases and that they accounted for 9.1 percent of the hospital days. The importance of orthopedics is further seen in its contribution to the evacuation rate, for 35 percent of the nonbattle surgical evacuees are from this service. Ear, nose, and throat cases are next with 21.8 percent. Some of these cases will require longer hospitalization in the Z/I than others of course, so that the distribution gives no measure of ultimate load by specialty in Z/I hospitals even for nonbattle cases.

CAUSES OF ACUTE INJURY



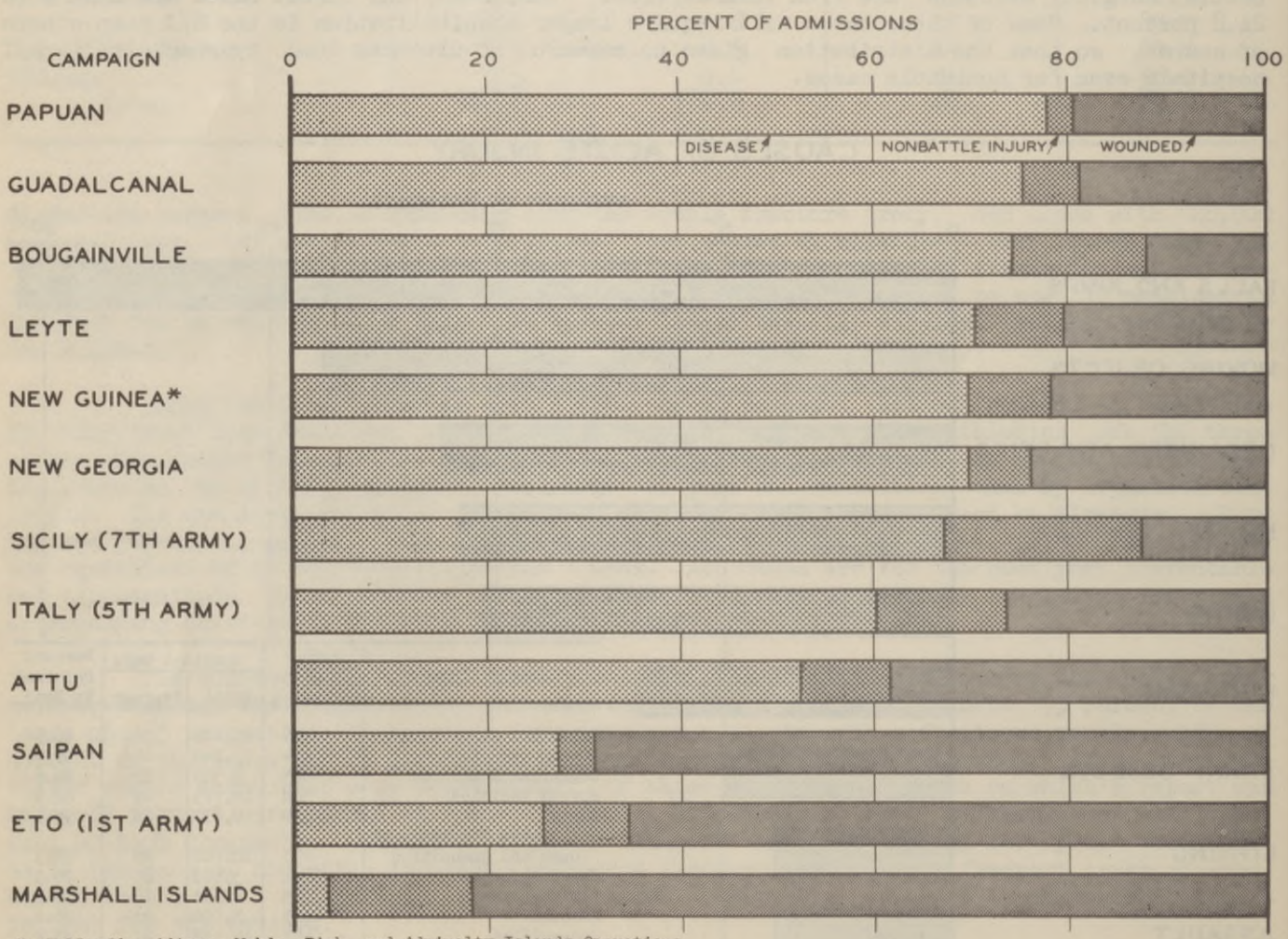
Cause of Injury	Number of Patients	Hospital Days		Percent Returned To Duty
		Total	Average	
Falls and Jumps	706	21,420	30	96.9
Moving Objects	474	11,149	24	95.4
Organized Athletics	385	8,550	22	96.6
Moving Vehicles	368	10,775	29	88.9
Burns	354	9,377	26	95.5
Accidental Discharge of Guns and Ammunition	235	10,018	43	78.7
Sharp Objects	171	3,659	22	96.5
Lifting	135	2,393	18	99.3
Assault	135	3,090	23	95.6
Unspecified	467	12,438	27	93.4
Total	3,430	92,869	27	93.9

NONBATTLE CASUALTIES BY CAMPAIGN

During most of the campaigns and lesser operations of the present war, as in other wars, admissions for nonbattle causes have far outweighed those for battle causes. During 1944, however, there have been spectacular reversals of the usual relationship, especially in several brief but heavily contested operations in the Central Pacific, and during the first few months of operations in France and the Lowlands. The accompanying table presents some preliminary information on the extent of illness and nonbattle injury among troops engaged in the campaigns and operations for which such data are available. Even more than in the case of battle casualties, information pertaining to a campaign as such is not readily obtainable from routine War Department reports. The data presented here have been derived from the periodic medical reports of theaters, operational reports submitted by combat units, and special reports of various kinds. In consequence the data on nonbattle casualties are not precisely parallel with those on battle casualties with respect to the exact time-interval and the strength involved in each operation. Important conflicts with the data on battle casualties published in HEALTH for December are noted in the table.

The full impact of an operation on the health of the troops engaged may not be measured adequately by the admission rate for the period of combat. This is particularly true of campaigns in malarious areas prior to the routine use of suppressive atabrine. For example, after the Papuan and Guadalcanal Campaigns the divisions engaged suffered heavily from relapsing malaria for many months. During the Guadalcanal operation, Army losses from malaria occurred at an average rate of 1.2 per thousand men per day, almost the same as the rate of which men were wounded in action. Six months after withdrawal from Guadalcanal the Americal Division, then in non-malarious Fiji, sustained an average malaria admission rate of 10.4 per thousand men per day, attributable entirely to infection acquired during combat.

RELATIVE IMPORTANCE OF DISEASE, NON-BATTLE INJURY, AND BATTLE CASUALTY IN VARIOUS CAMPAIGNS



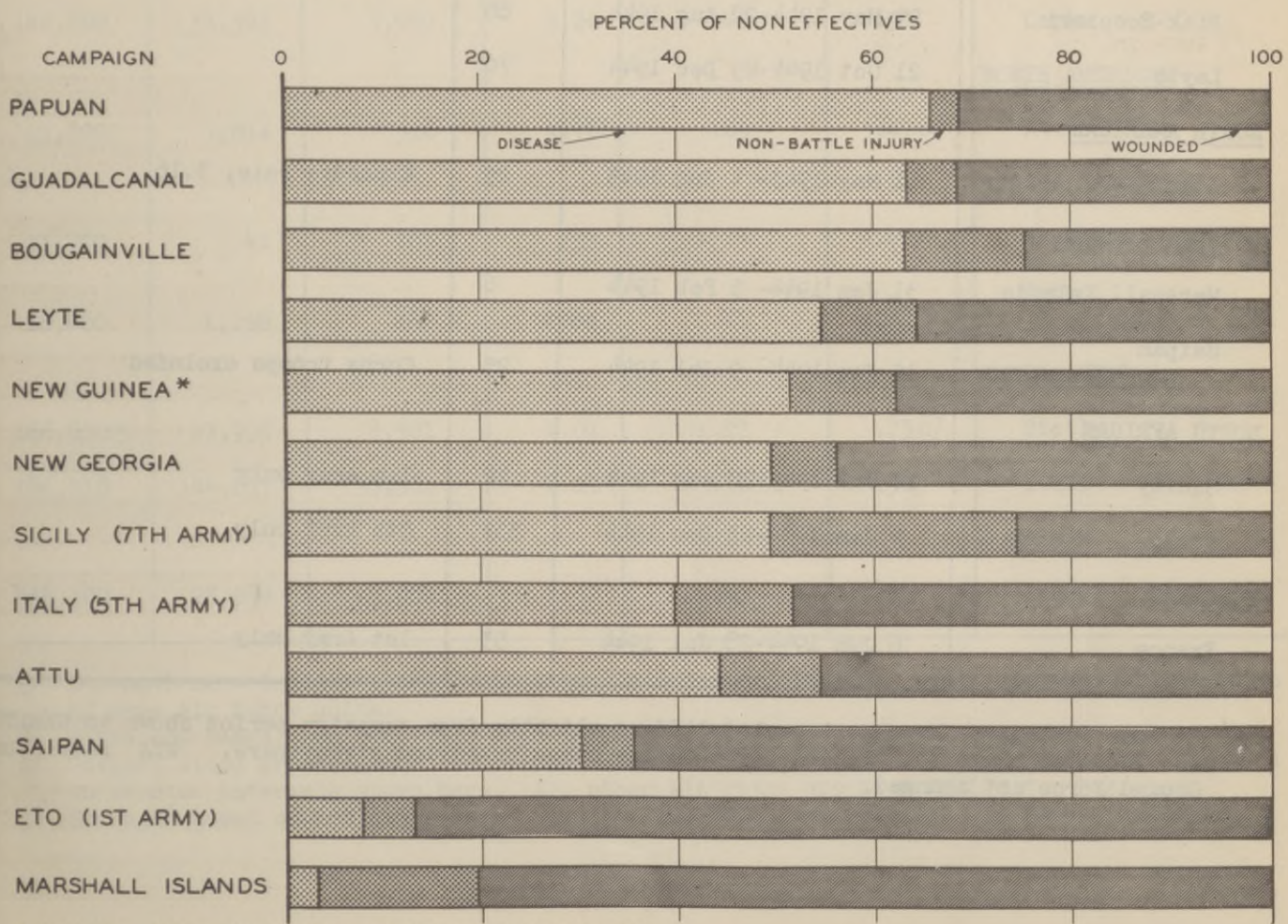
* Hollandia, Aitape, Wakde, Biak, and Admiralty Islands Operations

NONBATTLE CASUALTIES BY CAMPAIGN (Continued)

(See HEALTH, May 1944). In general, however, most disease admission rates imply proportionately less noneffectiveness than do equivalent battle casualty admission rates, for the average length of treatment is shorter for disease patients.

The accompanying charts compare the three broad types of admission with respect to their proportionate incidence on the one hand and their contribution to noneffectiveness on the other. The noneffective rate, which under stable conditions is the product of a daily admission rate and the average duration of treatment for any type of admission, measures the net effect on manpower available more adequately than does the admission rate. The right-hand panel provides estimates of the proportion of noneffectiveness corresponding to the proportionate distribution of admissions shown in the left-hand panel. Noneffective rates for campaigns are rarely reported and can at present be estimated only from average lengths of treatment drawn from the experience of a theater at a particular time. The weights applied to the admission rates vary from theater to theater and from time to time. In addition the estimated noneffective rates pertain, not to the area of combat, but to the theater as a whole, for many patients will be evacuated to rear areas for hospitalization. For example, if the 5th Army admission rates are multiplied by the average length of stay of patients within the Army area, then 65 percent of all noneffectiveness is attributable to disease, 12 percent to injury, and only 23 percent to battle casualty. However, if the same admission rates are multiplied by durations of stay based upon the experience of the theater as a whole, then 40 percent of all noneffectiveness is attributable to disease, 12 percent to nonbattle injury, and 48 percent to battle casualty. This difference results directly from the policy of retaining in the Army area patients most likely to return to duty soon. For this reason the proportionate distribution of noneffectiveness given in the accompanying chart reflects the cost of the campaign at the theater level.

RELATIVE IMPORTANCE OF DISEASE, NON-BATTLE INJURY, AND BATTLE CASUALTY IN VARIOUS CAMPAIGNS



* Hollandia, Aitape, Wakde, Biak, and Admiralty Islands Operations

CAMPAIGN CASUALTY RATES

ARMY BATTLE AND NONBATTLE CASUALTIES, PROVISIONAL CAMPAIGN DATA

Theater and Campaign	Report Period a/	Average Days	Remarks
SOUTH PACIFIC			
Guadalcanal	1 Nov 1942-13 Feb 1943	105	Malaria rate, 1.15
New Georgia	30 Jun 1943-30 Sep 1943	93	Malaria rate, 1.49
Bougainville	19 Nov 1943-28 Apr 1944	162	Malaria rate, .29
SOUTHWEST PACIFIC			
Papuan	26 Sep 1942-23 Jan 1943	120	Rate for Malaria and other Fevers, 4.38
Admiralty Islands	2 Mar 1944-5 Apr 1944	35	
Aitape	2 May 1944-15 Aug 1944	100	Excluding 13 July - 18 July
Hollandia	27 Apr 1944-17 May 1944	21	D-Day, 22 April 1944
Wakde	17 May 1944-23 Aug 1944	99	
Biak-Soepiori	27 May 1944-22 Aug 1944	88	
Leyte	21 Oct 1944-29 Dec 1944	70	
NORTH AMERICAN			
Attu	11 May 1943- 4 Jun 1943	25	Exposure rate, 3.16
CENTRAL PACIFIC			
Marshall Islands	31 Jan 1944- 5 Feb 1944	6	
Saipan 27 Infantry Div.	15 Jun 1944- 9 Jul 1944	25	Corps troops excluded
NORTH AFRICAN			
Sicily	10 Jul 1943-20 Aug 1944	42	7th Army only
Italy	2 Jan 1944-23 Dec 1944	357	5th Army only
EUROPEAN			
France	6 Jun 1944-28 Jul 1944	53	1st Army only

a/ In some instances the report period differs slightly from campaign period shown in HEALTH for December. Rate for wounded based on the campaign period given there. WIA rate for Ground Force not changed.

CAMPAIGN CASUALTY RATES (Continued)

ARMY BATTLE AND NONBATTLE CASUALTIES, PROVISIONAL CAMPAIGN DATA

Average Strength Reported	Number of Casualties Reported		Rates per Thousand Men per Day			Theater and Campaign
	Disease	Nonbattle Injury	Disease	Nonbattle Injury	Wounded	
						SOUTH PACIFIC
20,000 b/	10,691	811	5.09	.39	1.27 c/	Guadalcanal
20,000	11,855	1,068	6.37	.57	2.16 c/	New Georgia
38,200	14,834	2,814	2.40	.45	.38 c/ d/	Bougainville
						SOUTHWEST PACIFIC
10,200	8,870	308	7.25	.25	1.79	Papuan
19,000	1,406	74	2.11	.11	1.55	Admiralty Islands
24,350	9,493	1,342	3.90	.55	.61 c/	Aitape
33,300	1,977	427	2.82	.61	.66	Hollandia
18,300	3,817	294	2.11	.16	.93 c/	Wakde
25,800	5,324	458	2.35	.20	1.04 c/	Biak-Soepiori
140,000	31,321	3,980	3.20	.41	.91	Leyte
						NORTH AMERICAN
15,200	1,814	318	4.76	.83	3.47 c/	Attu
						CENTRAL PACIFIC
17,700	41	185	.39	1.74	9.41	Marshall Islands
16,400	1,158	168	2.83	.41	7.88	Saipan 27 Infantry Div.
						NORTH AFRICAN
166,000 e/	27,955	8,501	4.01	1.22	.73 c/	Sicily
186,518	144,657	33,561	2.17	.50	.94	Italy
						EUROPEAN
338,100	23,589	7,984	1.32	.45	3.35	France

b/ Strength more inclusive than that shown in December HEALTH, partly because of inclusion of Army Air Force units.
c/ Rates not based upon precisely same periods as those for nonbattle causes.
d/ Revised since presentation in December HEALTH. WIA rates for Italy and France are based on shorter intervals shown here. All other WIA rates are from HEALTH for December.
e/ Strength based on medical reports, and differs from that published in December HEALTH.

DISEASE AND INJURY

MALARIA

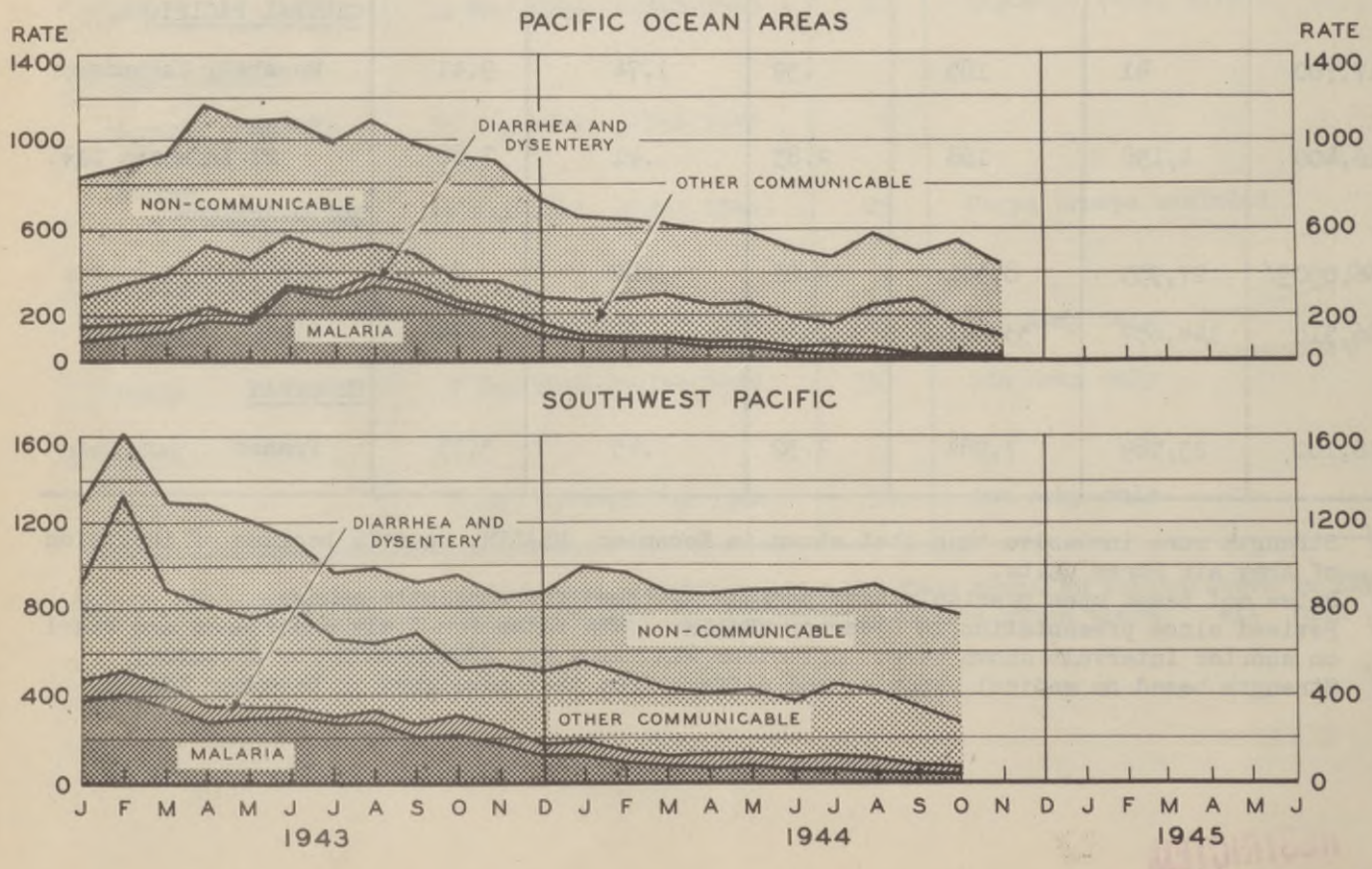
During 1944, malaria rates on the order of those reported in 1943 have been found only in the Asiatic theaters. In August 1944, the admission rate in the Asiatic theaters rose to 310 per thousand men per year, close to the peak rate of 322 in August 1943. These rates and all others given here are for diagnosed malaria and do not include cases diagnosed as fever of unknown origin. In September 1944, American troops stationed in the Karachi area experienced a sudden and severe outbreak of malaria, which swept rapidly through the western province of Sind. The rate for this area rose rapidly from 28 in July to a peak of about 1,100 admissions per thousand men per year for the month of October. The sudden outbreak of the disease well illustrates its explosive potentialities under conditions ideal for the breeding of mosquitoes. Admissions declined rapidly during November, largely in response to vigorous anti-mosquito control measures. Under the influence of the Karachi epidemic, the rate for the entire theater rose from 240 in September to 255 in October, whereas ordinarily it declines sharply at this season.

In the Southwest Pacific the incidence of malaria has fallen steadily since the middle of 1943. Invasion of Leyte failed to increase the average theater rates for November and December, but this season is normally one of low incidence on Leyte. However, there is evidence that the rate for Southwest Pacific troops in the Philippines increased during January. Admissions for malaria declined steadily in the Pacific Ocean Areas throughout 1944, and reached the phenomenally low rate of 9 during November. In the South Pacific the victory over malaria is virtually complete, but intensive anti-malarial work is necessary as long as U. S. bases are maintained there. Their declining strength in the face of the build-up of forces in the malaria-free central and western areas of the Pacific operates further to reduce the average theater rate. In the Mediterranean Theater there has been much less seasonal variation in malaria incidence during 1944 than in 1943, the rate having been sustained in large part by relapses on the part of patients originally infected at the time of the invasion of Sicily and the Italian mainland. It is believed there has been far less transmission during 1944 than was observed during 1943 for, despite relapses, the 1944 rates have been lower during the season of maximum transmission, and the November rate for the Fifth Army failed to rise after troops were taken off atabrine during October. For this reason, the outlook for 1945 appears quite favorable.

Malaria control programs vary with local conditions, but always include both en-

DISEASE ADMISSIONS PER THOUSAND MEN PER YEAR

OVERSEAS THEATERS



MALARIA (Continued)

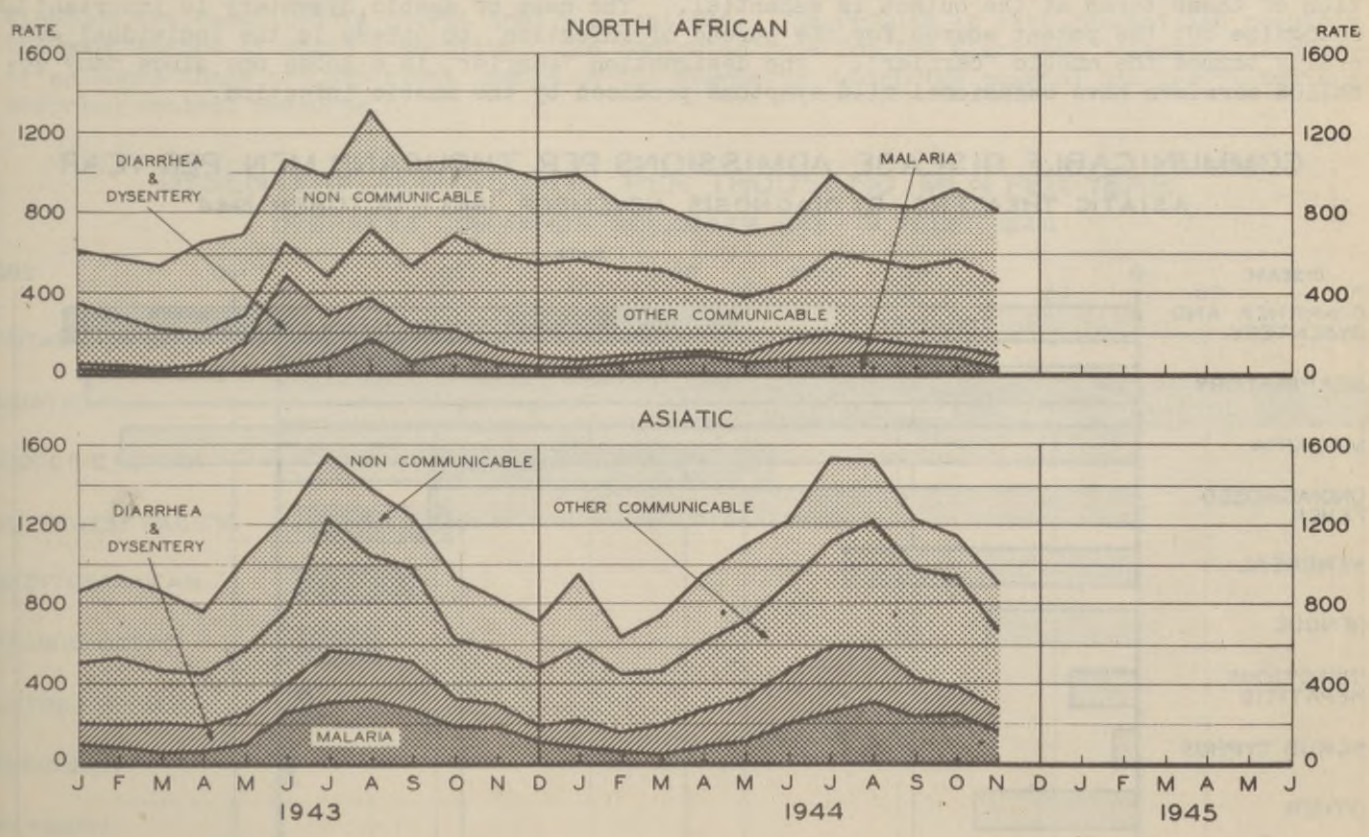
vironmental measures directed chiefly against the breeding of mosquitoes and the enforcement of individual discipline with reference to atabrine and to exposure to mosquitoes. As garrison conditions become better stabilized, more attention can be given to the native populations adjacent to Army areas and serving as reservoirs of infection. In the Southwest Pacific extensive surveys have been made of nearby civilian populations to determine the extent of malaria infection. Nowhere has the need for such work been greater than in the West African Service Command, a strategic transportation area inhabited by a peculiarly dangerous malaria vector which could easily be carried to Brazil with devastating effect. In this command a recently intensified program of malaria control has encompassed native villages which could not be moved away from the general vicinity of major airfields, and greatly reduced the mosquito population around Army installations. Coupled with heightened individual discipline with respect to both mosquitoes and atabrine, the more extensive anti-mosquito work has dramatically lowered the incidence of malaria among U. S. troops in this base area to less than a tenth of that for corresponding months in 1943. Measures to keep the Anopheles gambiae mosquito out of Brazil are operating to the satisfaction of all governments concerned.

The charts below and on the preceding page compare the incidence of malaria with diarrhea and dysentery, other communicable, and noncommunicable diseases in the four theaters of chief interest. Rates for other commands appear on page 46. From January through November 1944, diagnosed malaria contributed 37 percent of the admissions for communicable diseases and 24 percent for all diseases in the Southwest Pacific. During 1943 these figures were 16 and 8 percent. In the Mediterranean Theater, on the other hand, the 1943 figures of 10 and 5 percent increased to 12 and 8 percent during 1944. For the Asiatic theaters the percentages are 25 and 17 for 1943, and 21 and 16 for 1944. The great changes in the experience of the Pacific Ocean Areas are measured by the decrease in the percentages from 48 and 21 in 1943 to 19 and 8 in 1944. Were it possible to determine what portion of the admissions for undiagnosed fever in any month were truly malaria admissions, these percentages would undoubtedly be higher.

The noneffective rate for malaria closely parallels the admission rate, and has declined in all theaters except the Mediterranean during 1944.

DISEASE, ADMISSIONS PER THOUSAND MEN PER YEAR

OVERSEAS THEATERS



AMEBIC DYSENTERY AND THE DIARRHEAL DISEASES

The diarrheas and dysenteries have repeatedly demanded attention as diseases of prime military importance in this war. A review in HEALTH for August 1944 pointed out that the average admission rate for the Middle Eastern, North African, and Asiatic Theaters in 1943 was roughly 150 admissions per 1,000 men per year. The war has moved from the first of these theaters but the Asiatic theaters (including the present India-Burma and China Theaters) report a high rate of 191 for the year ending 31 October 1944. The magnitude of the problems posed by the diarrheal diseases in the Asiatic theaters is emphasized when admission rates for these diseases are compared with those for other causes, as in the chart below. When it is recalled that many of those partially incapacitated by the diarrheal diseases, and treated in quarters or remaining on duty while ill, are not included in these rates, it is seen that these diseases cause an even greater loss in time and efficiency than the rates alone would indicate.

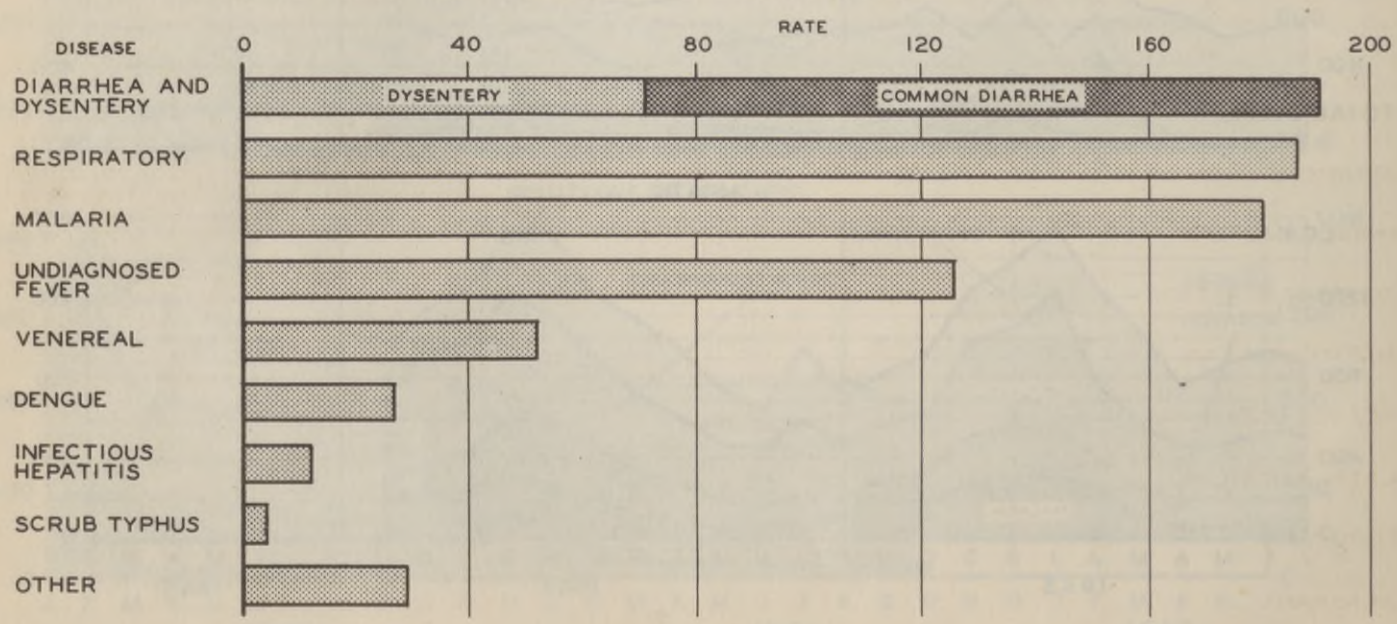
Cases of so-called common diarrhea constitute about 60 percent of the total, the remaining 40 percent being made up of bacillary, amebic, and other types of dysentery. The typical case of diarrhea runs an afebrile course of three or four days and has numerous watery stools in which no inflammatory cellular exudate can be demonstrated. No causative organism has been isolated from the stools of these patients. Treatment is symptomatic and recovery is rapid and complete.

The importance of bacillary dysentery lies in its ability to strike in epidemic proportions rather than in the severity of illness produced in the individual case. The disease generally lasts four to ten days. Patients may have a marked systemic reaction, with fever, cramps, tenesmus, and frequent small stools consisting mainly of mucus, blood, and pus, but in many cases, symptoms are mild and stools grossly normal though loose. Early treatment with sulfadiazine or sulfaguanidine shortens the clinical course and generally renders the stool bacteriologically negative. Such treatment is of considerable value as a measure in the control of spread of the disease.

Of all the diarrheal and dysenteric diseases, the one which may produce the most severe illness, with longest hospitalization and invalidism, most serious complications, and highest mortality, and which is likely to be the greatest problem for the future, is amebic dysentery. Amebic dysentery constitutes a larger proportion of all dysentery in the Asiatic theaters than elsewhere, amounting to about 45 percent of all cases. Amebiasis is the term used to designate all conditions produced by infection with Endameba histolytica. Of all individuals who contract amebiasis, a variable percentage develop amebic dysentery. A definition of these terms at the outset is essential. The case of amebic dysentery is important to recognize but the potent source for the spread of infection to others is the individual generally termed the amebic "carrier". The designation "carrier" is a loose one since many so-called carriers have occasional mild symptoms produced by the amebic infection.

COMMUNICABLE DISEASE ADMISSIONS PER THOUSAND MEN PER YEAR

ASIATIC THEATERS BY DIAGNOSIS NOVEMBER 1943 – OCTOBER 1944



AMEBIC DYSENTERY AND THE DIARRHEAL DISEASES (Continued)

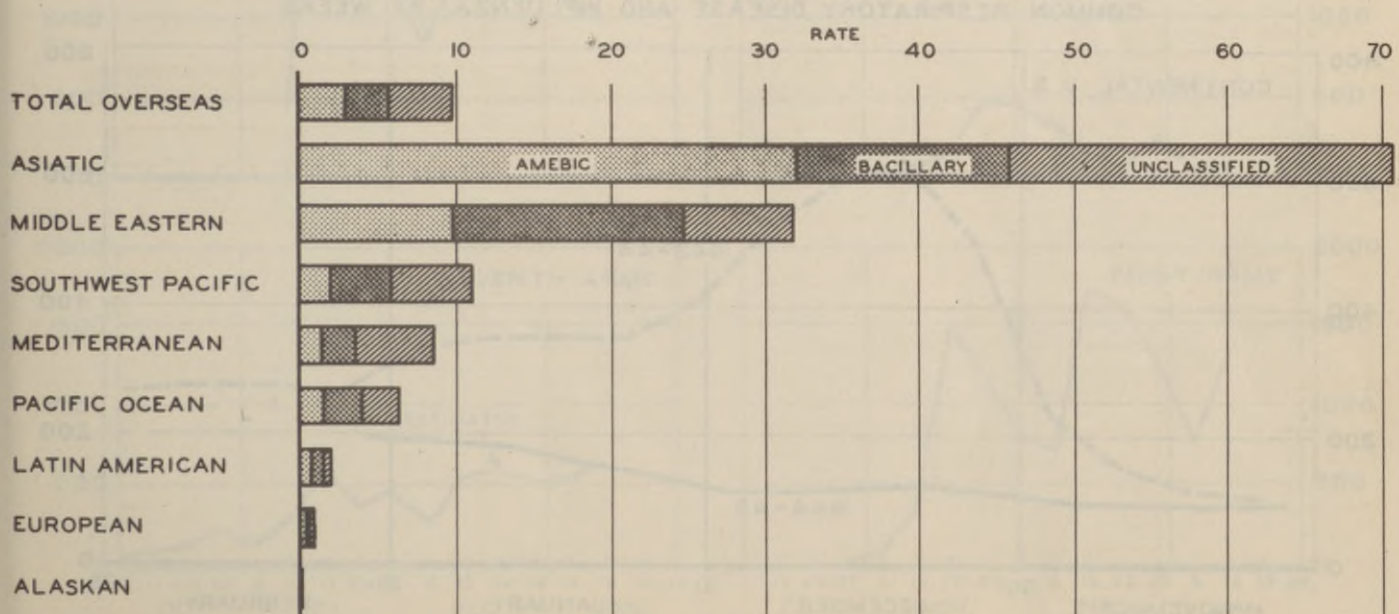
Although occurring more frequently in tropical and sub-tropical regions, amebiasis has a world-wide distribution. The causative agent, Endameba histolytica, belongs to a large group of single-celled parasites which cause such diseases as malaria, sleeping sickness, kala-azar and cutaneous leishmaniasis. It differs from the parasites causing these diseases it that it does not require a specific insect host for transmission among individuals. Spread is accomplished by mechanical means, as through the medium of contaminated food and drink. Under conditions of poor personal hygiene, direct person-to-person contact can become important in the spread of amebiasis. In some situations it is difficult to evaluate the importance of each mode of transmission in the spread of amebiasis. The modes of transmission are known in general, and control must be directed against all. A medical program for controlling the spread of amebiasis and the other diarrheal diseases requires the complete support of command. To safeguard the Army against these diseases in countries situated in tropical and subtropical regions, it is often necessary to impose measures which arouse the displeasure of the local government and civilian population. At such times the exercise of command function in support of medical programs is put to severe trial.

Similar general measures of control apply to all the diarrheal diseases. The infected food handler, both in civilian establishments and in Army messes, must be eliminated as a hazard. The newer approved Army laboratory methods should be used in detecting infected food handlers. Such examinations should be made periodically. When use of native help is required, their duties should be designed to prevent their contact with prepared food and eating utensils. Hand-washing facilities should be provided at latrines used by Army personnel and native help. When civilian facilities cannot be depended upon to provide food and drink safe for consumption, the Army should endeavor to provide more attractive eating establishments and entertainments for Army personnel. Foods to be served raw in tropical or backward areas require treatment with compound germicidal rinse, high chlorine content water, or boiling water to render them safe for consumption. Diagnostic facilities should be extented to dispensaries since early diagnosis and management of the dysenteries is an important weapon of control. Post-treatment examinations will detect those potential carriers requiring further treatment. Providing a safe water supply is essential. So important are the duties of personnel on water details operating chlorinating and filtration units that command must extent its authority to the lowest echelon in assuring such a supply. Although the role of the fly and other insects as mechanical transmitters of the agents causing the diarrheal diseases varies in importance, their control must be complete and continuous.

The newer chemical and mechanical methods applicable to control of the diarrheal diseases are described in recent Army publications. The problem is ever present and requires the maintenance of rigid discipline. The admission rate for the diarrheal diseases in countries where these are prevalent reflects the degree to which the command has instituted and enforced control measures.

DYSENTERY, ADMISSIONS PER THOUSAND MEN PER YEAR

OVERSEAS COMMANDS NOVEMBER 1943 – OCTOBER 1944

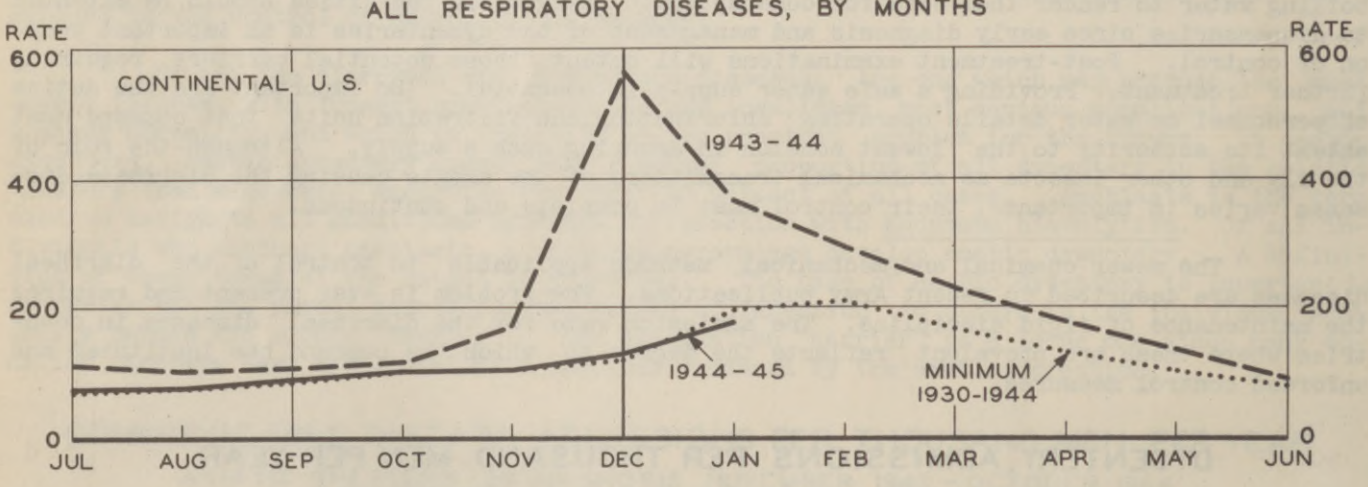


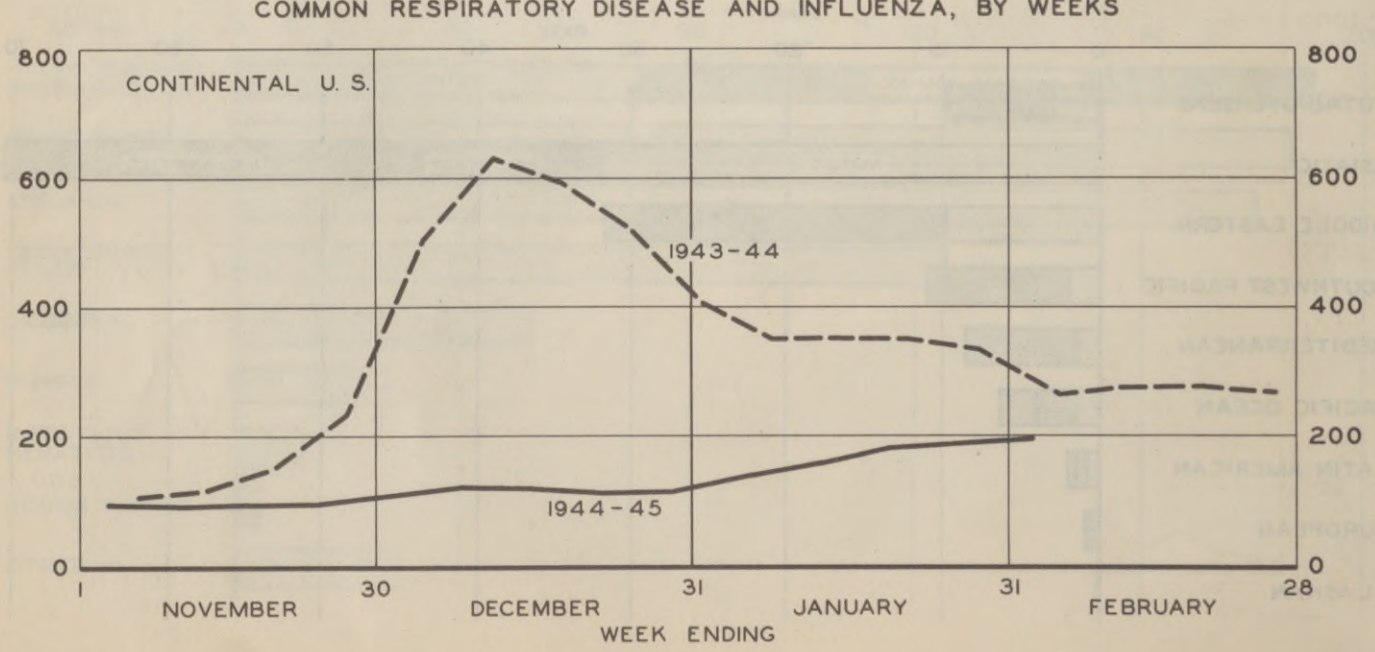
RESPIRATORY DISEASE, CONTINENTAL U. S. AND EUROPEAN CONTINENT

The incidence of respiratory disease among troops in the continental U. S. continues to be remarkably low. As the first panel below indicates, the provisional rate of 178 for January is about 10 percent below the lowest January rate of the preceding 15 years. In fact one must go back to 1915 to find a recorded rate lower than this. There was a gradual rise in respiratory admissions during January, and a rate of 195 was registered during the first week in February. The bottom panel below gives these facts against the background of the corresponding period of last winter, with its very sharp influenza epidemic in November and December. Scrutiny of the rates for the various service commands reveals slight variations, with the Fifth and Sixth Service Commands highest. No sharp increases are apparent in any area. However, it is by no means rare for February or even March to produce a higher respiratory admission rate than January. For example, during the winter of 1935-1936, when there was a late respiratory peak, the admission rates were 221 for January, 469 for February and 415 for March. It is for this reason, together with the fact that epidemics of respiratory disease are still unpredictable, that the exceptionally favorable rates thus far experienced this winter cannot be projected reliably into the next two months.

The satisfactory respiratory disease situation extends also to troops on the European Continent, according to preliminary consolidations prepared there. Throughout December the incidence of common respiratory disease did not reach 120 admissions per 1,000 men per year, and for the first two weeks of January the reported rates are only 137 and 149 for all European Theater forces on the Continent. Average rates for the field forces alone are slightly below those for all troops on the Continent.

RESPIRATORY DISEASE, ADMISSIONS PER THOUSAND MEN PER YEAR





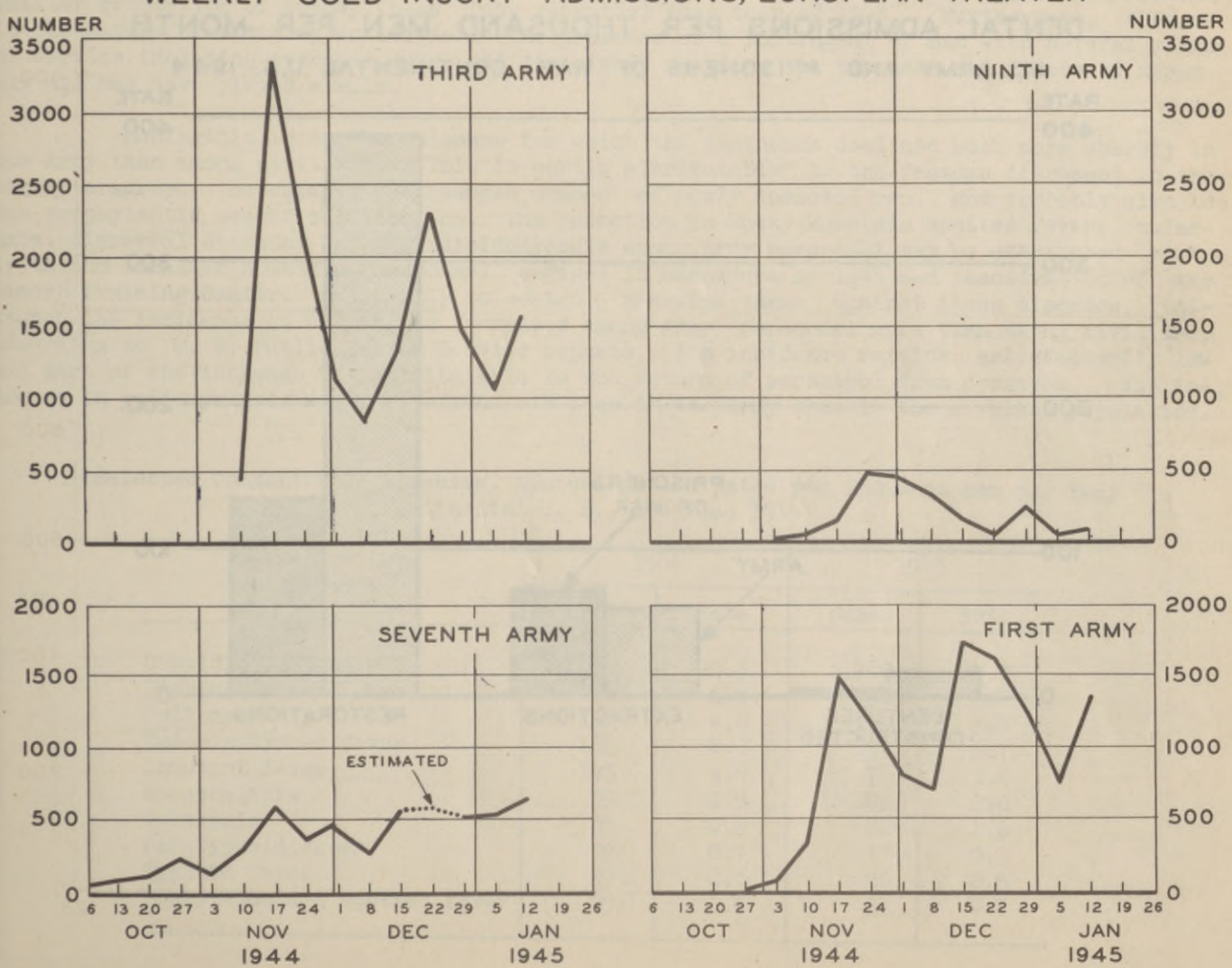
TRENCH FOOT AND FROST BITE

With the advent of much lower temperatures on the Western Front, frost bite, a cold injury similar to trench foot, is being reported in increasing numbers. Although all four armies reported a total of less than 50 cases of frost bite during the week ending 8 December, there were almost 800 cases during the first week of January and 1,800 cases the second week. However, differentiation between mild forms of frost bite and trench foot is difficult, and statistics which separate the two conditions may not be reliable. In view of this fact, and since the problems presented by the two conditions are basically the same, the accompanying charts, shown in HEALTH for December, have been modified to show the total incidence of cold injury. The reporting of these injuries has greatly improved since November, but must still be regarded as approximate.

During the week ending 12 January it is estimated that there were 3,800 cases of cold injury, bringing the total to date to roughly 34,000 cases. This weekly total is slightly above the average for November and December, and 60 percent above the level for the previous week. There were about 1,500 cases in the Third Army and 1,400 in the First Army. Control measures continue to be pushed vigorously, but the tactical situation and the weather have greatly hampered the full development of the type of individual foot discipline essential to its successful prevention. The First French Army operating under severe climatic conditions in the Vosges Mountains, had reported 4,800 cases of trench foot by 28 December. This is roughly equivalent to the total for the Seventh Army believed to have been of about the same strength during the report period. On the other hand, the Second British and First Canadian Armies had reported less than 50 cases by 30 December. British measures of prevention are virtually identical with those of the U. S. Army, except that the British provide gum boots to troops forced to stand constantly on water-logged ground. The British attribute their good record to shoes of superior fit and to better foot discipline.

In the Mediterranean Theater the incidence of trench foot remains quite satisfactory.

WEEKLY COLD INJURY ADMISSIONS, EUROPEAN THEATER



DENTAL SERVICE FOR PRISONERS OF WAR

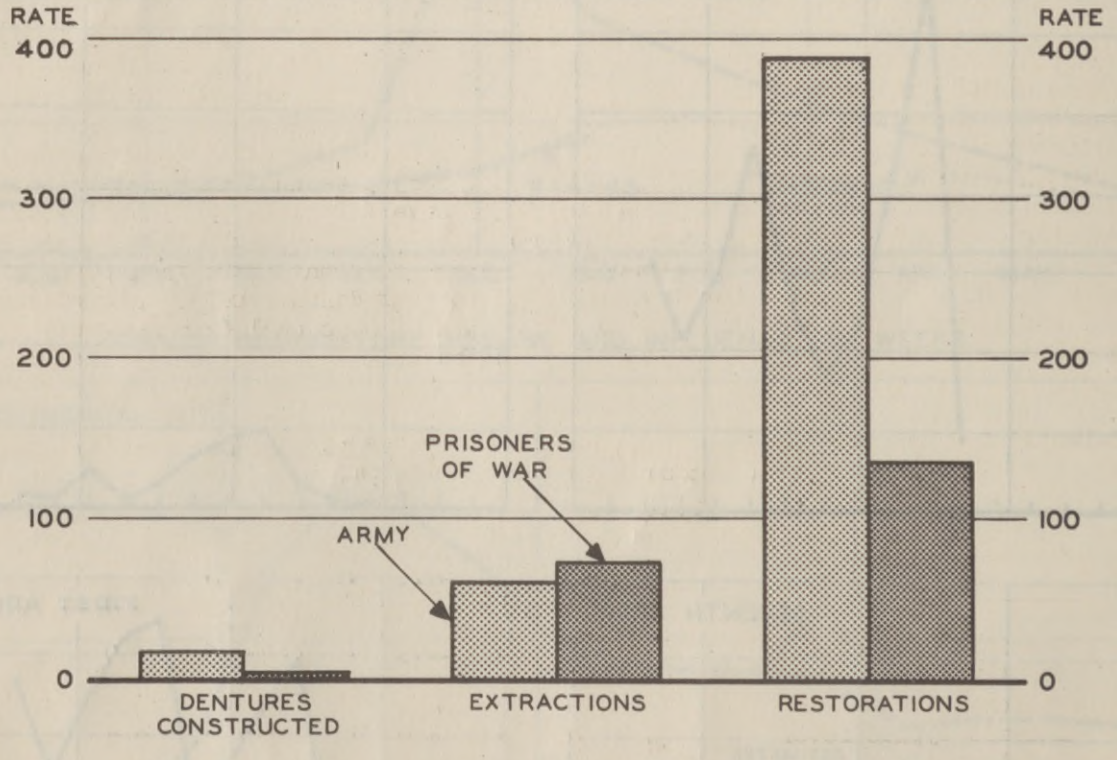
The Army field manual, Rules of Land Warfare, states that "Every camp shall have an infirmary, where prisoners of war shall receive every kind of attention they need." In the continental United States dental service for German, Italian, and Japanese prisoners is being accomplished by the utilization of prisoner-of-war dentists so far as possible. In general, dental work at large stations is provided separately for prisoners of war. In isolated camps a considerable amount of work is accomplished by the utilization of mobile dental operating units.

The panel below compares, in rate form, the volume of dental work accomplished for prisoners of war with that done for U. S. Army personnel during 1944. The one instance of a higher rate for prisoners of war is that for extractions, and probably reflects the poorer dental health and greater need for emergency work on the part of prisoners. Personnel of Italian Service Units are eligible for overseas duty and hence must be prepared in accordance with Italian POM. To date more than 1,100 such troops have been screened and shipped. Italian prisoners, the great majority of whom are employed in the Service Units, comprised about 21 percent of all prisoners of war held in the continental United States during 1944.

Strength figures for prisoners of war in overseas theaters are not available to establish rates for dental work accomplished abroad. The principal volume of dental service for prisoners of war in foreign theaters has been reported from the European and the Mediterranean Theaters. Five percent of all extractions overseas and nearly one percent of all restorations during 1944 were for prisoners of war. The number of dentures constructed or repaired for prisoners of war overseas during the year is negligible, less than 0.1 percent of all denture work. For the continental U. S. the corresponding figures are six percent of all extractions, two percent of all restorations, and 1.5 percent of all denture work.

DENTAL ADMISSIONS PER THOUSAND MEN PER MONTH

U.S. ARMY AND PRISONERS OF WAR, CONTINENTAL U.S. 1944



INCIDENCE OF COMMUNICABLE DISEASES, CONTINENTAL U. S.

Provisional admission rates for troops in the United States during 1944 show a sharp reduction in morbidity below the levels of 1943 and the preceding war years. The admission rate for all disease was lower than that for any year since 1939 and about 25 percent lower than that for 1943. The incidence of the common respiratory diseases and influenza declined about 40 percent below the 1943 level and was lower than in any year since 1938. This extremely favorable respiratory rate is responsible for about 60 percent of the decline in the overall disease rate. Of the more important communicable diseases, the following had rates for 1944 which were definitely lower than those for 1943: pneumonia (all types), diarrhea and dysentery, mumps, measles, scarlet fever, and meningococcal meningitis. Increases were reported in the admission rates for gonorrhea, atypical pneumonia, and rheumatic fever, the latter possibly a result of improved reporting. Malaria acquired outside the U. S. increased considerably as more and more troops returned who had served in endemic areas. The death rate for nonbattle injury increased by about 15 percent but that for disease remained almost unchanged.

Improvements were also registered in several of the uncommon but potentially significant infectious diseases, including coccidioidomycosis, encephalitis, Rocky Mountain spotted fever, and tularemia. On the other hand, diphtheria, poliomyelitis, endemic typhus fever and undulant fever, despite their statistically low order of frequency, all increased somewhat as causes of admission. The table below compares the 1943 and 1944 cases and rates for each of these diseases.

During 1944 the Army admission rate for measles declined although civilian incidence as reported to the U. S. Public Health Service remained unchanged. In addition, the Army experience with scarlet fever was more favorable in 1944 than 1943, although civilian incidence is reported to have increased considerably. The reason for the differences is not known, but further analysis might show that the civilian prevalence of these diseases was higher in 1943 in those geographic sections of the country where the military force was concentrated. Another possible explanation is that the more seasoned Army of 1944 contained a smaller proportion of susceptibles (new recruits) than that of 1943. Furthermore, changes in the nature of training activities, the presence of a contingent of men with several years of service including overseas duty, and diminished crowding in barracks and places of assembly all may have played a role.

Meningitis is another disease for which the incidence declined much more sharply in the Army than among civilians. This is partly attributable to the factors discussed in the above paragraph, especially the reduced number of newly inducted men, and probably also to the prophylactic use of sulfadiazine. The reduction in Rocky Mountain spotted fever, tularamia, diarrheal disease, and coccidioidomycosis among Army personnel may be attributed partly to the smaller number of personnel engaged in maneuvers in 1944 and inactivation of the Desert Training Center, and partly to control measures taken against these diseases. Although the incidence of diphtheria increased among Army personnel more than among civilians, according to U. S. Public Health Service reports, its incidence remains satisfactorily low and part of the increase is attributable to the return of personnel from overseas. The increase in poliomyelitis was proportionately less in the Army than in the civilian population.

Selected Communicable Diseases, Admissions and Rates per Thousand Men per Year
Continental U. S., 1943 and 1944

Disease	1944		1943	
	Cases	Rate	Cases	Rate
Coccidioidomycosis	814	20.3	1,180	23.0
Diphtheria	274	6.8	151	3.0
Poliomyelitis	162	4.0	169	3.4
Endemic typhus fever	162	4.0	137	2.7
Undulant fever	143	3.6	78	1.6
Encephalitis	59	1.5	102	2.0
Tularemia	35	0.9	80	1.6
Paratyphoid fever	29	0.7	17	0.3
Typhoid fever	23	0.6	26	0.5
Rocky Mountain spotted fever	15	0.4	37	0.7

HEALTH BRIEFS

Venereal Disease on the Continent

After climbing rapidly to a level of 50 to 60 admissions per 1,000 men per year in October 1944, the venereal disease admission rate among troops on the Continent failed to advance further in November and December. During the first two weeks of January the rate was only about 51 per 1,000 men per year, according to preliminary consolidations. Theater medical reports attribute much of the success in maintaining control to the contact-tracing program. Seven nurses are presently engaged in this epidemiologic work and concomitantly have been instrumental in stimulating the interest of French civil authorities in this method of attacking the venereal disease problem. Cooperation from French health authorities in this respect is reported as excellent. Paris and Liege are being most frequently named as the place of infectious contact.

Morale Affected by Leave Policy in Middle East

A recent technical medical report from the Middle East contains the following item of interest in connection with the temporary relief of personnel with long overseas service.

"Believed to be a strong factor for increasing the morale of troops is the recently established theater policy whereby personnel may be returned to the United States on temporary duty for estimated periods of six to eight weeks for rehabilitation, recuperation and recovery. Primarily intended for personnel whose duties are of such nature that they may not be rotated, or for whom rest and return is desired in lieu of rotation, this policy should prove most beneficial to those persons who have served overseas in tropical climates for appreciable periods of time, since continual and prolonged service in tropical climates appears to lower the efficiency and stamina of personnel, especially service troops whose routinary duties often approach boredom, as well as assuring the retention of trained personnel in key positions."

Immunization Against Typhus

Stimulating doses of typhus vaccine were recently administered to all European Theater personnel on the Continent. To date there has been no typhus fever among U. S. troops in the theater. The degree of louse infestation is minimal, only about 0.5 percent of units reporting any at all, and in each case this has been limited to a few men who have been promptly deloused.

Reduction in Time Lost from Psychosomatic Disorders

Medical experience in the Fifth Army area has shown that approximately 23 percent of the total combat psychiatric cases ultimately recognized as such are patients having organic symptoms induced by emotional disturbance but not recognized as psychiatric cases until evacuated out of the army area. Investigation of patients with upper gastro-intestinal tract symptoms revealed that these patients spent an average of 21 days in hospital and another 14 days in the replacement system before they were returned to their units. Moreover, only 55 percent were returned to combat duty from base section hospitals. Accordingly, the Fifth Army established a clearing station for screening patients with gastro-intestinal symptoms and made psychiatric consultation available in the army area. During the two months ending 23 December, 82 percent of all gastro-intestinal cases were returned to full combat duty, eight percent to limited duty, and only 10 percent evacuated to base section hospitals. The average time lost from combat was only eight days in comparison with the previous average of 35 days. Twenty-eight percent of the patients with gastro-intestinal symptoms received a final diagnosis of a psychiatric nature, although none was admitted as such. Among those whose symptoms were judged to be psychogenic, 73 percent were returned to full combat duty. The success of this effort has been such that the principle of recognition of the psychiatric basis of many gastro-intestinal disorders is being further extended by the Fifth Army to include certain cardiovascular and orthopedic conditions.

Hospital Ship Reconditioning Program

Under the provisions of ASF Circular No. 36, dated 31 January 1945, a reconditioning program will be provided aboard hospital ships for the sick or wounded soldier being returned to the United States or being transported on the longer intra-theater trips.

A cooperative enterprise of The Surgeon General, the Transportation Corps, hospital ship commanders and other agencies, the program will include the usual reconditioning methods modified within the limitations imposed by lack of space and facilities on a hospital ship. Provision has been made in the plan for training some of the ship complement in the techniques of reconditioning.

PROJECTED AVAILABILITY OF FIXED HOSPITALIZATION OVERSEAS

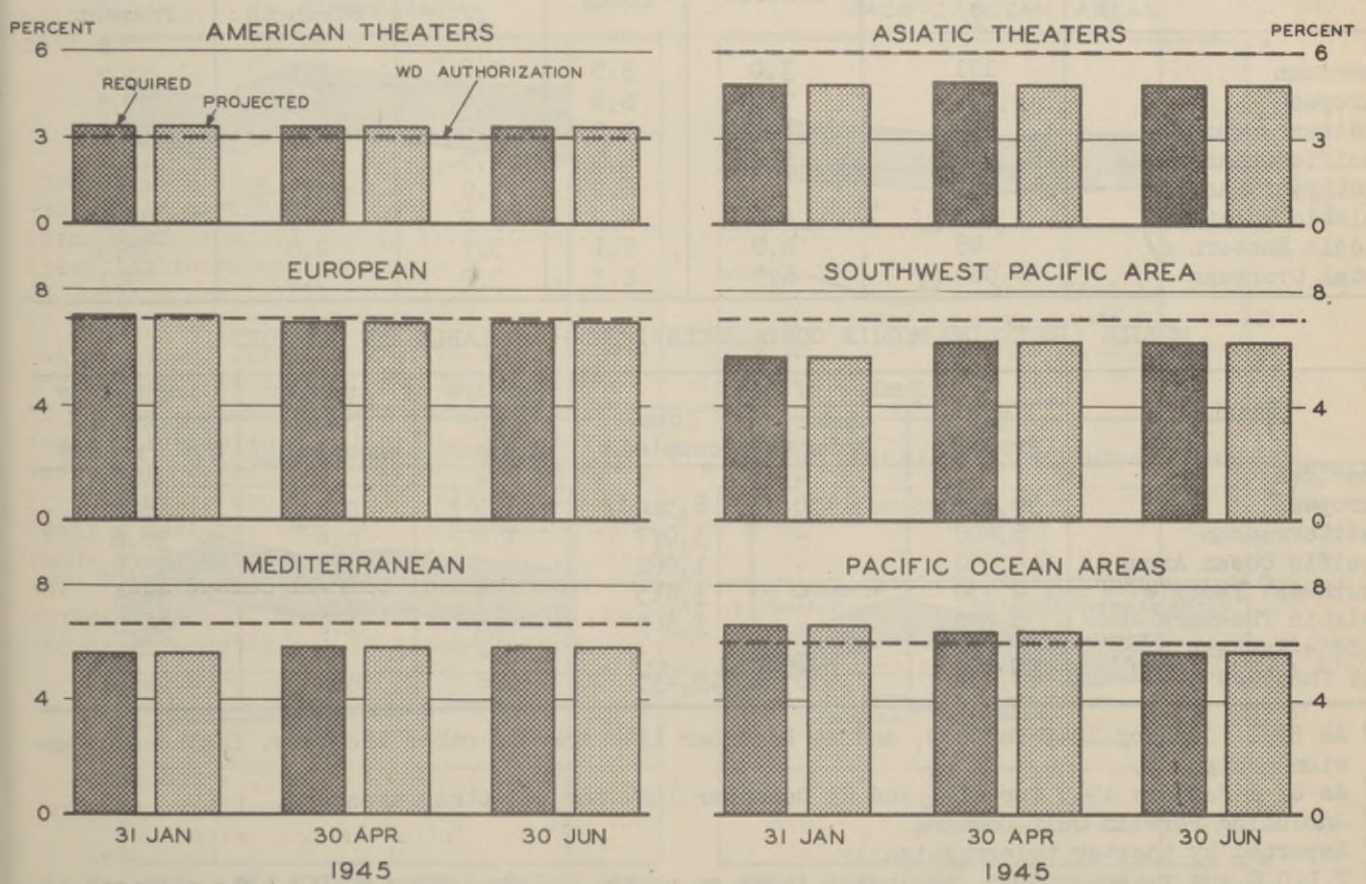
For the more important overseas commands the charts below present the essential facts concerning fixed bed capacity for 31 January, 30 April, and 30 June according to the 23rd revision of the WD Six Months Troop Forecast. The panel for each theater gives the WD authorization for fixed units as a dashed horizontal line which may be compared with the two vertical bars for any date, the darker one showing the theater requirement established by OPD and the lighter one showing beds provided and projected on the particular date. Only fully trained units are projected. All figures are shown as percentages of theater strength projections published in the Troop List for Operations and Supply dated 1 January 1945. The strength used for the Asiatic theaters includes 102,000 Chinese.

The projected fixed bed percentages include only such field hospitals as the theaters have elected to regard as fixed, all others being excluded as mobile. In the case of the European Theater 13,600 field hospital beds are now classified as mobile, while in the Mediterranean Theater 1,600 beds are so classified.

In all instances except the Asiatic theaters for April where the margin is small, the projection meets the theater requirement established by OPD, but in the Southwest Pacific Area, the Mediterranean Theater, and the Asiatic theaters both the projections and the stated theater requirements are well below the WD authorized percentages. Since they are stated as percentages of Troop List strength projections, the accuracy of these forecasts depends on the accuracy of the Troop List strength projections, whereas the WD authorized percentages are independent of all strength projections. For certain theaters the strength projections have been following a generally upward trend in recent months, and may well be too high. However, if the 1 January projections for 30 June should prove accurate, new units could hardly be put into these three theaters in time to avoid real deficiencies below the conservative needs represented by the WD authorized percentages. The projected excesses for the American commands represent a very small number of beds, and the strength of these commands is more scattered than elsewhere.

PROJECTED AVAILABILITY OF FIXED HOSPITAL UNITS OVERSEAS

BEDS AS PERCENT OF STRENGTH



HOSPITALIZATION

HOSPITALIZATION OVERSEAS

The following tables summarize the bed situation overseas on 31 December 1944, the latest date for which reasonably complete information is available. The counts of beds present and under orders are based upon the 1 January Troop List for Operations and Supply. The reports of occupancy are more preliminary, being based upon theater radio reports. The strengths are derived from the 1 February Troop List, and have been adjusted to exclude from the Southwest Pacific total the Pacific Ocean Areas strength on Leyte as well as to exclude the en route component of each theater strength given in the Troop List. Also, the strength of the Asiatic theaters has been increased by 89,000 to account for Chinese troops, the Army being obligated to provide fixed hospitalization at 6 percent of Chinese strength in India-Burma up to a total of 102,000 men.

FIXED BED UNITS AVAILABLE AND OCCUPIED
Number of Beds, 31 December 1944

Theater	WD Authorization		T/O Present		T/O Under Orders	T/O in operation a/ d/	Total Fixed Available a/ d/	Total Occupied b/ d/
	Percent of Strength	Number of Beds	Number	Percent of Authorization				
American	3.0	5,136	5,925	115.4	-	6,564	9,681	3,066
European	7.0	189,945	184,550	97.2	11,800	166,400	204,652	176,276
MTO	6.6	33,780	29,125	86.2	-	29,775	32,975	22,244
POA	6.0	26,762	27,150	101.4	2,800	25,408	31,653	11,482
SWPA	7.0	52,612	46,500	88.4	5,400	47,500	43,634	24,487
Asiatic	6.0	19,025	15,550	81.7	1,250	15,950	18,353	7,921
ME c/	6.0	2,886	3,400	117.8	-	3,250	4,292	1,355
All Theaters	6.7	330,146	312,200	94.6	21,250	294,847	345,240	246,831

Beds as Percent of Strength

Theater	Strength in Thousands e/	W.D. Authorization	T/O Present		Beds Occupied b/	
			Total	Usable f/	Percent of Strength	Percent of T/O Present
American	171	3.0	3.5	2.8	1.8	51.7
European	2,714	7.0	6.8	5.4	6.5	95.5
Mediterranean	512	6.6	5.7	4.6	4.3	76.4
Pacific Ocean Areas	446	6.0	6.1	4.9	2.6	42.3
Southwest Pacific	752	7.0	6.2	5.0	3.3	52.7
Asiatic Theaters	317 g/	6.0	4.9	3.9	2.5	50.9
Middle Eastern c/	48	6.0	7.1	5.7	2.8	39.9
Total Overseas	4,960 h/	6.7	6.3	5.0	5.0	79.1

MOBILE (INCLUDING MOBILE CONVALESCENT) BEDS AVAILABLE AND OCCUPIED

Theater	Number of Beds			Percent of Strength		Occupied as Percent of T/O Present
	T/O Present	Under Orders	Total Occupied b/	T/O Present	Total Occupied b/	
American	-	-	-	-	-	-
European	50,650	7,550	8,516 i/	1.9	0.3 i/	16.8
Mediterranean	8,400	-	3,077	1.6	0.6	36.6
Pacific Ocean Areas	4,050	-	1,062	0.9	0.2	26.2
Southwest Pacific	9,950	-	3,415	1.3	0.5	34.3
Asiatic Theaters	5,700	-	3,365	1.8	1.1	59.0
Middle Eastern c/	-	-	-	-	-	-
All Theaters	78,750	7,550	19,435	1.6	0.4	24.7

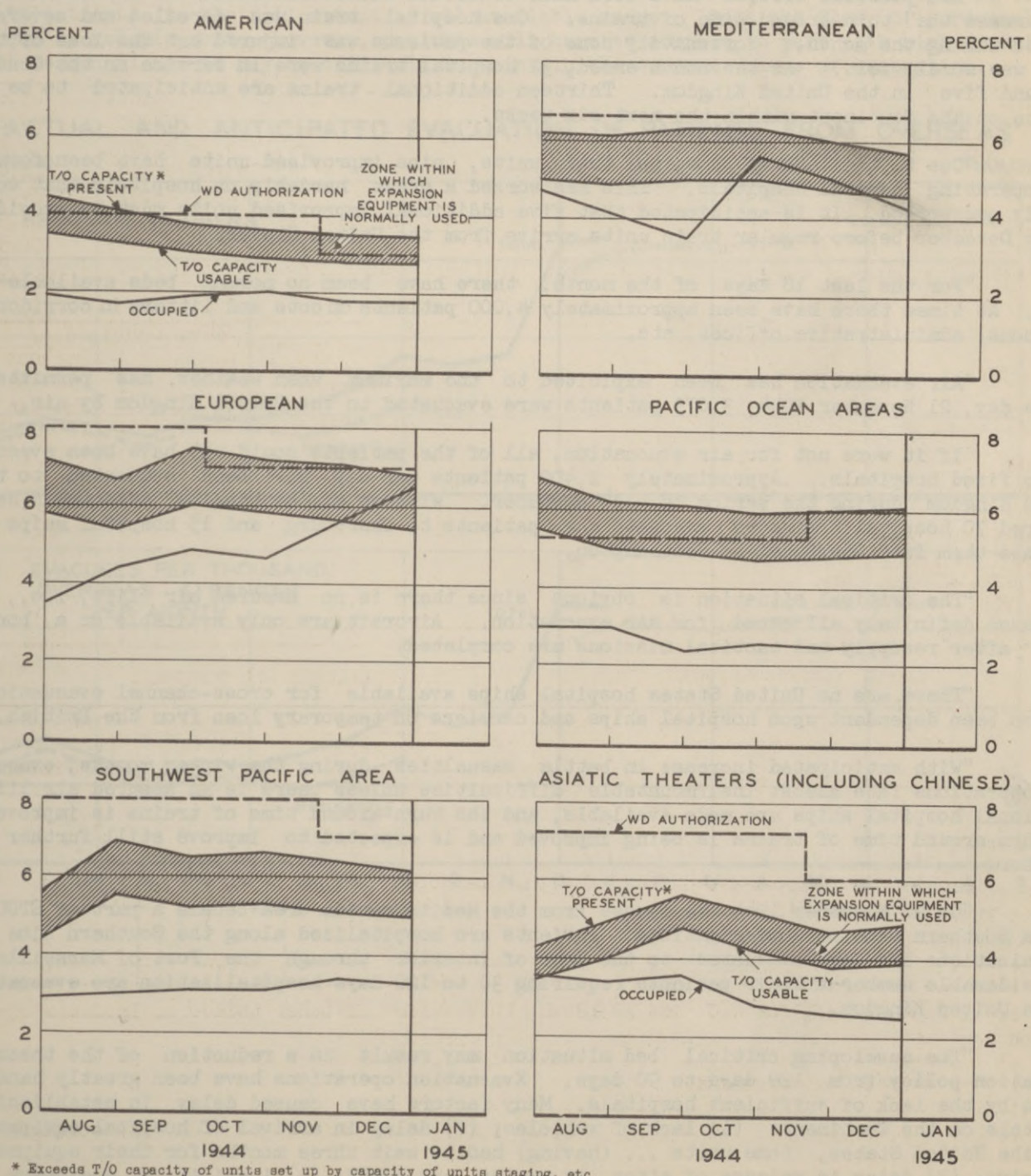
a/ As of 11 January 1945 for ETO, and 29 December 1944 for all other theaters. Includes expansion equipment.
b/ As of 1 January 1945 for ETO, and 29 December 1944 for all other theaters.
c/ Including Persian Gulf Command.
d/ Reported by theater telegraphically.
e/ T.L.O.S. 1 February 1945, excluding those en route, and including in POA, the strength of POA units on Leyte.
f/ Eighty percent of T/O Present.
g/ Includes 89,000 Chinese strength in India-Burma.
h/ One thousand too great because of rounding.
i/ All Convalescent Beds included.

HOSPITALIZATION OVERSEAS (Continued)

The theater panels below give the recent changes in the availability and occupancy of fixed beds since the end of July 1944. The shaded band on each panel gives the range of occupancy within which the use of expansion equipment becomes necessary, so that an occupancy line in this area is evidence of pressure upon the theater supply of fixed beds. The pressure may be even greater than indicated, for in some instances a considerable number of units may be staging, in construction, and the like, so that expansion facilities must be used earlier than the charts show. In these instances, however, some of the personnel of units staging should be available for attachment to operating units expanded beyond T/O capacity. On 31 December the European Theater reported 166,400 fixed T/O beds in operation and 176,000 patients, 14,000 of whom were prisoners of war. As of 1 January 1945, 302,000 prisoners of war were being held in the European Theater Communications Zone.

FIXED HOSPITALIZATION OVERSEAS THEATERS

BEDS AS PERCENT OF STRENGTH



* Exceeds T/O capacity of units set up by capacity of units staging, etc.

INTRA-THEATER EVACUATION, EUROPEAN THEATER

The following excerpt from a technical medical report for the month of November describes difficulties experienced at that time and also subsequently in a more acute form. More recent data on hospitalization appear on page 30.

"Evacuation operations have been faced with one crisis after another throughout the month. On two occasions evacuation had to be stopped from the army areas for 18 to 24 hours due to the lack of adequate hospital trains and hospital beds on the Continent. Heavy battle casualties plus great numbers of patients with trench foot placed an overwhelming burden on the inadequate evacuation means. Weather has been fickle. On four different occasions during the month there was no evacuation from the Continent to the United Kingdom by either sea or air. These occasions, unfortunately, occurred when conditions were the most critical. An additional difficulty occurred on 24 November 1944 when the 15th General Hospital was destroyed by a V-1 bomb and five trains destined for evacuation from First Army had to be diverted to evacuate the patients to another hospital.

"All possible efforts have been made to obtain additional means of evacuation and to decrease the turn-around time of trains. One hospital train was derailed and severely damaged during the month. Fortunately none of the patients was injured but the loss of the train was sorely felt. As the month ended, 31 hospital trains were in service on the Continent and five in the United Kingdom. Thirteen additional trains are anticipated to be in service on the Continent within the next six weeks.

"Due to the lack of hospital train units, nine improvised units have been formed from operating general hospitals. This has worked a great hardship on hospitals that were already overworked. It is anticipated that five additional improvised units must be provided during December before regular train units arrive from the United States.

"For the last 18 days of the month, there have been no normal beds available in Paris. At times there have been approximately 4,000 patients on cots and litters in corridors, day rooms, administrative offices, etc.

"Air evacuation has been exploited to the maximum when weather has permitted. In one day, 21 November 1944, 3,073 patients were evacuated to the United Kingdom by air.

"If it were not for air evacuation, all of the patients could not have been evacuated to fixed hospitals. Approximately 2,400 patients per day have been evacuated to the United Kingdom during the period 18 - 30 November. Without air evacuation this would have required 70 hospital trains to evacuate the patients to Cherbourg and 15 hospital ships to evacuate them from Cherbourg to Southampton.

"The critical situation is obvious since there is no assured air lift, i.e., no airplanes definitely allocated for air evacuation. Aircraft are only available on a 'bonus basis' after resupply and tactical missions are completed.

"There are no United States hospital ships available for cross-channel evacuation. We have been dependent upon hospital ships and carriers on temporary loan from the British.

"With anticipated increase in battle casualties during the winter months, evacuation operations face almost insurmountable difficulties unless there is an assured air lift, additional hospital ships are made available, and the turn-around time of trains is improved. The turn-around time of trains is being improved and is expected to improve still further in December.

"On 20 November 1944 the forces from the Mediterranean area became a part of ETOUSA with a Southern Line of Communications. Patients are hospitalized along the Southern Line of Communications and are evacuated to the Zone of Interior through the Port of Marseilles. A considerable number of their patients requiring 30 to 120 days hospitalization are evacuated to the United Kingdom.

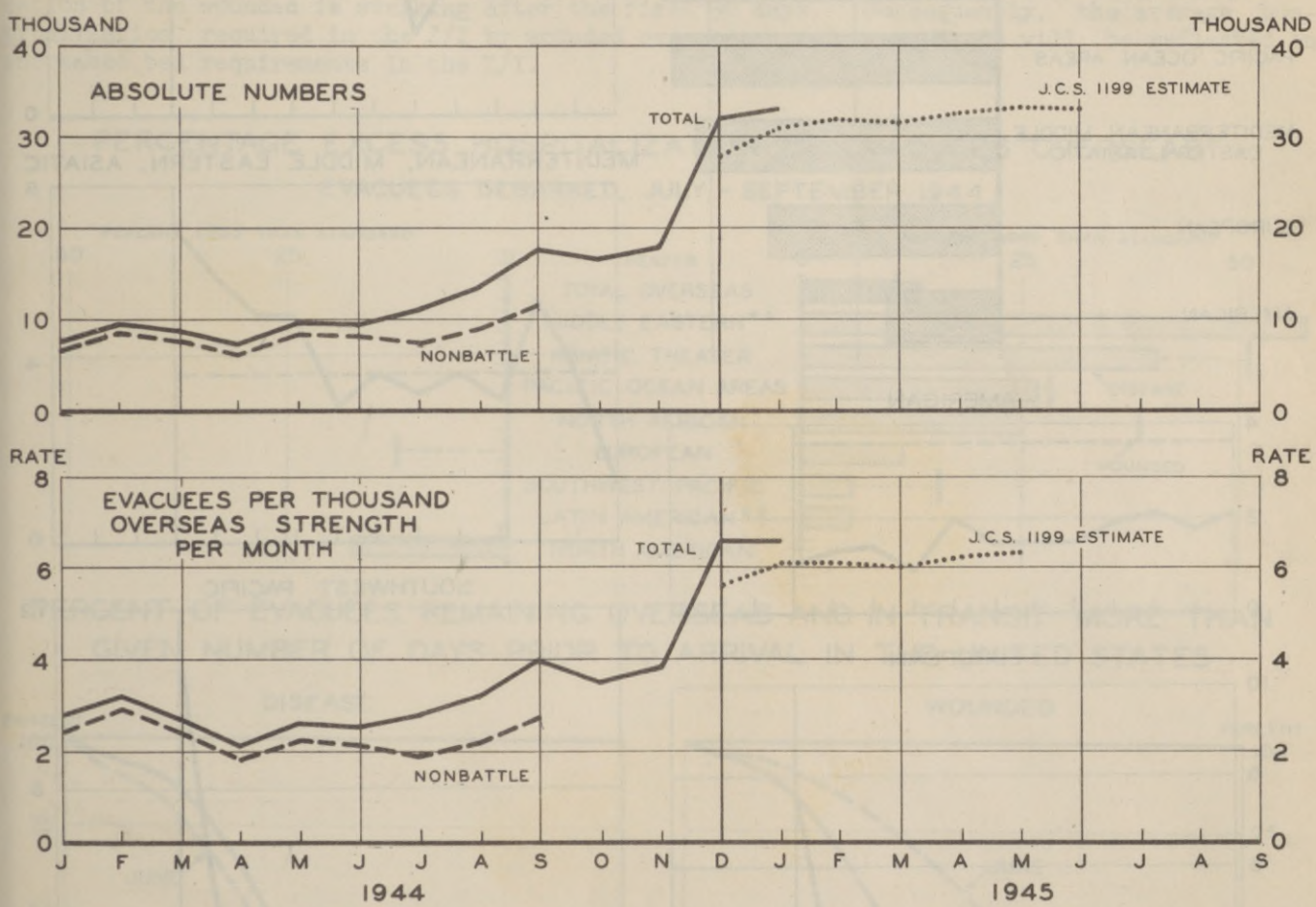
"The developing critical bed situation may result in a reduction of the theater evacuation policy from 120 days to 90 days. Evacuation operations have been greatly handicapped by the lack of sufficient hospitals. Many factors have caused delay in establishing hospitals on the Continent: (1) lack of vehicles; (2) delay in arrival of hospital equipment from the United States, some units ... (having) had to wait three months for their equipment to arrive; (3) delay in release of sites by armies and SHAEF; (4) inability of engineers to build hospitals or convert existing buildings mainly due to lack of engineering supplies."

TREND OF EVACUATION FROM OVERSEAS

The provisional total of 33,000 Army patients debarked in the U. S. during January continues the radically new trend established in December as a result of War Department action to utilize more fully all available sea lift from the European Theater. Ships returning from the European Theater debarked 20,000 U.S. patients in January in comparison with 17,000 in December. The January lift from the European Theater amounts to two-thirds of the patients arriving by water from all theaters. Air lift from all theaters was about ten percent of the total debarked during the month.

Transportation capacity is believed to be available for sustaining a volume of evacuation probably greater than that of January, and it is anticipated that evacuation may occur at the January rate or higher for several months at least. The forecasts developed in J.C.S. 1199 are uniformly above 30,000 Army patients per month and are shown in the panels below as a rough guide to the expected evacuation experience of the next few months. Any projections such as these are necessarily tentative because of the uncertainty surrounding the strategic situation in Europe with all its consequences for rapid redeployment once V-E Day is at hand. The more certain victory appears the more anxious the theater will be to evacuate patients to the full extent of all available means. Once the flow of personnel is reversed by redeployment, however, patients will have to compete in part with high-priority, combat personnel and it may be difficult to maintain the current volume of evacuation.

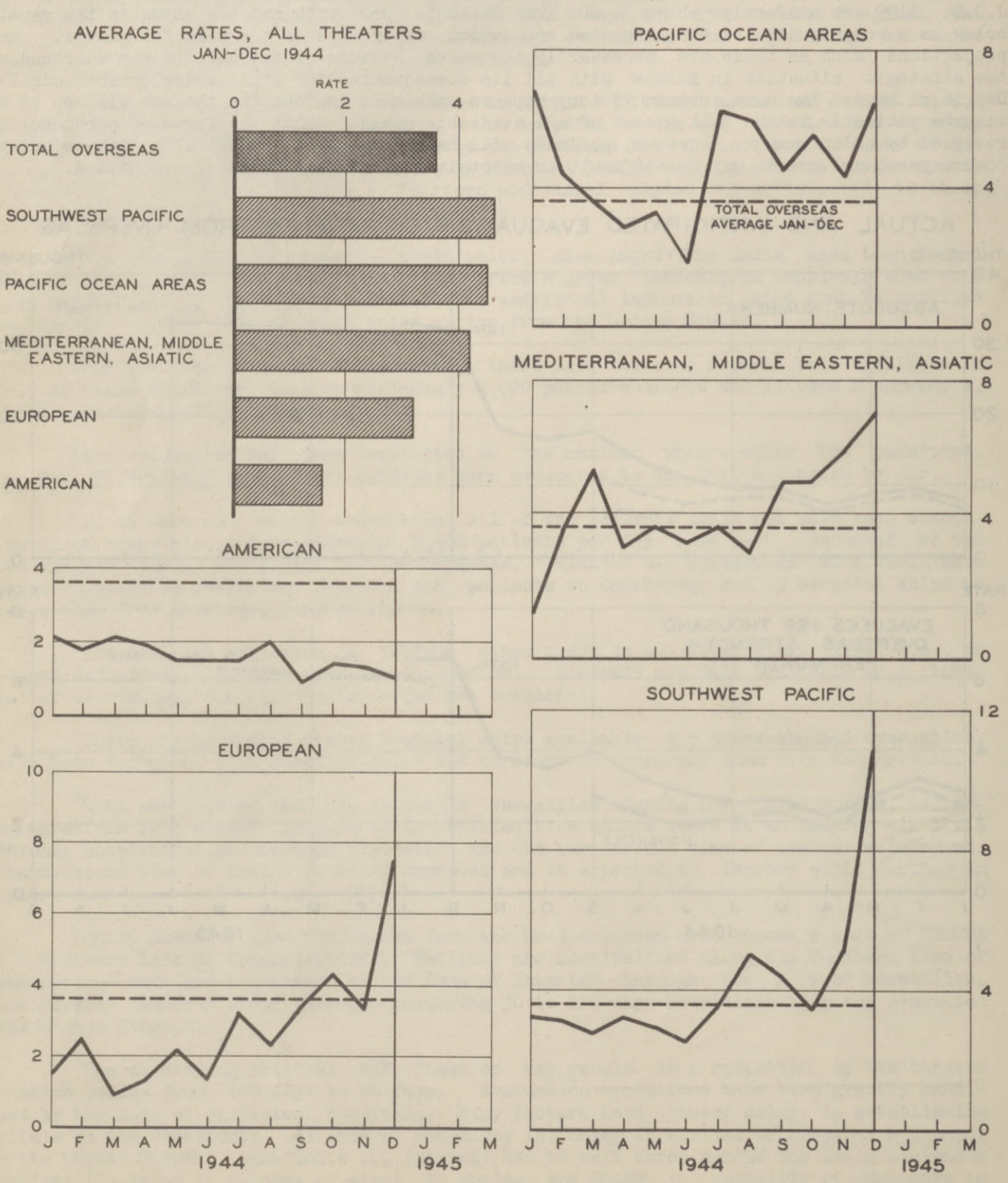
ACTUAL AND ANTICIPATED EVACUATION OF PATIENTS* FROM OVERSEAS



TREND OF EVACUATION FROM OVERSEAS (Continued)

The spectacular rise in the volume of evacuation during December, whether viewed in terms of number of patients or evacuees per 1,000 theater strength, was nowhere greater than in the European Theater. The rate at which patients were embarked for the U. S. rose from 3.3 per 1,000 strength per month during November to 7.5 during December. The latter or an even higher rate may well be maintained for months. The change was hardly less dramatic in the Southwest Pacific Area, however, for the evacuation rate advanced from 5.1 for November to 10.9 for December. For January a rate of about 8 is anticipated.

EVACUEES PER THOUSAND MEN PER MONTH, OVERSEAS THEATERS



DURATION OF HOSPITALIZATION PRIOR TO EVACUATION

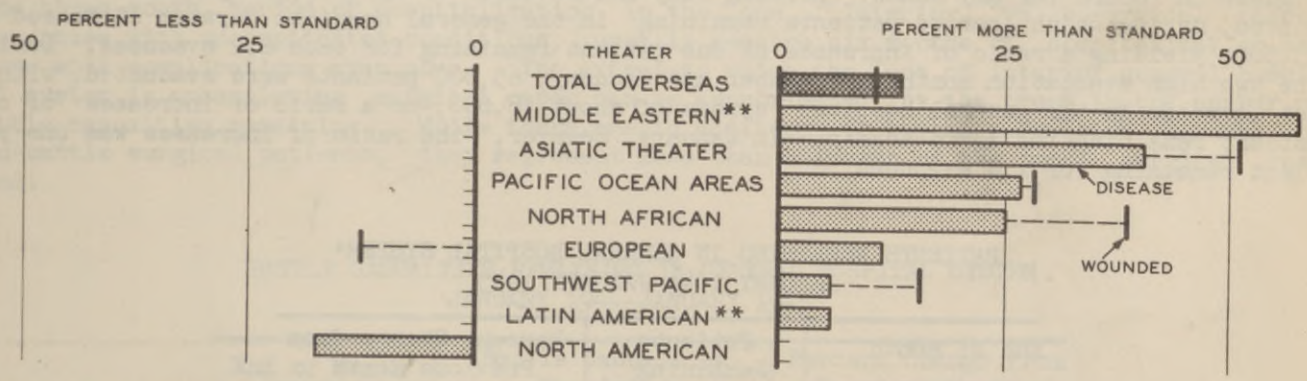
For all patients debarked in the United States from July through September 1944, the average duration of hospitalization prior to embarkation was 59 days for disease patients, 79 days for nonbattle injury patients, and 63 days for battle casualties. The average for wounded is 21 percent below the comparable figure for June.

The first panel below plots the relative amount of additional hospitalization which was required in the various theaters for the treatment of evacuees because they were kept longer than the standard time under a 120 day evacuation policy as discussed in HEALTH for December. For disease patients the standard is 52 days prior to evacuation and for wounded it is 57 days. The percentages would be considerably smaller, but still appreciable, if they could be presented as the increased cost of hospitalizing all patients overseas, not merely evacuees. The short evacuation policy and early evacuation of serious cases from the North American areas result in a smaller cost of hospitalizing patients in this area than that envisioned by the standard. Where there is no pressure upon hospitalization in an overseas theater, of course, there is less reason for attempting speedy evacuation and a longer evacuation policy may be preferred. Longer holding, where feasible, may also be indicated at times in order to relieve already overtaxed transportation facilities or even Z/I facilities if medical means are more plentiful in the theater than in the Z/I.

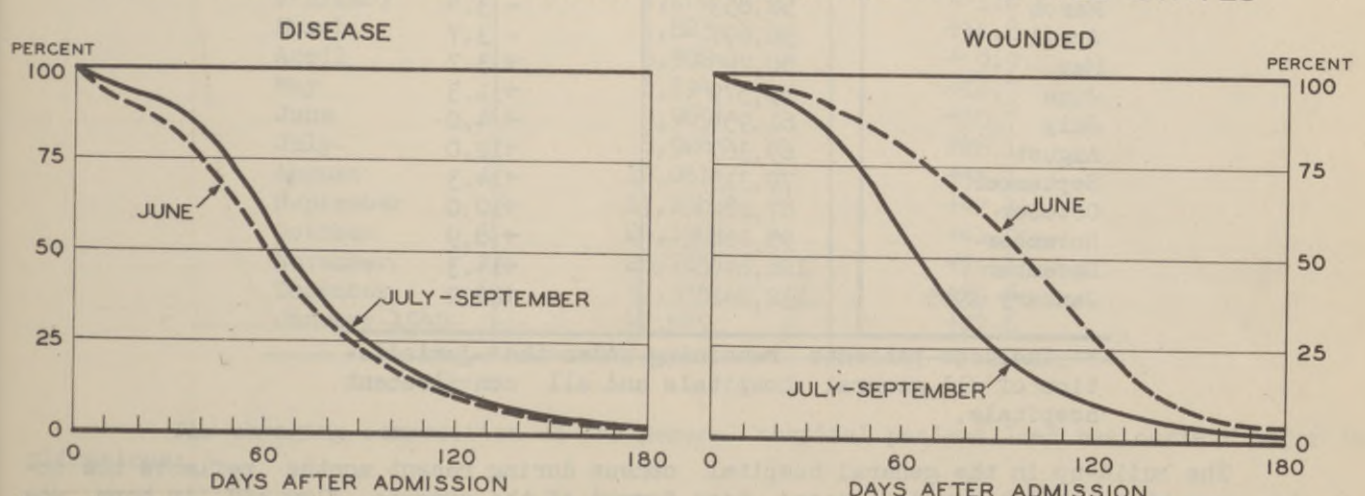
Contrasting evacuees received during June with those debarked from July through September, the panels at the bottom of the page give the percentage hospitalized overseas and in transit to the U. S. more than a given number of days. The shortened overseas hospitalization of the wounded is striking after the first 30 days. Consequently, the average hospitalization required in the Z/I by wounded evacuees has increased and will be reflected in increased bed requirements in the Z/I.

PERCENTAGE EXCESS HOSPITALIZATION OF EVACUEES OVERSEAS*

EVACUEES DEBARKED, JULY - SEPTEMBER 1944



PERCENT OF EVACUEES REMAINING OVERSEAS AND IN TRANSIT MORE THAN GIVEN NUMBER OF DAYS PRIOR TO ARRIVAL IN THE UNITED STATES



* Based on conservative optimum evacuation schedule used as standard and defined in Health for December.
** No battle casualty evacuees.

HOSPITALIZATION IN THE ZONE OF INTERIOR

Patient Trend

January saw a new peak reached in the number of patients evacuated to the Zone of Interior. The total number evacuated amounted to 33,456, an increase of more than 2,000 over December which had been the previous all time high.

U. S. ARMY PATIENTS EVACUATED FROM OVERSEAS*
JULY 1944-JANUARY 1945

Month	Army Evacuees Number
July 1944	10,566
August	13,970
September	16,630
October	17,437
November	17,852
December	31,350
January 1945	33,456

* Based on patients processed through debarkation hospitals.

The large increase in the evacuee inflow in December and January was reflected in a continued rise in the number of patients remaining in the general hospital system. The net gain in total patients remaining in January (exclusive of the number added to the general hospital system through the conversion of three station hospitals) amounted to approximately 23,000. The absolute and percentage increase in patients remaining during January was the highest on record for any month. Between July and November of 1944, 76,500 patients were evacuated, during which period patients remaining in the general hospital system increased by 35,500, yielding a ratio of increases of one patient remaining for each 2.2 evacuees. During the two high evacuation months, December and January, 65,000 patients were evacuated, with a net increase in the general hospital system of about 38,000, or a ratio of increases of one patient remaining for 1.7 evacuees. In January, however, the ratio of increases was one patient remaining for 1.4 evacuees.

PATIENTS REMAINING IN GENERAL HOSPITAL SYSTEM*
JANUARY 1944-JANUARY 1945

End of Month	Patients Remaining	Percent Change from Previous Month
January 1944	61,094	
February	60,928	- 0.3
March	58,853	- 3.4
April	56,697	- 3.7
May	58,795	+ 3.7
June	59,579	+ 1.3
July	61,954	+ 4.0
August	69,367	+12.0
September	79,315	+14.3
October	87,282	+10.0
November	95,068	+ 8.9
December	108,640	+14.3
January 1945	132,842	+22.2

* Includes patients remaining under the jurisdiction of all general hospitals and all convalescent hospitals.

The build-up in the general hospital census during recent months reflects the increasing proportion which surgical cases have formed of the evacuee flow and, in turn, now represent of the general hospital population. Before the intensive campaigns which followed

HOSPITALIZATION IN THE ZONE OF INTERIOR (Continued)

the invasion of France, the evacuee flow to the Zone of Interior was not only much smaller in absolute numbers -- the average for the first six months was 8,500 -- but was composed primarily of medical and neuropsychiatric cases rather than surgical cases. During the past four months, the majority of all evacuees have been surgical cases as evidenced by the following table.

PERCENTAGE COMPOSITION OF EVACUEE INFLOW BY MAJOR DIAGNOSTIC GROUPS, BEFORE AND AFTER MAJOR CAMPAIGNS IN EUROPE

Diagnostic Group	Pre D-Day in Europe*	Oct. 1944-Jan. 1945**
Total	100	100
Surgery	20	57
Medicine	50	21
NP	30	22

* Estimated on basis of diagnoses shown on evacuee cards.

** Computed from reports by debarkation hospitals to Medical Regulating Officer.

In general, medical and neuropsychiatric cases can be discharged after an approximate three-month period of hospitalization in the Zone of Interior, while surgical cases, even those with uncomplicated conditions, usually require six months of hospitalization and those with complications even more. The extent to which the Zone of Interior general hospital system is accumulating surgical cases can be approximated by the trend in the number of battle casualties remaining. While there are in addition to battle casualties a number of non-battle surgical patients, they represent less than a fourth of the total surgical case load.

BATTLE CASUALTIES REMAINING IN GENERAL HOSPITAL SYSTEM JANUARY 1944-JANUARY 1945

End of Month	Battle Casualties Remaining	Percent Change from Previous Month
January 1944	4,233	
February	4,200	- 1.0
March	4,823	+14.8
April	5,302	+ 9.9
May	6,294	+18.7
June	6,969	+10.7
July	8,926	+28.1
August	12,061	+35.1
September	17,138	+42.1
October	24,158	+41.0
November	28,765	+19.1
December	37,335	+29.8
January 1945	47,649	+27.6

The changing composition of the general hospital patient load has certain major implications:

a. The number of patients in the general hospital system requiring intensive medical care is much greater at the present time than in the early or middle part of 1944. This

HOSPITALIZATION IN THE ZONE OF INTERIOR (Continued)

reflects itself in additional requirements for personnel and results in a higher utilization of available facilities, such as operating rooms, clinics, etc.

b. Because of the more serious conditions with which patients are currently evacuated, their length of stay in Zone of Interior hospitals is much greater than was previously the case. During the first half of 1944 patients evacuated from overseas were discharged within a period of three months or so, while the average duration of stay of the patient loads currently transferred to the Zone of Interior is about five months. This marked increase in the average duration of stay in the hospital system has been an important factor underlying the requirement for additional beds.

The Bed Expansion Picture

Prior to the approved expansion of the general and convalescent hospital system to care for the increased evacuee flow there were 119,500 beds in the general hospitals. During the month of January, there were immediately made available to the Medical Regulating Officer about 21,000 beds through the absorption of adjacent convalescent facilities, the use of T/O or post housing for the medical detachment, and through the designation of four new temporary general hospitals (about 20,000 beds net for overseas patients, when allowance is made for the station hospital care which must be provided for local troops at the new general hospitals). After deducting debarkation beds, the Medical Regulating Officer thus had a working capacity of 127,000 beds against a patient load in the general hospitals of 117,000 at the end of the month.

PATIENTS REMAINING IN GENERAL HOSPITALS PROPER
END OF JANUARY 1945

Command	Number of Hospitals	Authorized Patient Capacity*	Effective Beds**	Patients Remaining***	
				Number	Percent of Effective Beds
Total	65	152,699	127,181	116,798	91.8
Service Commands					
First	3	8,600	5,700	6,177	108.4
Second	5	17,732	12,380	11,812	95.4
Third	5	10,375	6,610	5,684	86.0
Fourth	12	28,835	24,023	22,366	93.1
Fifth	8	14,564	14,564	13,234	90.9
Sixth	4	7,855	7,855	6,786	86.4
Seventh	5	13,434	11,434	9,025	78.9
Eighth	10	21,426	20,279	20,052	98.9
Ninth	12	26,878	21,336	18,730	87.8
The Surgeon General (Walter Reed)	1	3,000	3,000	2,932	97.7

* Sub-authorized by Office of Surgeon General on basis of total authorization of 169,500 from G-4.

** Authorized beds less 13,202 debarkation beds and 12,316 beds not yet available for use by Medical Regulating Officer.

*** Excludes 16,044 patients remaining in convalescent hospitals.

During the month of February, it is estimated that the change-over in responsibility for debarkation work to staging area hospitals, additional conversion of facilities and the completion of minor construction will result in a further increase of approximately 19,000 general hospital beds. The third stage of the expansion program is just now getting under way and will not result in any gains for several months because it is primarily dependent upon the construction of new housing for medical detachments.

Convalescent Hospitals

A serious operating difficulty encountered during the past month has been the non-availability of adequate facilities at convalescent hospitals. These difficulties reflected the following:

HOSPITALIZATION IN THE ZONE OF INTERIOR (Continued)

a. Construction still in process.
b. Lack of overhead and, in particular, trainer personnel.
c. The need to review the availability of housing at several posts.

The Medical Regulating Officer had available approximately 18,000 convalescent beds during the course of the month, and the patients remaining at the end of the month were within two thousand of this figure. Substantial requests from the general hospitals to transfer additional cases to the convalescent hospitals had to remain unfilled because of the necessity to reserve the few remaining spaces for patients who are sent directly from the debarkation hospitals to convalescent hospitals.

The entire success of The Surgeon General's plan for the most effective care of overseas patients hinges on the ability to utilize the general hospital facilities and personnel only for those patients who require such specialized treatment. When patients no longer need general hospital type treatment they must be transferred to the convalescent hospitals, making the general hospitals available in turn, for new evacuees who require general hospital type treatment. A concerted effort is, therefore, being made to insure that the convalescent hospital capacity is rapidly expanded during the coming weeks, to permit the proper flow of patients through the general hospital system.

Personnel

Effective patient treatment requires not only physical facilities but properly trained personnel. Although there were increases in the total personnel available for the treatment of patients in the general hospital system during January, these increases in availability were outstripped by increases in requirements occasioned by the rapidly mounting patient load. Marked personnel deficits continue to exist on the basis of War Department Circular 209 applied to current authorizations to the field of patient capacities in the general and convalescent hospitals.

Personnel shortages in the general hospital system amount to:

TOTAL	30,800
Medical Corps	700
Nurses	4,500
Other Officers	3,000
Enlisted Men	22,600

During January action was taken to accelerate the staffing of the general and convalescent hospitals by the following steps:

a. The publication of instructions to the field which permit hospital commanders to assign to detachment overhead within authorized ceilings all personnel ready for return to duty other than profiles A and B.
b. Reassignment of certain personnel made excess by the reduction in the scope of the medical training program at ASF training centers.

Recommendations have been made by The Surgeon General to redistribute Medical Corps Officers among the theaters and commands in order to cover part of the Medical Corps deficit. The nurse recruiting program is being aggressively pushed; the Chief of Staff has authorized the establishment of 103 WAC companies at the general hospitals to provide WAC personnel as nurses' aides. Continuing aggressive action is essential in order to overcome the sizable deficit remaining. Such action should of course include civilian recruitment to the extent that local labor markets will permit.

Current Status, Station and Regional Hospitals

There was an increase of 2,000 patients in the station and regional hospitals during January which occurred despite the decline in troop strength. This increase is normal at this time of the year. The high occupancy in station and regional hospitals, especially noticeable in the regional hospitals where occupancy exceeded effective beds, made it impossible for Service Commanders to revise downward their authorized beds at a rate commensurate with the decline in troop strength.

HOSPITALIZATION IN THE ZONE OF INTERIOR (Continued)

BEDS AUTHORIZED AND PATIENTS REMAINING IN STATION AND REGIONAL HOSPITALS
End of January 1945

Command	Authorized Beds*	Effective Beds**	Patients Remaining		Beds Occupied***
			Number	Percent of Effective Beds	
Army Service Forces - Total	73,205	58,564	57,582	98.3	56,771
Service Command - Total	65,845	52,675	53,741	102.0	52,955
Station Hospitals	33,208	26,566	25,136	94.6	25,004
First	220	176	78	44.3	78
Second	1,629	1,303	988	75.8	976
Third	2,349	1,879	1,668	88.8	1,648
Fourth	5,430	4,344	4,165	95.9	4,136
Fifth	958	767	542	70.7	535
Sixth	1,096	877	709	80.8	708
Seventh	2,139	1,711	1,240	72.5	1,231
Eighth	12,925	10,340	10,457	101.1	10,433
Ninth	5,669	4,535	4,545	100.2	4,515
MDW	793	634	744	117.4	744
Regional Hospitals	32,637	26,109	28,605	109.6	27,951
First	550	440	426	96.8	407
Second	1,034	827	760	91.9	736
Third	3,229	2,583	2,881	111.5	2,772
Fourth	12,350	9,880	10,831	109.6	10,622
Fifth	1,574	1,259	1,498	119.0	1,483
Seventh	3,100	2,480	2,623	105.8	2,583
Eighth	7,200	5,760	6,459	112.1	6,310
Ninth	3,600	2,880	3,127	108.6	3,038
Chief of Transportation-Total	7,360	5,888	3,841	65.2	3,816

* Authorized by Service Commanders or by Chief of Transportation.
** Authorized beds less an allowance for dispersion of 20 percent.
*** Difference between number of patients remaining and corresponding number of beds occupied represents number of patients temporarily absent from hospital on sick leave, furlough or AWOL.

Personnel shortages continue to exist at station and regional hospitals; they are most substantial in the case of nurses.

The following table summarizes the bed, patient and personnel picture in the ASF hospitals, Zone of Interior.

SUMMARY ASF HOSPITALIZATION IN THE ZONE OF INTERIOR*
End of January 1945

Type of Hospital	Patient Capacity		Patients Remaining		Personnel Shortages***		
	Authorized	Effective**	Number	Percent of Effective Beds	MC	ANC	Total
Total	246,044	198,156	186,583	94.2	796	5,876	34,175
Station and Regional	65,845	52,675	53,741	102.0	83	1,389	3,352
General	152,699	127,181	116,798	91.8	409	4,091	24,471
Convalescent	27,500	18,300	16,044	87.7	304	396	6,352

* Excludes station hospitals under the Chief of Transportation.
** Defined in two preceding tables.
*** The shortages make no allowance for availability of 2,300 protected personnel of approximately 300 Medical Corps officers and 2,000 corpsmen, since this personnel must be supervised by American medical officers and, therefore, is not equivalent to corresponding categories of American personnel.

NURSE PERSONNEL

At the end of December, there were approximately 42,000 nurses in the Army Nurse Corps. Since total requirements for nurses both overseas and in the Zone of Interior, based on T/O's and published personnel guides, exceeded 50,000 at that time, there existed a net deficit of approximately 8,000. Close to 5,000 of this deficit was concentrated in the Zone of the Interior, all in ASF hospitals, and mostly in the general hospitals in which the deficit exceeded 3,000.

The large evacuee inflow which increased from an average of 8,500 patients monthly during the first half of 1944 to a number in excess of 30,000 monthly in December vastly increased the requirements for general and convalescent hospital beds in the Zone of Interior. Recently the War Department General Staff authorized an expansion in the general hospital system of 50,000 general hospital beds and 20,000 convalescent beds. The nursing deficit in this country has risen, therefore, from 5,000 to approximately 8,500.

During the last quarter of 1944 the average monthly recruitment of nurses amounted to 725. Separations averaged 275 per month, resulting in a net monthly gain of 450. Because of the intensified recruiting campaign and the impetus gained from the current proposal to draft nurses, procurement in January reached 1,050. Since separations for the month were only 170, there was a net gain of 880. It is estimated that on the basis of voluntary recruiting the total strength of the Army Nurse Corps at the end of June will be somewhat in excess of 47,000. In terms of June requirements this will represent a shortage of more than 9,000 nurses and an even greater shortage in terms of peak redeployment requirements.

Because of the large shortage which existed in the Zone of Interior in December and the additional shortage resulting from the expansion of the general hospital system, any effort to fill overseas requirements in full would result in the most serious shortage in the Zone of Interior. If the draft legislation is not passed, the nurse problem will probably become increasingly acute unless the most aggressive action is taken to secure supplemental means. Even if the draft measure is enacted, ancillary nursing means would be very helpful.

The Chief of Staff has directed that there be recruited 103 WAC companies (of 100 WACs each) who will be trained to serve as nurses' assistants. A substantial portion of this WAC personnel must first be recruited and trained and will not be available for duty until April or May. It is unknown at this time whether the required number of WACs can be obtained. In addition to this WAC personnel, those individuals who are participating in the Nurses Aide Program carried out under the auspices of the Red Cross can be hired as civilian employees for Army hospitals, although the number hired must be limited to the group who were in the training program on 13 January 1945 or to whom commitments had been made prior to that date. It is unknown at this time what this number will amount to, but it may not exceed 2,000.

The acute shortages outlined above and the fact that additional means will become available relatively slowly and in insufficient amounts -- unless the draft is passed -- have led The Surgeon General to recommend certain redistributions of nursing personnel among major commands and theaters, in order to insure that nurses are assigned primarily in relation to patient load. These recommended redistributions are emergency measures which can be dispensed with as soon as the new ceiling of 60,000 nurses is substantially met.

ABUSE OF MEDICAL CHANNELS OF DISPOSITION

Because of pressure from command, many individuals are placed into medical rather than administrative channels of disposition, resulting in an unnecessary waste of manpower on the one hand and of medical facilities on the other. Individuals are daily reclassified, evacuated, and even discharged for medical reasons on meager grounds, and medical means are being utilized to dispose of individuals who are ineffective but not sick. Although the effect of such practices is generally not immediately apparent, over a period of time they lower the morale and decrease the motivation of those who remain in the Army. Command has been too willing to employ the easier medical channels of disposition, and the medical officer, in turn, has not fully appreciated his responsibility for conserving manpower beyond his professional responsibility to individual patients. There is a widespread tendency to attribute ineffectiveness to coincidental medical defects, while other factors influencing effectiveness, namely appropriateness of leadership, and individual motivation and attitudes, have not been given sufficient consideration.

It is much simpler to dispose of an individual who creates a problem for an organization by routing him through medical channels than it is to correct the non-medical factors which are causing the difficulty. It is understandable that a simple solution will be universally preferred to one that is more difficult, but the manpower lost by such practices is of such extent as to have led to corrective action in several overseas theaters where the problem has been more clearly visualized.

In a recent administrative circular, the Southwest Pacific Area has stressed the fact that the existence in an individual of a physical or mental defect is not in itself sufficient cause for hospitalization and that it is the responsibility of the Medical Department to provide medical care for those who will be benefited thereby. It further states that: "Medical officers attached to troops and medical officers in dispensaries will not transfer such cases to hospitals unless they are unable to make an adequate diagnosis of the defect and estimate of the degree of incapacity, or unless the defect present is such that hospital treatment is plainly necessary." It directs that those patients who, after hospital treatment, and despite their defects, are judged capable of service in their former organizations, will be discharged to duty and returned to their organizations. Those who are considered fit for military service but whose defects preclude the possibility of duty in their former organizations are to be transferred to a Replacement Depot for further assignment.

Similarly, South Pacific Base Command, in a recent circular letter to medical officers, stressed the responsibility of medical officers to the service, stating: "The first responsibility of the entire Medical Department is the maintenance of the fighting strength of the army, and all other responsibilities either support this one or are secondary to it. Medical officers must accept the responsibility of decision between real disability and no significant disability in fact. Commanders cannot evade this responsibility by passing it on to the next echelon, and medical officers will not be permitted to do so." It directs among other things that medical officers must not:

1. "allow the soldier who is actually feigning illness to occupy a hospital bed unnecessarily long and to usurp the time of the medical officer, consultant, laboratories, etc.

2. "permit the medical department to be utilized as an agency for the removal of undesirable soldiers and officers who have at the most but minor physical or mental disability.

3. "refer unnecessarily the dispensary patient to hospitals nor the hospital patient to neuropsychiatric consultants or wards for by doing so this may make minimal symptoms become unduly important.

4. "overlook the fact that the closer to the site of the inception of his difficulties or illness that a soldier is treated, the greater are the chances that he will be returned to duty."

On the other hand, the South Pacific Base Command circular directs that: "...in order to meet satisfactorily this challenge to medicine as a whole and more adequately conserve manpower the medical officer must ...

1. "make the diagnosis of psychoneurosis with caution and on facts and degree of disability - the diagnosis alone is insufficient to excuse anyone from duty.

ABUSE OF MEDICAL CHANNELS OF DISPOSITION (Continued)

2. "keep the hospital patient as active in constructive work as is feasible and possible in order that he may not lose any of his functional capacity, stamina and good morale while recovering from even a specific ailment.

3. "take the initiative in and collaborate more closely with commanders, chaplains, and information-education section officers in correcting personnel adjustment problems.

4. "fully realize that all officers who make decisions, make errors - and medical officers who make decisions are no exception. Medical officers will be fully protected who make decisions that prove later to have been wrong when such decisions have been made after careful consideration of available facts. The only inexcusable sin is negligence in obtaining those facts that are open to anyone who will go for them and the neglect of the patient."

A recent directive of the Peninsular Base Section reminds unit commanders of their responsibility to recommend unfit personnel for discharge from the Army in accordance with AR 615-368 and AR 615-369. "Commanding officers have repeatedly hospitalized enlisted men who come within these provisions, thereby placing a burden on the already strained hospital facilities. This action tends to cause enlisted men to be discharged because of physical reasons rather than under the provisions of AR 615-368 or 615-369 thereby making it a possible basis of a claim against the government for compensation. Unit commanders will make maximum use of the provisions of above cited Army regulations, and will institute necessary proceedings to bring such undesirable enlisted personnel before a Board of Officers for examination to determine whether or not such personnel should be discharged under this authority. Only in emergencies, or where the need for restraint is clearly indicated, will personnel who are covered by these provisions be hospitalized and then only when such action is recommended by a medical officer."

No such clear-cut expression of policy has been voiced in the Zone of Interior. It would appear desirable to have such an expression of policy with regard to the utilization of administrative discharges for those who are inapt and inadaptable for service. Utilization of such criteria as "below the minimal standards for induction" for discharging men from the service (cf. WD Circular 161, 1943 and WD Circular 370, 1944) places emphasis on defects which may or may not be disabling. While individuals with psychoneurosis are considered below minimal standard for induction, many with psychoneurosis are performing effective service both in the Zone of Interior and overseas, and even in combat. Perforation of an ear drum is disqualifying for service, yet the defect may confer practically no disability. While such a defect may render a man unsuited for combat service, because of the possibility of an aggravation of the disorder, it is militarily unwise to consider such an individual sick, or to discharge him as disabled.

STATISTICAL TABLES

The tables below and on the following pages present the admission rates for selected causes in the overseas theaters. The rates include cases admitted to hospital or confined to quarters for a day or more, and have been derived from MD Forms 86ab (now AGO Form 8-122), both regular and telegraphic, submitted to The Surgeon General from each overseas theater or lesser command. Only the major overseas areas are shown separately, but the total overseas rates are based upon a complete consolidation. The rates for wounded in action are derived from The Adjutant General's report Battle Casualties of the Army, and represent hospital admissions only. Rates which are based upon incomplete reports are so noted, and those derived from the weekly telegraphic 86ab reports are distinguished from those computed from the regular monthly report. Average rates for 1944 have been computed only for those theaters which have submitted a complete set of 86ab reports for the year.

The malaria rates are for diagnosed malaria only, and include both primary attacks and recurrences insofar as these are reported as malaria, a variable amount being reported as fever of unknown origin by the various theaters. The venereal disease rates are based upon the 86ab rather than upon the monthly venereal disease statistical report, which generally gives somewhat lower rates. The rates for all respiratory disease include incidence of common respiratory diseases, influenza, and the pneumonias. The incidence of dengue and infectious hepatitis is shown for only those theaters which have experienced a rate of at least 10 in some one month. The transfer of strength from the Mediterranean to the European Theater is believed to have caused some error in the reports from the former area for October and November, one which takes the form of too little strength for the admissions reported.

WOUNDED IN ACTION, AS REPORTED TO THE ADJUTANT GENERAL
Hospital Admissions per Thousand Men per Year

Month and Year	Overseas Commands								
	Total f/ Overseas	North American	Caribbean	ETO a/	NATO	POA	SWPA	CBI	ME and PGC
1943 Average	23	6	e/	7	62	18	9	4	4
1944 - Jan	30			4	115	8	10	0	4
Feb	39			6	144	35	6	1	0
Mar	24			5	65	37	29	10	1
Apr	13			6	38	5	12	12	17
May	41			5	180	1	25	8	24
Jun	113			191	98	54	44	41	13
Jul	142			270	91	41	24	24	14
Aug	97			185	67	19	10	7	0
Sep	110			172	165	28	4	2	0
Oct	94			113	180	24	61	1	0
Nov	129			220	44	8	42	1	0
Dec	c/			c/	c/	c/	c/	c/	c/
1944 Average	c/	d/	e/	c/	c/	c/	c/	c/	c/

a/ Excluding Iceland.
c/ Data not yet available.
d/ Only 5 men reported as wounded through 30 November 1944.
e/ Only 7 men reported as wounded in Latin American Commands from 1 January 1943 through 30 November 1944.
f/ Including casualties among troops enroute overseas.

STATISTICAL TABLES (Continued)

ADMISSIONS TO HOSPITAL AND QUARTERS
Rates per Thousand Men per Year

Month and Year	United States	Overseas Commands								
		Total	Alaskan	Caribbean	ETOa/	NATO	POA	SWPA	CBI	ME and PGC
ALL DISEASE										
1943 Average	739	890	624	670	837	943	971	1,046	991	1,107
1944 Jan	778	840	671	575	805	995	661	998	954	952
Feb	709	767	611	548	754	851	641	979	639	964
Mar	635	738	594	504	717	847	614	867	745	869
Apr	574	676	548	521	582	755	599	865	957	920
May	537	628	513	519	458	710	596	875	1,095	1,064
Jun	479	c/	428	504	c/	746	511	885	1,222	948
Jul	473	c/	367	561	c/	998	474b/	877	1,535	1,073
Aug	472	c/	377	555	c/	845	500b/	904	1,520	978
Sep	506	c/	341	528	c/	844	659b/	816	1,228	896
Oct	511	c/	341	532	c/	930	545b/	771	1,154	775
Nov	494	c/	387	532	c/	810	443b/	(799)b/	897	729
Dec	513	c/	298	512	c/	862	(417)	(881)b/	(686)	645
1944 Average	563	c/	478	531	c/	846	c/	c/	c/	896
NONBATTLE INJURY										
1943 Average	80	136	182	105	100	149	131	171	84	140
1944 Jan	69	130	166	82	81	195	114	161	113	126
Feb	69	117	154	85	83	155	112	160	88	87
Mar	68	113	138	77	91	127	115	161	80	107
Apr	65	109	137	70	87	118	128	143	102	108
May	68	115	124	67	90	142	128	145	105	99
Jun	73	c/	149	66	c/	143	109	144	90	113
Jul	72	c/	114	63	c/	146	96b/	141	86	105
Aug	71	c/	103	65	c/	125	86b/	149	88	88
Sep	67	c/	107	61	c/	137	107b/	144	81	95
Oct	66	c/	95	60	c/	135	116b/	142	98	88
Nov	61	c/	94	56	c/	131	111b/	(133)b/	115	81
Dec	55	c/	84	59	c/	107	(98)	(128)b/	(98)	94
1944 Average	67	c/	127	68	c/	138	c/	c/	c/	99
ALL RESPIRATORY DISEASES										
1943 Average	263	186	224	103	421	145	91	112	165	208
1944 Jan	363	277	362	99	434	302	102	88	226	326
Feb	291	241	293	103	343	278	97	90	173	392
Mar	229	231	294	81	327	252	114	92	153	262
Apr	273	169	197	94	226	172	99	89	147	265
May	132	135	165	100	151	128	102	107	185	212
Jun	85	c/	125	63	c/	106	98	89	216	166
Jul	72	c/	95	90	c/	122	66b/	90	253	147
Aug	73	c/	99	92	c/	113	66b/	84	201	190
Sep	87	c/	113	86	c/	115	94b/	78	182	195
Oct	100	c/	129	73	c/	191	89b/	66	181	200
Nov	102	c/	136	82	c/	162	65b/	c/	156	193
Dec	125	c/	74	73	c/	178	c/	c/	c/	210
1944 Average	159	c/	190	87	c/	174	c/	c/	c/	231

a/ Excluding Iceland.
b/ Based upon incomplete report.
c/ Data not yet available.
( ) Based upon telegraphic report.

STATISTICAL TABLES (Continued)

ADMISSIONS TO HOSPITAL AND QUARTERS
Rates per Thousand Men per Year

Month and Year	United States	Overseas Commands								
		Total	Alaskan	Caribbean	ETO a/	NATO	POA	SWPA	CBI	ME and PGC
DIAGNOSED MALARIA d/										
1943 Average	0.2	96	0.1	37	3	54	208	245	181	123
1944 Jan	0.1	45	0	24	5	29	89	130	86	61
Feb	0.1	41	0	18	5	47	82	92	66	62
Mar	0.1	43	0	11	7	72	85	71	50	58
Apr	0.1	43	0	9	12	80	56	63	91	63
May	0.2	42	0	14	16	57	60	67	116	64
Jun	0.3	c/	0	20	c/	70	37	59	210	84
Jul	0.2	c/	0	20	c/	81	21b/	59	265	121
Aug	0.2	c/	0	15	c/	91	14b/	48	310	71
Sep	0.2	c/	0	11	c/	74	15b/	42	240	51
Oct	0.2	c/	0	13	c/	61	10b/	37	255	40
Nov	0.1	c/	0	8	c/	38	9b/	(42)b/	165	23
Dec	0.1	c/	0	6	c/	25	(7)	(41)b/	(97)	15
1944 Average	0.2	c/	0	14	c/	62	c/	c/	c/	59
DIARRHEA AND DYSENTERY										
1943 Average	12	66	8	16	12	132	43	70	146	170
1944 Jan	9	31	4	15	13	31	33	63	129	43
Feb	9	28	2	13	11	35	32	51	88	38
Mar	7	28	4	12	11	26	28	53	145	60
Apr	6	33	2	12	13	23	24	65	186	117
May	8	37	1	13	11	35	26	63	214	217
Jun	12	c/	2	14	c/	87	24	52	258	148
Jul	12	c/	3	15	c/	114	41b/	56	326	159
Aug	11	c/	6	9	c/	76	40b/	57	280	178
Sep	10	c/	3	10	c/	66	23b/	41	186	159
Oct	10	c/	4	9	c/	68	19b/	37	140	106
Nov	8	c/	4	15	c/	43	19b/	(80)b/	105	129
Dec	7	c/	2	13	c/	33	(20)	(113)b/	(89)	55
1944 Average	9	c/	3	13	c/	54	c/	c/	c/	115
TOTAL VENEREAL DISEASE e/										
1943 Average	26	34	3	56	43	56	5	15	52	68
1944 Jan	30	47	2	39	34	116	7	12	68	69
Feb	28	43	3	32	30	110	8	10	63	55
Mar	28	37	3	36	25	94	7	10	52	74
Apr	30	36	5	32	26	88	7	8	66	59
May	32	34	4	31	23	92	5	7	40	58
Jun	31	c/	4	26	c/	84	4	6	45	45
Jul	35	c/	7	34	c/	117	4b/	7	50	50
Aug	36	c/	6	31	c/	121	4b/	7	47	50
Sep	37	c/	6	30	c/	125	5b/	6	53	55
Oct	38	c/	7	37	c/	140	5b/	5	50	62
Nov	39	c/	7	42	c/	115	3b/	c/	43	79
Dec	39	c/	8	29	c/	134	c/	c/	(48)	72
1944 Average	33	c/	5	33	c/	111	c/	c/	c/	60

a/ Excluding Iceland.
b/ Based upon incomplete report.
c/ Data not yet available.
( ) Based upon telegraphic report.
d/ For U. S., includes only cases acquired in the U. S.
e/ For U. S., excludes EPTS cases.

STATISTICAL TABLES (Continued)

ADMISSIONS TO HOSPITAL AND QUARTERS
Rates per Thousand Men per Year

INFECTIOUS HEPATITIS

Month and Year	Overseas Commands			
	Total Overseas	North African	Southwest Pacific	Asiatic Theaters
1943 Average	13	37	3	10
1944 Jan	12	38	2	7
Feb	7	22	1	6
Mar	5	17	1	7
Apr	4	10	1	9
May	5	11	3	8
Jun	c/	8	4	7
Jul	c/	11	8	13
Aug	c/	12	27	17
Sep	c/	21	22	25
Oct	c/	25	10	18
Nov	c/	39	6 b/	10
Dec	c/	71	(6) b/	(8)
1944 Average	c/	23	c/	c/

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Month and Year	Overseas Commands			
	Total Overseas	Pacific Ocean Areas	Southwest Pacific	Asiatic Theaters
1943 Average	12	40	30	25
1944 Jan	18	11	133	5
Feb	18	20	121	2
Mar	12	17	72	11
Apr	10	12	58	16
May	10	5	58	23
Jun	c/	2	55	11
Jul	c/	26	54	33
Aug	c/	70	31	61
Sep	c/	192	28	59
Oct	c/	18	20	39
Nov	c/	2	(35) b/	15
Dec	c/	(2)	(51) b/	c/
1944 Average	c/	c/	c/	c/

b/ Based upon incomplete report.
c/ Data not yet available.
( ) Based upon telegraphic report.