

## LEPROSY IN MEN WHO SERVED IN UNITED STATES MILITARY SERVICE<sup>1</sup>

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This report is based upon the case histories of former military service men who have been admitted to the U. S. Marine Hospital at Carville, Louisiana, suffering from leprosy. It does not include instances of former service men who have contracted leprosy and have not been in the National leprosarium, at some time between January 1, 1921 and April 1, 1940.

One group, designated as Spanish War Veterans, includes those who had service in the Spanish War, the Boxer Insurrection and the Philippine Insurrection. The other group, designated as World War Veterans, served in the World War or had peace-time service subsequent to 1916. For convenience two men who had only peace-time service between the Philippine Insurrection and the outbreak of the World War have been included in the Spanish War group, as both served in the Philippines. A few who had service in *both* the Spanish and World Wars are included in the Spanish War group.

The case histories from which these data were compiled are hospital records and not military records. The information is far from complete in many instances. Table 1 shows\* data on the Spanish War group and Table 2 comparable data on the World War group.

*Spanish War group* (Table 1).—There are 32 Spanish War veterans, of whom one did not serve outside the continental United States; one shows no record of such service; 1 served in Puerto Rico, 4 in Cuba, 16 in the Philippines, 2 in the Philippines and Hawaii, 2 in the Philippines and Cuba, 2 in the Philippines and China, 1 in the Philippines and Panama, 1 in the Philippines, Mexico, and France, and 1 in the Philippines, China, Cuba, Haiti and Santo Domingo. Twenty-eight of these men served in the Army, three in the Navy, and one in the Marine Corps. The length of active service in 23 cases where that point could be determined varies from one to twenty-six years.

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Five men of this group were born outside of the United States, 27 in the United States. Of the latter, 8 were born in the Southern tier of states (those bordering on Mexico or the Gulf of Mexico, plus the state of Georgia) and 19 were born in states north of this tier. In some instances the history does not give the place of residence from which the individual entered military service, though in most cases it was from the native state or an adjoining one. One man born in Kentucky and another born in Rhode Island enlisted from Montana. It is readily seen that the Spanish War veterans who were born in the United States came from widely separated sections scattered over the nation as a whole, roughly in proportion to population and to the number of troops recruited from the various parts of the country.

Considering the states from which these veterans were admitted to the leprosarium, we find that 4 came direct from island possessions, 11 from states in the southern tier, and 17 from states north of that zone. The age on admission to the leprosarium averaged 52 years, the youngest being 40, the oldest 69.

*World War group* (Table 2).—There are 51 World War veterans. The records of 33 show no service outside the United States, though our records are by no means complete in this respect; 12 had service in France, 1 in Panama, 1 in Hawaii, 2 in Mexico, 1 in Puerto Rico and 1 in the Philippines. Thirty-eight served in the Army, three in Army and National Guard, one in Students' Army Training Corps, eight in the Navy, and one in the Marine Corps.

Eighteen men of this group were born outside of the continental United States, 33 in the southern tier of states and none in states north of said tier. Thirty were admitted from states in the southern tier, twenty-one from states north thereof. The age at admission averaged 33.2 years, the youngest being 22, the oldest 43.

*Post-war group* (peace-time service only).—There are two men who have had only peace-time service since the World War. One served about one year in the Army in Texas; the other served four years in the Navy, three years of such service being in Hawaii. Both of the men were born in the southern tier of states.

*Comment.*—The tabulated data as to time of appearance of first symptoms shows the statements of the patients on this matter. This information is all that is available, though probably not of much value from a scientific viewpoint. In general it shows a much shorter period between date of entry into military

service and alleged appearance of symptoms in the World War group than in the Spanish War group. In the former group some showed symptoms during their service, which means that at least some received their infection prior to entering the service.

This shorter period for developing symptoms, combined with the fact that all of the native-born World War veterans under consideration were born in the southern tier of states where leprosy is more or less endemic, suggests that they had already received their infection before entering the military service.

This observation seems to support the contention that leprosy is always contracted in infancy or childhood, though it may not become manifest until many years later. On the other hand, the development of the disease in nineteen Spanish War veterans who were natives of states north of the southern tier and were of adult age at time of entering the service, contradicts the hypothesis that leprosy is *always* contracted in childhood.

TABLE 1. *Leprosy in men of the United States military services, (a) Spanish War group.*

Record No.	Age on admission and marital status	Place of (a) birth (b) admission	Service, branch and duration	Foreign service	First symptom appeared	Type of leprosy
16	45, D	N. Carolina D. Columbia	Army, 5 yrs.	Cuba, 2 yrs., 1898-1900 Philippines, 3 yrs., 1900-3	About 1905; diagnosis 1908	Mixed
80	45, M	Michigan "	Army, no record	Philippines, dates not given	No record	Mixed
96	53, M	Pennsylvania Florida	Army, no record	Cuba, 1898; discharged 1907	About 1915 <sup>a</sup>	Mixed
144	44, M	Missouri Kansas	Army, no record	Philippines, 1902 (duration?)	About 1915	Nodular
176	56, S	Pennsylvania Philippines	Army, no record	Philippines, 1899-1915, soldier and civilian employee	No record	Mixed
186	52, M	Louisiana "	Army, no record	Cuba	In 1921	Anesth.
230	50, M	Louisiana "	Army, no record	None	About 1913	Anesth.
244	48, S	Texas "	Army, no record	In service 1898; no record of place	Nodules on face, 1907	Mixed
250	41, M	Alabama Georgia	Army, 9 yrs.	Philippines, 2 yrs., 1911-13; Panama, 7 mos., 1915	In 1916	Mixed
280	44, S	Germany Wisconsin	Army, 9 mos.	Puerto Rico, 1898; service 9 mos.	No record	Mixed
292	52, S	Bohemia Virginia	Marine Corps, 23 yrs.	China, Philippines, Cuba, Haiti, S. Domingo, total 17 yrs. between 1901-22.	In 1921, in Cuba	Mixed
312	57, M	N. Carolina Virginia	Navy, no record; ret. U.S.N.	Philippines (dates?); later in China and So. America	In 1924	Nodular
351	51, S	Ohio "	Army, 20 yrs.	Philippines, China, Siberia; 15 yrs.	In 1924	Mixed
364	50, S	Ireland Hawaii	Army, 3 yrs.	Philippines, 26 yrs.; 30 mos. in service, 1898-1901	In 1916	Mixed
389	40, S	Iowa Illinois	Army, 7 yrs.	Philippines, 1911-13	In 1924	Mixed
433	48, W	Rhode Island Kansas	Army, 26 mos.	Philippines, 12 yrs.; 2 yrs. in service, civilian employee there and Hawaii, 12 yrs., 1901-13	In 1923	Mixed
450	43, M	Arkansas New York	Navy, 21 yrs.	Philippines and China	In 1923, 1 yr. after discharge	Nodular
484	51, M	Kentucky Montana	Army, 4 yrs.	Philippines, 20 mos., 1900-02; Hawaii, 7 mos.	In 1906; diagnosis 1917	Mixed

TABLE 1. *Leprosy in men of the United States military services, (a) Spanish War group (cont.).*

571	53, D	Louisiana "	Navy, no record	China, 1900-01 Philippines, 1901-04	In 1923	Mixed
626	52, M	Texas "	Army, 1 yr.	Cuba, 1898; lived in Mexico, 6 mos.	In 1928	Nodular
641	55, S	Indiana D. Columbia	Army, 17 yrs.	Philippines, 1905- 1908	In 1919; diagnosis 1929	Anesth.
774	52, M	Georgia "	Army, 6½ yrs.	Cuba, 6 mos., 1898-99; Philippines, 1906- 08	About 1921	Mixed
907	58, M	Iowa Nebraska	Army, 2 yrs.	Philippines, 1898- 99	Two years after discharge	Anesth.
961	59, M	Ohio California	Army, 3 yrs.	Philippines, 34 yrs.; civilian 31 yrs.	About 1916	Anesth.
1009	54, S	Pennsylvania Philippines	Army, 20 yrs.	Philippines, 36 yrs.; service, 1898-1934	In 1930	Mixed
1009A <sup>b</sup>	59, S	Ohio Philippines	Army, 3 yrs.	Philippines, 36 yrs.; in service 3 yrs.	No record	Mixed
1057	50, M	Russia New York	Army, 3 yrs.	Philippines, 1901- 1904	In 1922	Mixed
1242	56, W	Louisiana "	Army, 1 yr.	Cuba, 7 mos., 1898; worked there 3 yrs., 1902-05	About 1935	Mixed
1266	63, M	Germany Georgia	Army, 23 yrs.	Philippines, 7½ yrs., between 1889- 1911; Mexico, 1914; France, 1918-19	In 1900?; first defi- nite symptoms about 1933	Mixed
1290	69, S	Virginia Ohio	Army, 14 yrs.	Philippines, 7 yrs. in service, 18 yrs. as civilian employ- ee until 1924	About 1935	Mixed
1330	64, M	Michigan Texas	Army, 2½ yrs.	Philippines, 2 yrs., 1899-1901	About 1934	Mixed
1376	57, M	Missouri "	Army, 6 yrs.	Philippines, 2 yrs., 1906-08	In 1938	Mixed

<sup>a</sup> Probable contact in Florida, 1904.<sup>b</sup> Patient died en route to Carville and not actually admitted.

TABLE 2. *Leprosy in men of the United States military service, (b) World War group.*

Record No.	Age on admission and marital status	Place of (a) birth (b) admission	Service, branch and duration	Service		First symptom appeared	Type of leprosy
				United States	Elsewhere		
52	24, S	Louisiana	Army, 23 mos.	About 1918-20	France, 1918-19	In 1919, France	Nodular
95	22, S	Louisiana	Army, 2 yrs.			In 1919	Nodular
100	27, M	Philippines	Navy, 6¼ yrs.		Not stated	In 1918	Anesth.
102	24, S	India	M. Corps, 3½ yrs.		In France	In France	Mixed
113	32, M	Louisiana	Army, 16 mos.	1918-19	In France	In 1919, in Army	Mixed
123	43, S	Louisiana	Army, 18 mos.	1916-18	None	Leprosy before enlistment	Mixed
139	31, S	Br. Guiana	Army, 18 mos.		In France	In 1917, before enlistment; diagnosis 1920	Mixed
145	27, S	Florida	Army, 5 mos.	1917-18	None	In 1918	Nodular
192	26, S	Puerto Rico	Army, 4 days			Discharged, unfit	Nodular
197	27, M	Florida	Army, 1 yr.	1918-19	None	In 1919	Nodular
198	27, S	Br. W. Indies	Army, 19 mos.		In France, 15 mos.	In 1920	Mixed
215	29, S	Texas	Army, 25 mos.		In France	In 1921, 2 years after discharge	Mixed
225	25, S	W. Indies	Army, 26 mos.	1917-19	In France	In 1919	Nodular
228	27, M	Florida	Army, 23 mos.			In 1919	Mixed
231	24, S	Texas	Army, 14 mos.			In 1917; disch. a/c disability 1919	Mixed
246	35, W	Louisiana	Army, 6 mos.	1918		In service	Nodular
272	32, D	Texas	Army, 1 yr.		In France	In 1919	Mixed
294	28, S	Bahamas	Army, 20 mos.		In France	In 1922	Mixed
300	33, M	Louisiana	Army, 5 mos.	1918		In 1917 and 1921	Mixed
301	28, W	Philippines	Navy, 7¼ yrs.		Total service, 1917-24	In 1923	Nodular
311	23, S	Virgin Islands	Navy, 5¼ yrs.		Total service, 1919-24	In 1923; diagnosis 1924	Mixed
387	27, S	Louisiana	Army, 2 mos.	1918		(Discharged a/c contractures)	Mixed
390	32, S	Louisiana	Army, 28 mos.	1917-19	Mexican border, 1917	In 1919	Mixed



TABLE 2. *Leprosy in men of the United States military service, (b) World War group.*  
(continued)

401	34, S	Greece New York	Army, 55 days	1917		While in camp	Mixed
414	29, M	Mississippi "	Army, 9 mos.	1918-19		In 1919 (after discharge)	Mixed
489	39, M	Georgia Tennessee	Army, 9 mos.	1918-19		In 1926 (probably in 1919)	Nodular
562	38, M	Louisiana "	Army, 7 mos.	1918-19		In 1921	Mixed
579	39, S	Italy New York	Army, 7 mos.	1918		In 1922	Mixed
608	36, M	Texas "	Army, 16 mos.	1918-19		In 1919; diagno- sis 1928	Mixed
659	33, M	Louisiana "	Army, 14 mos.		In France, 1	In 1929	Mixed
689	36, M	Louisiana Virginia	Navy, 20 mos.	1917-19		In 1918, in serv- ice	Mixed
723	34, M	Texas Indiana	Army, 7½ yrs.	4½ yrs.	In Philip- pines, 1915-18	About 6 months after discharge	Mixed
727	38, M	Br. W. Indies New York	Army, 32 mos.			About 6 months after discharge	Mixed
732	45, S	Philippines California	Nat. Gd., 1 yr.		In Hawaii, 1918-19	About 1929. (In Hawaii 11 yrs.)	Mac- anesth.
733	33, S	Philippines California	Nat. Gd., no record		In Hawaii	In 1925	Mixed
736	38, S	Louisiana Oklahoma	Army, 3½ yrs.	None; civilian	In Mexico, 1922-23	In 1927	Mixed
741	40, S	Philippines California	Navy, no record	No record	No record	About 1928	Anesth.
746	30, S	Texas New York	S.A.T.C., 2 mos.	1918		About 1919; diag- nosis 1920	Mixed
816	36, M	Texas "	Army, 10 mos.	1918-19		In 1919	Mixed
827	36, M	Louisiana "	Army, 10 mos.	1918-19		About 1923	Nodular
833	43, S	Texas "	Army, 14 mos.		Lived in Mexico 2½ yrs., civilian	One year after discharge	Mixed
850	34, S	Louisiana "	Army, 22 mos.		In France, 21 mos.	In 1929	Mixed
893	39, S	Philippines Washington	Nat. Gd., 1 yr.		In Hawaii, 1918	In 1932	Anesth.
899	39, S	Greece California	Army, 16 mos.			In 1918	Mixed
931	35, M	Mississippi Louisiana	Army, 15 mos.		In France	In 1932	Mixed
965	30, M	Florida "	Navy, 4 yrs.	1917-1921		In 1919	Mixed
999	42, S	Louisiana "	Army, 5 mos.	1918-1919		In 1933	Mixed
1114	40, M	Texas "	Army, 25 mos.		In France	About 1934	Mixed

TABLE 2. *Leprosy in men of the United States military service, (b) World War group.*  
(continued)

1172	42, M	Florida	Navy, 22 mos.	Florida <sup>a</sup>		About 1930	Mixed
		"				"	
1319	43, S	Texas	Army, 8 mos.		Panama, 1918	In 1937	Mixed
		"					
1320	40, M	Philippines	Navy, 10 yrs.	(See foot- note <sup>b</sup> )		In 1938	Mixed
		New York					
1041 <sup>c</sup>	36, M	Mississippi	Army, 13 mos.	In Texas, 1 yr.		In service; diag- nosis 1934	Mixed
		Arkansas					
1314 <sup>c</sup>	36, M	Louisiana	Navy, 4 yrs.	California, 1 yr.	Hawaii, 3 yrs.	About 1930	Mixed
		Texas					

<sup>a</sup> Patient lived in Florida all of his life except 1 year in North Carolina.<sup>b</sup> Patient served only in Norfolk, Boston, New London and New York; diagnosis made while in hospital for other trouble.<sup>c</sup> Post-war group, peace-time service only.