

Vermont Mental Health Performance Indicator Project

Agency of Human Services, Department of Health, Department of Mental Health
108 Cherry Street, Burlington, Vermont 05401

TO: Vermont Mental Health Performance Indicator Project
Advisory Group and Interested Parties

FROM: John Pandiani and Brennan Martin

DATE: September 5, 2008

RE: VSH Census and Vermont Population

In response to our August 8 report on the Vermont State Hospital (VSH) Census 1892 – 2008 (<http://healthvermont.gov/mh/docs/pips/2008/documents/Pip080808.pdf>), Peggy Brozicevic, Research and Statistics Section Chief in the Vermont Department of Health, inquired about the impact of changes in Vermont's population on state hospitalization rates during the 117 years covered by that report. This week's report addresses that inquiry by providing the Vermont population for each year and providing yearly state hospital utilization as per capita rates, as well as the raw hospitalization rates provided in the earlier report.

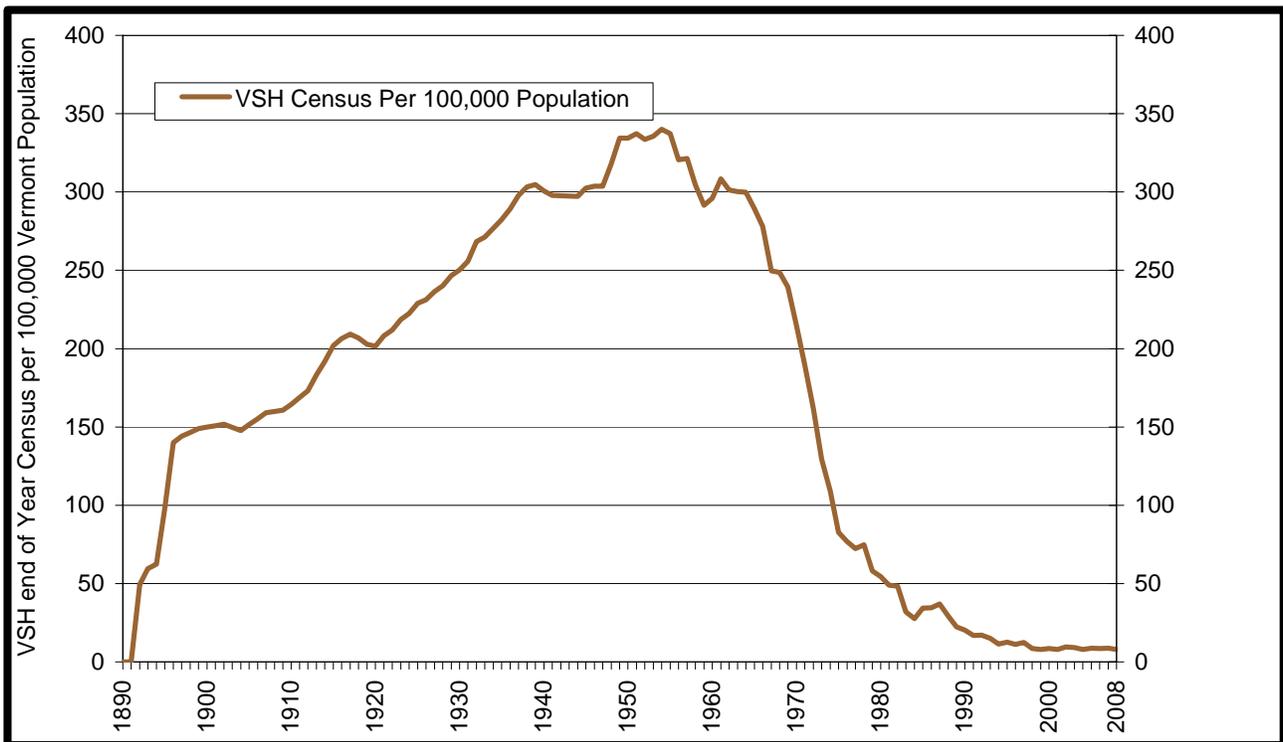
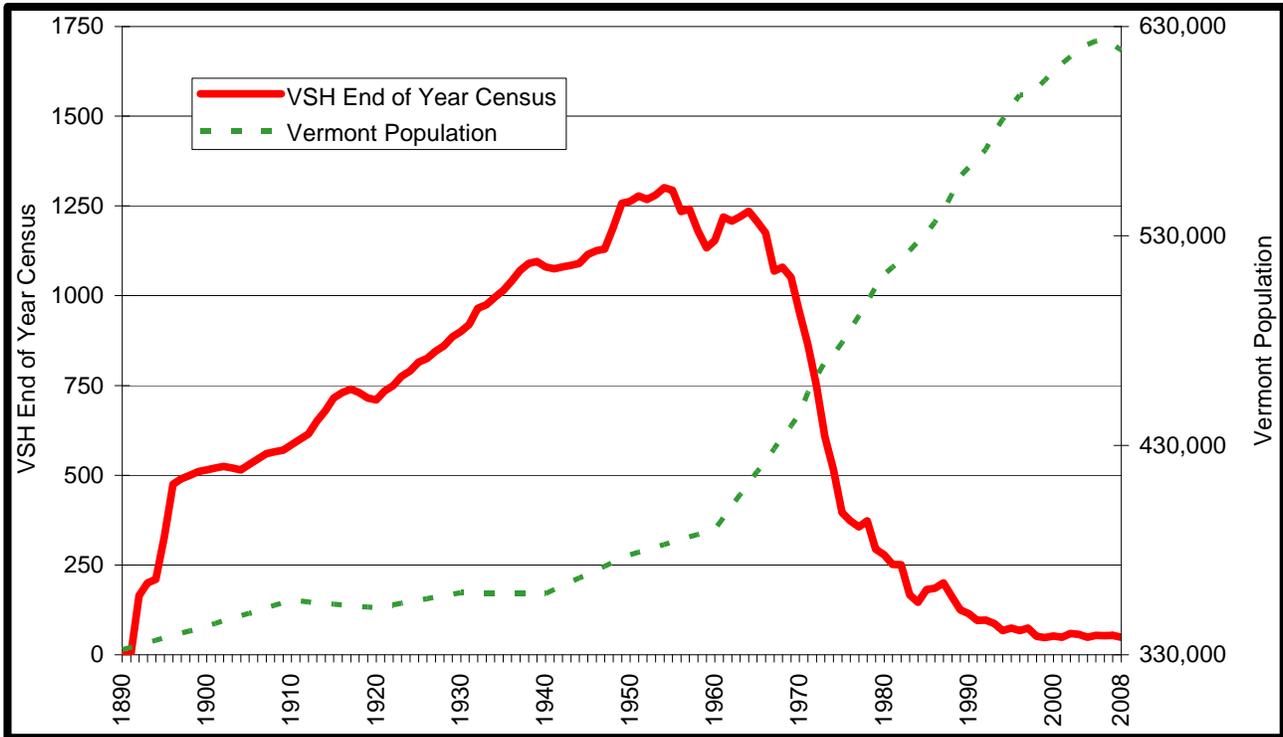
Vermont's annual population figures for 1890 through 1969 were extrapolated from decennial population figures provided by the U.S. Census. Vermont's annual population figures for 1970 and later are based on estimates provided by the Vermont Department of Health. State Hospital census figures for 1892 through 1987 were obtained from VSH paper archives. State Hospital census figures for 1988 through 2008 were obtained from the Vermont State Hospital Treatment Episodes database.

As you will see, the annual census of the Vermont State Hospital increased from 165 patients at the end of 1892 to 1,301 patients at the end of 1954, and then decreased to less than 100 patients in 1991 and to less than 50 patients in 2008. During this same period, the total population of the state of Vermont almost doubled (increasing by 94% between 1890 and 2008). This growth, however, was not uniform. Between 1890 and 1954, the population of Vermont increased by 15%, but between 1954 and 2008, the population of Vermont increased by 64%. The per capita utilization rate for this time period increased from 49 patients per 100,000 Vermont residents in 1892 to a high of 340 patients per 100,000 residents in 1954, after which it decreased to less than 20 patients per 100,000 in 1991 and has been less than 10 patients per 100,000 since 2003.

These findings indicate that the Vermont State Hospital census increased dramatically during a period of very little change in the total population of the state and then decreased dramatically during a period of substantial growth in the population of the state. The Vermont State Hospital census was largely independent of the overall population of the state.

We look forward to your comments, your questions, and your suggestions for further analyses of Vermont State Hospital data. As always, you can reach us by e-mail at pip@vdh.state.vt.us or by phone at 802-863-7249.

VSH Census and Vermont Population : 1890 - 2008



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VSH Census and Vermont Population : 1890 - 2008

Fiscal Year	Year End Census	VT Population	VSH per 100,000	Fiscal Year	Year End Census	VT Population	VSH per 100,000	Fiscal Year	Year End Census	VT Population	VSH per 100,000
1890	0	332,422	0	1930	900	359,611	250	1970	955	444,732	215
1891	0	333,544	0	1931	920	359,573	256	1971	863	455,139	190
1892	165	334,666	49	1932	965	359,535	268	1972	748	462,793	162
1893	200	335,788	60	1933	975	359,497	271	1973	608	469,932	129
1894	210	336,910	62	1934	995	359,459	277	1974	516	473,098	109
1895	330	338,032	98	1935	1,015	359,421	282	1975	396	478,832	83
1896	475	339,153	140	1936	1,040	359,383	289	1976	373	485,392	77
1897	490	340,275	144	1937	1,070	359,345	298	1977	356	491,571	72
1898	500	341,397	146	1938	1,090	359,307	303	1978	373	498,313	75
1899	510	342,519	149	1939	1,095	359,269	305	1979	294	505,652	58
1900	515	343,641	150	1940	1,080	359,231	301	1980	278	511,456	54
1901	520	344,873	151	1941	1,075	361,083	298	1981	252	515,050	49
1902	525	346,104	152	1942	1,080	362,934	298	1982	251	518,692	48
1903	520	347,336	150	1943	1,085	364,786	297	1983	167	522,924	32
1904	515	348,567	148	1944	1,090	366,637	297	1984	146	527,154	28
1905	530	349,799	152	1945	1,115	368,489	303	1985	182	531,394	34
1906	545	351,030	155	1946	1,125	370,341	304	1986	185	536,467	34
1907	560	352,262	159	1947	1,130	372,192	304	1987	200	542,395	37
1908	565	353,493	160	1948	1,190	374,044	318	1988	161	550,013	29
1909	570	354,725	161	1949	1,257	375,895	334	1989	125	558,484	22
1910	585	355,956	164	1950	1,263	377,747	334	1990	114	562,758	20
1911	600	355,603	169	1951	1,278	378,960	337	1991	96	566,792	17
1912	615	355,250	173	1952	1,268	380,174	334	1992	97	571,157	17
1913	650	354,898	183	1953	1,280	381,387	336	1993	87	579,312	15
1914	680	354,545	192	1954	1,301	382,601	340	1994	67	585,544	11
1915	715	354,192	202	1955	1,294	383,814	337	1995	74	591,837	13
1916	730	353,839	206	1956	1,234	385,027	320	1996	67	597,194	11
1917	740	353,486	209	1957	1,241	386,241	321	1997	74	597,641	12
1918	730	353,134	207	1958	1,180	387,454	305	1998	51	600,269	8
1919	715	352,781	203	1959	1,133	388,668	292	1999	48	604,210	8
1920	710	352,428	201	1960	1,154	389,881	296	2000	52	608,827	9
1921	735	353,146	208	1961	1,219	395,366	308	2001	49	612,308	8
1922	750	353,865	212	1962	1,208	400,851	301	2002	59	615,611	10
1923	775	354,583	219	1963	1,220	406,336	300	2003	57	619,116	9
1924	790	355,301	222	1964	1,235	411,821	300	2004	49	621,394	8
1925	815	356,020	229	1965	1,207	417,307	289	2005	54	623,050	9
1926	825	356,738	231	1966	1,175	422,792	278	2006	53	623,908	8
1927	845	357,456	236	1967	1,069	428,277	250	2007	54	621,254	9
1928	860	358,174	240	1968	1,079	433,762	249	2008	49	618,600	8
1929	885	358,893	247	1969	1,051	439,247	239				

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