

CHAPTER 33

Other Fatal Accidents: Relation with Medical Radiation

*Box 1 of Chap. 33*  
*Summary: Regression Outputs, Other Accident Death Rates*

Below are the summary-results from all the regressions of MortRates upon PhysPops. MortRates are from Table 33-A, and PhysPops are from Table 3-A.

MALES .....

Year MortRate	Year PhysPop	R-squared	Constant	Coeff.	Std Err	Coeff/S.E
1940	1921	0.0107	71.7318	-0.0628	0.2283	-0.2752
1940	1923	0.0154	72.4819	-0.0703	0.2124	-0.3312
1940	1925	0.0375	76.1584	-0.1016	0.1947	-0.5219
1940	1927	0.0557	78.0775	-0.1187	0.1848	-0.6426
1940	1929	0.0499	76.7179	-0.1087	0.1793	-0.6065
1940	1931	0.0517	75.8137	-0.1009	0.1634	-0.6175
1940	1934	0.0791	77.0176	-0.1099	0.1417	-0.7756
1940	1936	0.0714	75.9027	-0.1004	0.1369	-0.7336
1940	1938	0.0797	75.8781	-0.0996	0.1279	-0.7787
1940	1940	0.0901	75.5351	-0.0954	0.1145	-0.8328
1950	1950	0.2279	67.2868	-0.1381	0.0961	-1.4375
1960	1960	0.4278	63.7628	-0.1756	0.0768	-2.2875
1970	1970	--	--	--	--	--
1980	1980	--	--	--	--	--
1990	1990	--	--	--	--	--

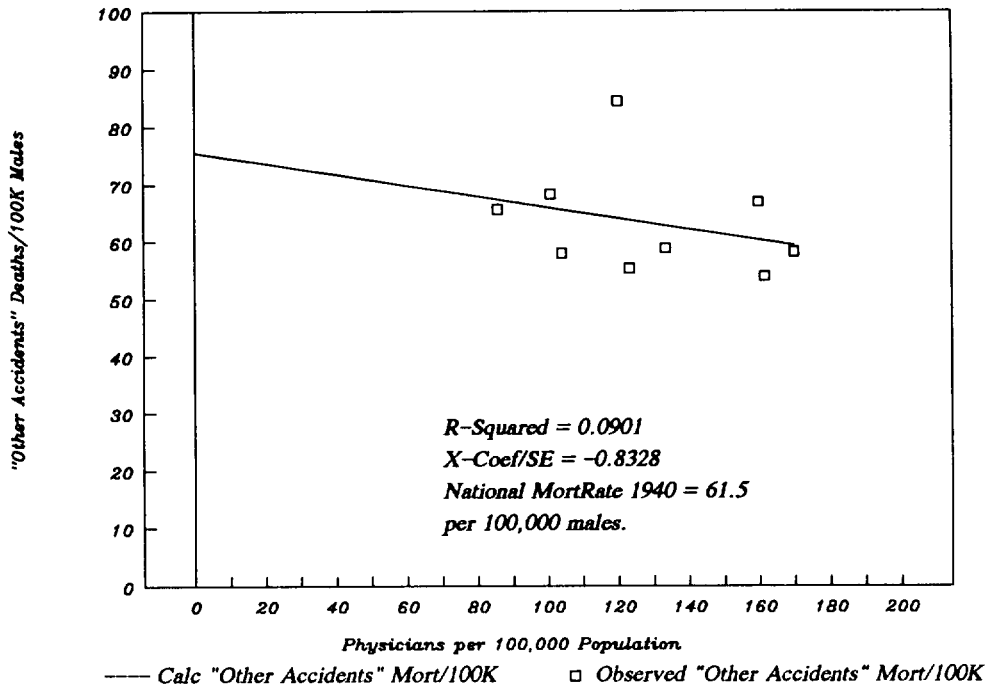
FEMALES.....

Year MortRate	Year PhysPop	R-squared	Constant	Coeff.	Std Err	Coeff/S.E
1940	1921	0.5688	47.7376	-0.1219	0.0401	-3.0388
1940	1923	0.5679	46.1956	-0.1135	0.0374	-3.0332
1940	1925	0.5976	45.0231	-0.1080	0.0335	-3.2246
1940	1927	0.5633	43.8521	-0.1004	0.0334	-3.0049
1940	1929	0.5489	43.1886	-0.0959	0.0329	-2.9184
1940	1931	0.5778	42.4863	-0.0898	0.0290	-3.0953
1940	1934	0.5434	40.9082	-0.0766	0.0265	-2.8863
1940	1936	0.4941	40.1653	-0.0703	0.0269	-2.6145
1940	1938	0.4577	39.3615	-0.0635	0.0261	-2.4305
1940	1940	0.4440	38.5655	-0.0563	0.0238	-2.3642
1950	1950	0.2651	28.1325	-0.0401	0.0253	-1.5889
1960	1960	0.2646	23.0083	-0.0372	0.0235	-1.5870
1970	1970	--	--	--	--	--
1980	1980	--	--	--	--	--
1990	1990	--	--	--	--	--

1940 MortRate, Males, "Other Accidents" Deaths, versus  
1940 PhysPop Values for the 9 Census Divisions, USA.

Not Significant

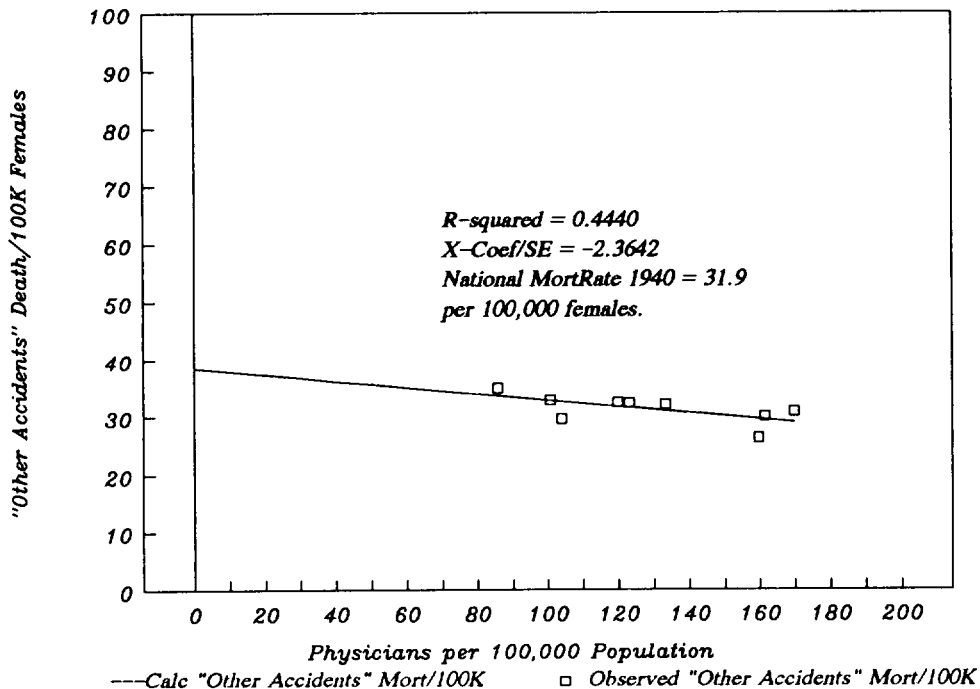
PhysPop is a surrogate for accumulated dose from medical irradiation.



1940 MortRate, Females, "Other Accidents" Deaths, versus  
1940 PhysPop Values for the 9 Census Divisions, USA.

Significant. INVERSE Direction.

PhysPop is a surrogate for accumulated dose from medical irradiation



**Table 33-A**  
**Other Accidents: Death Rates by Census Divisions and National.**

Annual death-rates per 100,000 are age-adjusted to the 1940 reference year. There are no exclusions by color or "race." Entries for the Nine Census Divisions are population-weighted; the averages below them are not. "National Rates" for both sexes: Deaths per 100,000 population (males + females). Males: Deaths per 100,000 male population. Females: Deaths per 100,000 female population.

**MALES** .....

Census Division	1940	1950	1960	1970	1980	1990
Pacific	66.9	49.7	39.8	--	--	--
New England	53.9	41.7	34.7	--	--	--
West North Central	55.3	47.5	39.8	--	--	--
Mid-Atlantic	58.2	41.6	32.6	--	--	--
East North Central	58.8	43.5	33.3	--	--	--
Mountain	84.4	69.2	55.4	--	--	--
West South Central	58.0	54.5	46.2	--	--	--
East South Central	65.6	51.1	49.0	--	--	--
South Atlantic	68.3	51.2	46.5	--	--	--
Average ALL	63.3	50.0	41.9	--	--	--
Average High-Five	58.6	44.8	36.0	--	--	--
Average Low-Four	69.1	56.5	49.3	--	--	--
Ratio (High/Low)	0.85	0.79	0.73	--	--	--

**FEMALES** .....

	1940	1950	1960	1970	1980	1990
Pacific	26.3	17.8	17.2	--	--	--
New England	30.0	23.5	18.8	--	--	--
West North Central	32.4	25.4	16.4	--	--	--
Mid-Atlantic	30.8	22.0	15.9	--	--	--
East North Central	32.2	22.4	15.6	--	--	--
Mountain	32.5	24.8	20.2	--	--	--
West South Central	29.6	23.9	20.0	--	--	--
East South Central	35.1	24.9	21.0	--	--	--
South Atlantic	33.0	23.3	20.3	--	--	--
Average ALL	31.3	23.1	18.4	--	--	--
Average High-Five	30.3	22.2	16.8	--	--	--
Average Low-Four	32.6	24.2	20.4	--	--	--
Ratio (High/Low)	0.93	0.92	0.82	--	--	--

**NATIONAL RATES** .....

	1940	1950	1960	1970	1980	1990
Both Sexes	46.9	35.4	28.6	--	--	--
Males	61.5	47.9	39.7	--	--	--
Females	31.9	23.1	17.8	--	--	--

● - 1940, 1950, 1960: All rates come from Grove 1968, Table 67, Pages 760-764, Death-rates from "Other Accidents (E800-E802, E840-E962)" ICD/7.  
● - Omitted data are only marginally related to examination of Hypotheses 1+2, as noted in Chapter 4, Part 2c.