

CHAPTER 26

Appendicitis, Deaths: Relation with Medical Radiation

Box 1 of Chap. 26

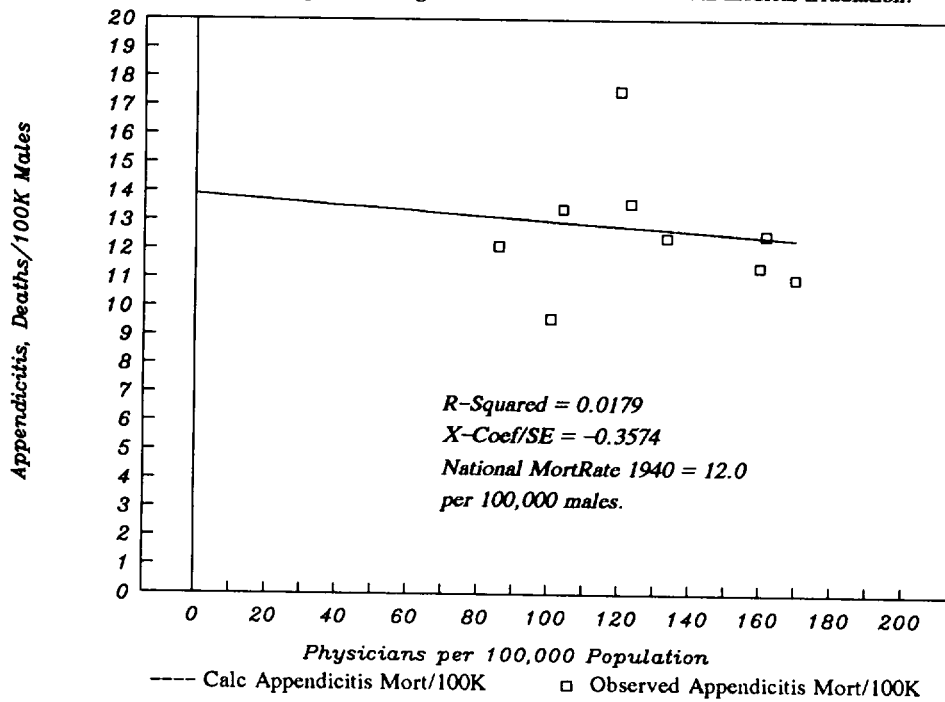
Summary: Regression Outputs, Appendicitis Deaths

Below are the summary-results from all the regressions of MortRates upon PhysPops. MortRates are from Table 26-A, and PhysPops are from Table 3-A.

MALES .....							
Year MortRate	Year PhysPop	R-squared	Constant		Coeff.	Std Err	Coeff/S.E
1940	1921	0.0221	9.7705		0.0211	0.0530	0.3981
1940	1923	0.0072	11.1403		0.0112	0.0498	0.2256
1940	1925	0.0000	12.7086		-0.0008	0.0463	-0.0166
1940	1927	0.0035	13.4821		-0.0070	0.0443	-0.1576
1940	1929	0.0030	13.3746		-0.0062	0.0429	-0.1440
1940	1931	0.0037	13.3977		-0.0063	0.0391	-0.1618
1940	1934	0.0097	13.7368		-0.0090	0.0343	-0.2624
1940	1936	0.0075	13.5651		-0.0076	0.0330	-0.2296
1940	1938	0.0103	13.6695		-0.0084	0.0310	-0.2700
1940	1940	0.0179	13.8878		-0.0099	0.0278	-0.3574
1950	1950	0.3168	3.3804		-0.0075	0.0042	-1.8018
1960	1960	0.0179	1.0540		0.0006	0.0015	0.3577
1970	1970	--	--	--	--	--	--
1980	1980	--	--	--	--	--	--
1990	1990	--	--	--	--	--	--
FEMALES .....							
Year MortRate	Year PhysPop	R-squared	Constant		Coeff.	Std Err	Coeff/S.E
1940	1921	0.0057	6.9336		0.0058	0.0288	0.2005
1940	1923	0.0024	7.2571		0.0035	0.0269	0.1289
1940	1925	0.0016	8.0491		-0.0027	0.0249	-0.1068
1940	1927	0.0025	8.1055		-0.0032	0.0239	-0.1324
1940	1929	0.0010	7.9501		-0.0019	0.0231	-0.0835
1940	1931	0.0015	7.9810		-0.0022	0.0211	-0.1029
1940	1934	0.0023	8.0060		-0.0024	0.0186	-0.1271
1940	1936	0.0001	7.7709		-0.0005	0.0179	-0.0266
1940	1938	0.0001	7.7632		-0.0004	0.0168	-0.0245
1940	1940	0.0010	7.8731		-0.0013	0.0151	-0.0835
1950	1950	0.1253	1.649		-0.0026	0.0026	-1.0015
1960	1960	0.3477	0.907		-0.0026	0.0013	-1.9316
1970	1970	--	--	--	--	--	--
1980	1980	--	--	--	--	--	--
1990	1990	--	--	--	--	--	--

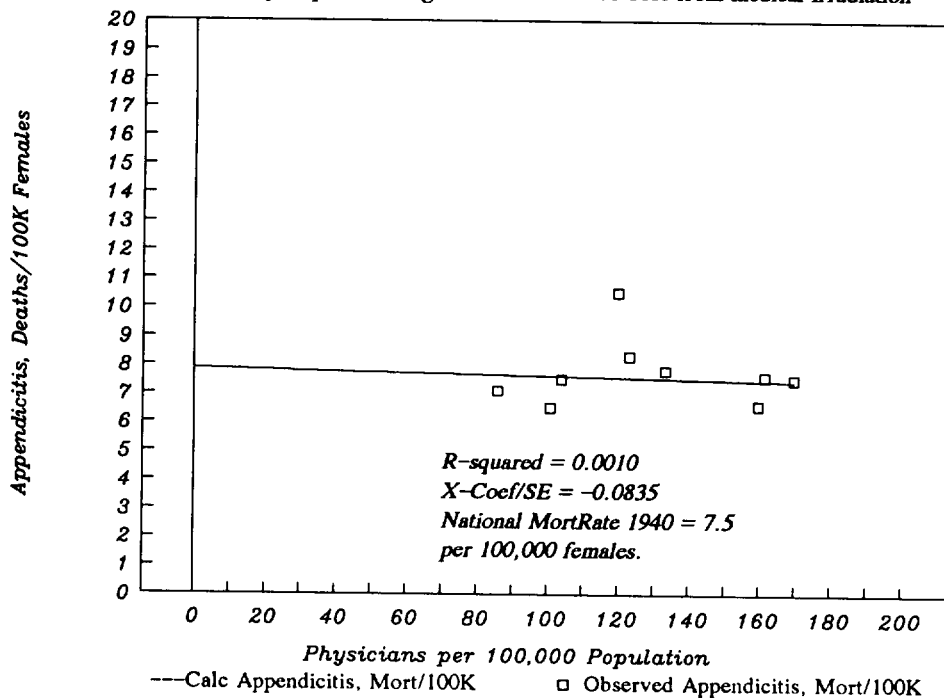
1940 MortRate, Males, Appendicitis, Deaths, versus  
1940 PhysPop Values for the 9 Census Divisions, USA.  
No Significant Relationship.

PhysPop is a surrogate for accumulated dose from medical irradiation.



1940 MortRate, Females, Appendicitis, Deaths, versus  
1940 PhysPop Values for the 9 Census Divisions, USA.  
No Significant Relationship

PhysPop is a surrogate for accumulated dose from medical irradiation



**Table 26-A**  
**Death from Appendicitis: 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	11.4	1.8	1.0	--	--	--
New England	12.5	1.9	1.1	--	--	--
West North Central	13.6	2.5	1.1	--	--	--
Mid-Atlantic	11.0	2.4	1.3	--	--	--
East North Central	12.4	2.6	1.3	--	--	--
Mountain	17.5	3.1	1.0	--	--	--
West South Central	13.4	2.6	1.0	--	--	--
East South Central	12.1	2.5	1.1	--	--	--
South Atlantic	9.6	2.6	1.2	--	--	--
Average ALL	12.6	2.4	1.1	--	--	--
Average High-Five	12.2	2.2	1.2	--	--	--
Average Low-Four	13.2	2.7	1.1	--	--	--
Ratio (High/Low)	0.93	0.83	1.08	--	--	--
FEMALES .....						
	1940	1950	1960	1970	1980	1990
Pacific	6.6	0.9	0.5	--	--	--
New England	7.6	1.2	0.3	--	--	--
West North Central	8.3	1.2	0.6	--	--	--
Mid-Atlantic	7.5	1.5	0.7	--	--	--
East North Central	7.8	1.4	0.6	--	--	--
Mountain	10.5	1.5	0.6	--	--	--
West South Central	7.5	1.2	0.7	--	--	--
East South Central	7.1	1.6	0.7	--	--	--
South Atlantic	6.5	1.4	0.6	--	--	--
Average ALL	7.7	1.3	0.6	--	--	--
Average High-Five	7.6	1.2	0.5	--	--	--
Average Low-Four	7.9	1.4	0.7	--	--	--
Ratio (High/Low)	0.96	0.87	0.83	--	--	--
NATIONAL RATES .....						
	1940	1950	1960	1970	1980	1990
Both Sexes	9.8	1.9	0.9	--	--	--
Males	12.0	2.5	1.4	--	--	--
Females	7.5	1.4	0.5	--	--	--

● - 1940, 1950, 1960: All rates come from Grove 1968, Table 67, Pages 741-744, "Appendicitis (550-553)" ICD/7.  
● - Omitted data are only marginally related to Hypotheses 1+2, as noted in Chapter 4, Part 2c.