

### INTERPRETING TABLES S1-S7

Tables S1-S7 provide mortality rates by year, along with calculations of absolute and relative increases in mortality rates that occurred during 1999-2016. For example, the first row of Table S1 demonstrates that, in *absolute* terms, all-cause mortality rates among NH American Indians and Alaskan Natives increased by an average of 6.9 deaths per 100,000 during 1999-2016 but even more so (14.8 deaths per 100,000) in the final five years, 2012-2016. In *relative* terms, the mortality rate increased by 26.6% during 1999-2016 and 30.8% between the nadir year and 2016. The nadir, or lowest reported mortality rate, is underlined and bolded; in this example, the nadir occurred in 2000, when the all-cause mortality rate was 425.8 deaths per 100,000.

The mortality data were modeled by the Joinpoint Regression program<sup>30</sup> (see Methods). Grey cells with bolded borders denote *joinpoints* (the years when mortality trends, or slopes, changed significantly). Periods of increasing ( $APC \geq 0.0$ ) and decreasing ( $APC \leq 0.0$ ) mortality are depicted in red and green, respectively; periods of stable mortality (APC values that did not differ significantly from zero) have no color. In this example, all-cause mortality among NH American Indians and Alaskan Natives increased throughout 1999-2016 (green shading), but 2012 was a joinpoint, when the slope changed significantly. Although the average annual percentage increase in mortality (AAPC) was 1.5% per year for the entire period (1999-2016), the final APC (for 2012-2016) was significantly higher: 3.4% (95% CI = 1.5 to 5.4%) per year.

The next row (NH Asians and Pacific Islanders) illustrates *retrogression*: although mortality in this population decreased from 1999 to 2016 (the 2016 rate was 18.0% below that of 1999, mortality decreased by an average of 1.9 deaths per 100,000, and the AAPC was -1.3%), the progress (green shading) ended in 2009. The caret (^) in the last column indicates that the slope for the 1999-2016 interval, although not significantly positive (APC 95% CI = -0.5 to 0.8%), was nonetheless a significant change from the downward pre-2009 slope.

TABLE S1. MORTALITY FROM ALL-CAUSES, EXTERNAL CAUSES, AND ORGAN DISEASE SYSTEMS, AGES 25-64 YEARS, BY RACE-ETHNICITY, 1999-2016

Racial and ethnic groups	Age-adjusted mortality rates (deaths per 100,000), by year																		Changes in mortality rates					
																			Average absolute year-to-year changes (per 100,000)†		Proportional (%) changes			
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	1999-2016	2012-2016	2016 vs 1999	2016 vs nadir	Fitted model‡	
																							AAPC (1999-2016)	Final APC (95% CI)
<b>ALL-CAUSE MORTALITY (A00-Y89)</b>																								
NH AIAN	439.8	<b>425.8</b>	444.6	453.0	474.1	458.7	477.0	464.4	462.2	471.9	477.2	479.7	482.7	492.6	502.6	526.0	548.7	556.8	6.88	14.82	26.6*	30.8*	1.5*	3.4 (1.5 to 5.4)^
NH API	177.6	174.1	173.1	164.8	160.4	153.9	155.7	152.4	146.7	144.3	142.1	141.2	142.8	143.8	143.2	139.9	<b>139.3</b>	145.6	-1.88	0.56	-18.0*	4.5*	-1.3*	0.2 (-0.5 to 0.8)^
NH blacks	656.1	646.7	636.7	629.6	623.8	598.1	593.4	577.8	558.1	535.2	523.4	503.5	496.1	491.3	492.8	<b>490.2</b>	495.9	509.8	-8.61	2.74	-22.3*	4.0*	-1.5*	2.1 (-0.6 to 4.9)
NH whites	338.9	340.6	342.4	341.5	340.6	333.9	336.3	334.5	330.9	333.0	332.2	<b>328.0</b>	332.7	332.4	335.5	341.3	347.1	356.6	1.04	4.78	5.2*	8.7*	0.2*	1.9 (1.2 to 2.6)^
Hispanics	284.3	281.7	279.5	274.6	<b>272.8</b>	260.5	261.2	255.2	247.6	241.0	238.0	228.9	<b>224.6</b>	226.5	226.1	225.7	226.8	234.8	-2.91	2.05	-17.4*	4.6*	-1.2*	0.6 (-0.2 to 1.3)^
<b>EXTERNAL CAUSES (V01-Y89)</b>																								
NH AIAN	99.8	<b>94.4</b>	94.5	108.9	109.2	107.4	115.8	120.0	114.4	114.6	120.6	119.9	125.6	133.2	127.4	138.2	147.6	157.2	3.38	6.32	57.5*	66.5*	2.5*	2.5 (2.1 to 3.0) <sup>NIP</sup>
NH API	23.6	22.9	21.5	21.6	22.3	21.9	21.7	21.5	21.5	19.8	<b>19.4</b>	20.5	20.5	21.3	20.6	20.3	20.4	22.0	-0.09	0.30	-6.8	13.4*	-0.5	0.7 (-0.5 to 1.9)^
NH blacks	76.6	76.6	76.4	78.1	77.6	77.1	80.5	83.2	79.5	72.6	69.9	<b>68.0</b>	69.9	71.5	72.9	73.3	81.6	94.1	1.03	4.84	22.8*	38.4*	1.3*	12.5 (7.4 to 17.8)^
NH whites	52.8	53.6	56.1	59.8	61.3	63.1	65.3	68.3	70.6	71.4	70.0	71.6	74.5	75.2	76.0	78.9	84.7	93.6	2.40	3.82	77.3*	NA	3.5*	9.6 (4.9 to 14.6)^
Hispanics	47.6	46.6	48.0	48.2	48.8	46.9	48.2	49.3	47.5	44.3	42.2	<b>40.6</b>	41.2	41.5	41.8	42.2	45.1	51.4	0.22	2.03	7.9*	26.5*	0.4	10.0 (4.7 to 15.6)^
<b>ORGAN DISEASES</b>																								
<b>Diseases of the circulatory system (I00-I99)</b>																								
NH AIAN	91.7	93.2	94.1	90.8	101.2	90.2	96.7	91.1	89.1	<b>87.2</b>	89.3	88.9	90.1	<b>87.2</b>	93.5	94.1	102.0	97.7	0.35	1.51	6.5	12.0*	0.4	3.3 (-0.3 to 7.0)^
NH API	52.3	49.6	47.3	45.4	45.2	41.0	42.1	40.8	38.1	37.7	<b>36.7</b>	35.3	35.9	36.0	36.9	35.3	35.1	35.7	-0.97	-0.03	-31.7*	NA	-2.1*	-0.2 (-1.1 to 0.6)^
NH blacks	202.1	198.9	194.9	191.8	<b>190.1</b>	180.7	177.3	170.6	164.2	159.1	154.7	149.7	145.3	145.2	145.6	144.9	145.4	147.3	-3.22	0.40	-27.1*	NA	-1.9*	0.2 (-0.1 to 0.6)^
NH whites	91.0	89.7	86.8	86.2	84.4	81.0	80.0	78.5	76.3	76.0	74.1	73.6	73.5	<b>73.2</b>	73.4	74.2	74.6	75.6	-0.91	0.41	-17.0*	3.2*	-1.1*	0.6 (0.2 to 0.9)^
Hispanics	70.6	68.1	64.5	66.4	63.1	61.2	60.5	58.3	56.3	53.2	52.9	51.1	49.4	<b>48.8</b>	48.7	48.5	48.9	49.3	-1.25	-0.01	-30.1*	NA	-2.1*	0.4 (-1.1 to 1.8)^
<b>Diseases of the digestive system (K00-K92)</b>																								
NH AIAN	55.6	<b>53.0</b>	55.5	56.7	58.1	55.8	55.7	<b>54.8</b>	63.2	65.7	60.0	66.1	66.3	69.2	73.2	74.9	79.8	79.0	1.38	2.54	42.1*	49.1*	2.3*	3.4 (2.5 to 4.2)^
NH API	5.5	6.2	5.8	5.9	5.3	5.3	5.8	5.9	5.3	5.6	5.7	5.5	5.5	5.3	5.5	5.2	5.6	5.7	0.01	0.05	2.9	NA	-0.3	-0.3 (-0.8 to 0.1) <sup>NIP</sup>
NH blacks	28.6	28.6	28.2	25.8	26.4	24.9	23.3	22.0	22.5	<b>21.6</b>	21.1	20.6	20.8	20.1	20.7	19.9	19.7	19.6	-0.53	-0.24	-31.4*	NA	-2.4*	-1.1 (-1.8 to -0.3)^
NH whites	17.6	17.8	18.2	18.4	18.5	18.2	18.3	18.6	19.0	19.5	19.8	20.2	20.8	21.3	21.7	22.1	22.9	22.6	0.30	0.36	28.8*	NA	1.6*	2.1 (2.0 to 2.3)
Hispanics	24.9	24.5	23.8	23.9	23.6	21.9	21.7	21.6	22.0	22.1	21.8	21.5	21.9	22.3	21.5	22.2	21.8	21.6	-0.20	-0.06	-13.5*	NA	-0.8*	0.0 (-0.4 to 0.3)^

Diseases of the respiratory system (J00-J98)																								
NH AIAN	22.2	22.9	21.8	<b>21.2</b>	26.7	21.6	23.4	21.4	23.2	28.6	30.6	25.1	25.4	24.5	24.8	28.9	27.1	27.1	0.29	0.35	22.0	27.8*	1.4*	1.4 (0.5 to 2.3) <sup>NJP</sup>
NH API	5.8	6.1	5.8	5.1	5.2	4.5	4.9	4.4	4.4	4.8	5.5	<b>4.2</b>	4.8	4.5	5.1	5.2	4.6	5.1	-0.04	0.08	-11.7	21.5*	-1.1	1.1 (-0.8 to 2.9) <sup>^</sup>
NH blacks	29.1	28.5	27.2	26.4	26.5	25.0	25.5	23.5	23.1	24.7	24.6	<b>22.2</b>	22.8	22.6	24.7	24.9	24.2	25.2	-0.23	0.47	-13.5	13.1*	-0.7*	1.8 (0.0 to 3.7) <sup>^</sup>
NH whites	18.7	18.6	18.5	18.2	18.5	17.7	18.6	<b>17.7</b>	17.7	18.9	20.3	18.3	19.5	18.8	20.3	21.3	20.4	21.1	0.14	0.32	12.9*	19.3*	0.7*	1.6 (0.8 to 2.5) <sup>^</sup>
Hispanics	10.4	10.7	9.8	10.0	9.9	9.3	9.7	8.9	8.4	9.1	11.2	9.0	8.6	<b>8.6</b>	9.4	10.1	8.7	9.5	-0.05	0.17	-8.5	10.9*	-0.7	-0.7 (-1.4 to 0.1) <sup>NJP</sup>
Endocrine, nutritional and metabolic diseases (E00-E88)																								
NH AIAN	31.9	<b>26.9</b>	27.8	30.7	31.8	30.1	32.3	32.0	27.7	27.9	29.5	32.8	34.5	34.5	33.5	36.6	37.5	39.4	0.44	0.97	23.5*	46.3*	1.5*	1.5 (0.8 to 2.3) <sup>NJP</sup>
NH API	6.0	5.9	6.3	5.9	6.3	6.1	6.2	6.5	6.4	6.0	6.3	5.8	5.9	6.4	6.5	6.2	6.3	6.8	0.05	0.19	15.1	NA	0.4	0.4 (0.0 to 0.7) <sup>NJP</sup>
NH blacks	33.3	32.1	32.6	33.7	33.3	32.0	32.2	31.8	30.9	28.6	<b>28.5</b>	28.5	29.7	28.6	29.8	30.7	31.8	32.2	-0.07	0.50	-3.5	12.9	-0.2	2.0 (1.1 to 2.9)
NH whites	12.7	13.3	13.5	<b>14.0</b>	14.1	13.9	14.2	14.2	13.9	13.9	14.0	13.7	14.7	14.4	14.9	15.4	16.0	16.1	0.20	0.27	26.4*	NA	1.4*	2.5 (1.8 to 3.3) <sup>^</sup>
Hispanics	16.2	16.2	16.1	16.0	16.7	14.8	15.7	14.3	14.1	13.9	13.3	13.3	<b>13.2</b>	13.4	13.6	13.7	13.6	14.4	-0.11	0.23	-11.3*	8.9*	-1.0*	1.5 (-0.7 to 3.8) <sup>^</sup>
Diseases of the nervous system (G00-G98)																								
NH AIAN	5.5	5.9	7.2	<b>5.4</b>	5.8	7.3	8.5	7.5	7.7	8.4	9.2	7.6	9.2	7.7	9.9	9.5	11.0	10.9	0.32	0.36	99.8*	19.5*	3.7*	3.7 (2.7 to 4.8) <sup>NJP</sup>
NH API	2.2	2.3	2.2	2.3	2.3	<b>1.9</b>	2.4	2.3	2.2	2.7	2.3	2.5	2.3	2.7	3.1	2.7	2.9	2.8	0.04	0.10	27.6	47.5	1.7*	1.7 (0.9 to 2.6) <sup>NJP</sup>
NH blacks	10.2	10.5	10.6	10.6	11.1	10.7	11.2	11.2	11.0	11.3	11.6	11.0	11.0	11.9	11.6	12.6	12.3	12.2	0.12	0.24	20.4*	NA	1.0*	1.0 (0.7 to 1.2) <sup>NJP</sup>
NH whites	7.1	7.6	7.6	7.8	7.9	7.9	8.3	8.3	8.4	8.6	8.8	8.8	8.8	8.9	9.3	9.3	9.5	9.8	0.16	0.22	38.9*	NA	1.6*	1.6 (1.5 to 1.8) <sup>NJP</sup>
Hispanics	3.7	4.2	3.9	4.3	4.6	4.3	4.5	4.5	4.6	4.5	4.6	4.5	4.6	4.5	5.0	4.8	5.2	5.2	0.09	0.12	40.4*	NA	1.4*	1.4 (1.0 to 1.8) <sup>NJP</sup>
Mental and behavioral disorders (F01-F99)																								
NH AIAN	17.7	14.2	16.6	14.7	18.4	18.4	17.5	<b>18.9</b>	13.3	13.7	<b>12.1</b>	<b>11.7</b>	13.1	14.6	13.8	17.9	17.7	17.7	0.00	0.92	-0.1	51.8*	0.9	7.2 (3.2 to 11.2)
NH API	0.7	0.9	0.8	1.1	<b>1.2</b>	1.1	1.2	1.5	1.0	1.0	1.0	0.9	0.9	1.2	1.1	1.1	1.1	1.2	0.03	0.06	68.8	NA	2.3	-0.6 (-2.8 to 1.7)
NH blacks	9.8	9.3	9.7	9.1	9.0	8.5	8.5	9.3	6.9	6.0	5.8	5.9	5.7	<b>5.7</b>	6.0	6.0	5.9	6.5	-0.19	0.15	-33.6*	14.5*	-2.6*	1.7 (0.5 to 3.0) <sup>^</sup>
NH whites	4.6	4.8	5.0	5.3	5.6	6.0	6.1	6.5	5.1	5.1	<b>4.9</b>	5.3	5.5	5.8	6.0	6.3	6.7	7.4	0.17	0.37	61.1*	51.0*	2.7*	5.7 (4.2 to 7.3) <sup>^</sup>
Hispanics	5.5	5.1	4.9	5.2	5.2	4.8	5.5	5.4	3.7	3.5	3.3	3.3	<b>3.2</b>	3.3	3.8	3.6	3.6	3.9	-0.09	0.14	-29.1*	22.0*	-1.8	3.2 (0.9 to 5.4) <sup>^</sup>
Diseases of the genitourinary system (N00-N98)																								
NH AIAN	8.1	8.7	10.5	9.2	9.1	8.2	7.5	9.4	8.3	9.7	8.7	8.6	<b>7.3</b>	7.7	8.5	10.5	10.1	10.4	0.14	0.62	29.0*	42.5*	0.4	0.4 (-0.7 to 1.5) <sup>NJP</sup>
NH API	2.4	2.3	2.8	2.5	2.1	2.2	2.4	2.4	2.3	2.5	2.2	2.3	2.0	2.1	2.3	2.1	2.3	2.3	-0.01	0.06	-7.9	NA	-0.7	-0.7 (-1.4 to 0.0) <sup>NJP</sup>
NH blacks	14.7	15.2	15.5	15.5	16.4	<b>16.2</b>	15.6	15.5	15.1	14.9	14.3	14.3	12.9	13.2	13.0	<b>12.7</b>	13.6	13.8	-0.05	0.18	-6.1	8.1	-0.4	5.3 (-1.5 to 12.5) <sup>^</sup>
NH whites	3.4	3.5	3.6	3.7	3.9	3.9	3.9	4.1	4.0	4.0	4.1	4.1	<b>3.8</b>	3.9	4.0	4.1	4.4	4.6	0.07	0.14	35.7*	18.9*	1.8*	5.6 (2.0 to 9.3) <sup>^</sup>
Hispanics	4.7	4.4	4.5	4.6	4.9	4.8	4.7	5.0	4.8	5.1	5.2	4.8	4.2	4.4	4.2	4.2	4.4	4.7	0.00	0.10	-0.8	NA	0.2	4.5 (-1.3 to 10.7) <sup>^</sup>
Pregnancy, childbirth and the puerperium (O00-O99)																								
NH AIAN	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	NA	NA	NA	NA	Insufficient data	
NH API	UR	UR	UR	UR	0.3	0.3	0.4	0.5	0.4	0.3	0.3	0.4	0.4	0.3	0.4	0.4	0.4	0.4	NA	0.06	NA	NA	Insufficient data	
NH blacks	0.6	0.6	0.6	0.6	0.8	0.9	1.0	1.0	0.9	1.0	1.1	1.1	1.2	1.4	1.5	1.5	1.5	1.6	0.06	0.34	167.9*	NA	6.4*	6.4 (5.6 to 7.3) <sup>NJP</sup>
NH whites	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.5	0.5	0.5	0.6	0.03	0.12	411.0*	NA	12.2*	7.5 (4.2 to 10.9) <sup>^</sup>
Hispanics	0.3	0.3	0.3	<b>0.3</b>	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.3	0.5	0.5	0.5	0.5	0.5	0.02	0.15	101.5*	106.3*	3.3*	3.3 (2.1 to 4.6) <sup>NJP</sup>

†Average year-to-year changes (from 1999 to 2016) in absolute mortality rates (deaths per 100,000). See text for more details.

‡Slopes from fitted model, in which joinpoint analysis<sup>30</sup> was used to plot trend lines that best fit the 17 annual mortality rates (see Methods). *Joinpoints* (grey boxes) are points of inflection when mortality trend lines changed significantly. *APC* = annual percentage rate change, the slope for the interval(s) between joinpoints. *AAPC* = average annual percent change, the slope for the entire (1999-2016) period based on the weighted average of the APCs. For brevity, the table presents APC values only for the final interval ending in 2016 (or the entire 1999-2016 period when there are no joinpoints). Table S8 in this supplement provides all AAPC values, APC values for every segment, and related 95% confidence intervals and p values. The Joinpoint Chartbook in this supplement displays the fitted model for each cause of death and racial-ethnic group.

\*Statistically significant changes in mortality rates (p < 0.05)

^APC (slope) for interval ending in 2016 differed significantly (p < 0.05) from slope of preceding period. *NJP* = no joinpoint (i.e., the fitted slope had no significant inflection between 1999 and 2016). Values equal the AAPC for the entire 1999-2016 period.

95% CI = 95% confidence interval

NH AIAN = non-Hispanic American Indians and Alaskan Native

NH API = non-Hispanic Asians and Pacific Islanders

NA = Not applicable; data were inadequate for calculation

NJP = No joinpoint; no significant changes in slope occurred and values represent the APC for the entire period of 1999-2016

UR = Unreliable data; fewer than 20 deaths from the specified cause of death in the given year and racial-ethnic group.

Notes Grey cells with bolded borders denote joinpoints, which demarcate changes in the APC (slope). Green shading denotes decreasing mortality (negative APC values that differ significantly from zero [ $p < 0.05$ ]). Red shading denotes increasing mortality (positive APC values that differ significantly from zero [ $p < 0.05$ ]). No shading indicates statistically stable trends (APC values that did not differ significantly from zero). Nadirs (mortality rates significantly below 2016 rates) are underlined and bolded. Between 1999 and 2016, NH whites (only) ages 25-64 years also experienced statistically significant increases in age-adjusted mortality from diseases of the blood and immune mechanism (D50-D89; 14.7% increase; AAPC = 0.5% [0.0 to 0.9%]) and skin diseases (L00-L98; 65.0% increase; AAPC = 2.6% [1.8 to 3.3%]), as well as post-nadir increases in mortality from congenital disorders (Q00-Q99; 21.4% increase from nadir 2009; post-2011 APC = 4.0% [2.1 to 5.9%]). Post-nadir increases in mortality from symptoms, signs and abnormal clinical and laboratory findings (R00-R99) were statistically significant among NH blacks, NH whites, and Hispanics on two-point comparisons but were not confirmed on joinpoint analysis and are not presented here. No statistically significant increases by race-ethnicity (on two-point analysis) were reported for mortality from neoplasms (C00-D48), infectious and parasitic diseases (A00-B99), and diseases of the musculoskeletal system and connective tissue (M00-M99). Data were suppressed by race-ethnicity (unreliable) for diseases of the eye and adnexa (H00-H57), diseases of the ear and mastoid process (H60-H93), conditions originating in the perinatal period (P00-P96), and codes for special purposes (U00-U99). More detailed data are provided in Table S1 of the online supplement.



TABLE S2. MORTALITY RATES BY LEADING CAUSES, NON-HISPANIC WHITES, AGES 25-64 YEARS, 1999-2016

	Age-adjusted mortality rates (deaths per 100,000), by year																		Changes in mortality rates						Excess deaths
																			Average absolute year-to-year changes†		Proportional (%) changes				
	2016 vs 1999	2016 vs nadir	Fitted model‡																						
			1999-2016	2012-2016	AAPC (1999-2016)	Final APC (95% CI)																			
1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	1999-2016	2012-2016	2016 vs 1999	2016 vs nadir	AAPC (1999-2016)	Final APC (95% CI)		
<b>External causes of morbidity and mortality (V01-Y89)</b>																									
Drug overdoses (X40-X44)	6.2	6.8	7.7	10.1	11.4	12.6	14.2	16.7	18.1	18.7	19.2	20.3	22.4	22.4	24.0	26.3	30.1	37.0	1.81	2.91	494.3*	NA	11.1*	20.0 (6.2 to 35.7)^	33,003
Alcohol poisoning (X45)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.7	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	0.06	0.01	674.5*	NA	12.3*	2.1 (-0.5 to 4.9)^	1,146
Pedestrian/cyclist/motorcycle injury (V01-V29)	3.4	3.5	3.8	4.0	4.1	4.4	4.6	4.9	4.8	4.9	4.4	4.3	4.4	4.7	4.3	4.3	4.7	5.1	0.10	0.14	50.1*	NA	2.4*	9.4 (-1.4 to 21.5)	1,404
Misc. land/other transport accidents (V80-V99) <sup>1</sup>	6.7	6.8	6.5	6.1	5.9	6.3	6.5	6.6	6.5	6.3	5.9	6.2	5.9	6.5	6.6	6.6	7.0	7.2	0.03	0.27	7.8*	23.5*	0.2	2.8 (1.5 to 4.0)	561
Other forms of accidental poisoning (X46-X49) <sup>2</sup>	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.4	0.5	0.5	0.5	0.5	0.6	0.7	0.02	0.03	139.1*	NA	5.1*	5.1 (4.2 to 6.0) <sup>NIP</sup>	410
Falls, drowning, fire (W00-W19, W65-W74, X00-X09) <sup>3</sup>	3.7	3.8	3.8	3.9	4.0	4.1	4.2	4.2	4.3	4.2	4.2	4.4	4.2	4.2	4.3	4.4	4.3	4.4	0.04	0.03	19.4*	NA	1.0*	0.2 (-0.1 to 0.6)^	768
Suicide (X60-X84)	15.6	15.7	16.6	17.3	17.4	17.7	17.7	18.4	19.2	20.0	20.4	21.1	21.6	22.1	22.1	22.7	23.5	23.3	0.45	0.35	49.4*	NA	2.5*	1.8 (1.0 to 2.5)^	8,300
<b>Diseases of the circulatory system (I00-I99)</b>																									
Hypertensive diseases (I10-I15)	3.8	4.0	4.3	4.8	5.2	5.3	5.5	5.8	5.8	6.4	6.6	6.6	7.0	7.2	7.7	8.2	8.4	8.8	0.29	0.36	129.8*	NA	5.1*	4.2 (3.9 to 4.6)^	5,318
Other heart disease (I30-I51) <sup>4</sup>	14.2	13.8	13.7	13.8	13.6	13.3	13.4	13.4	13.2	13.0	13.1	13.3	13.4	13.3	13.8	14.1	14.6	15.0	0.05	0.33	6.0*	15.6*	0.4*	2.9 (2.1 to 3.8)^	916
Venous/lymphatic diseases (I80-I89)	0.7	0.9	0.8	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.9	0.9	1.0	1.0	1.0	0.9	0.9	1.0	0.02	0.01	51.5*	NA	1.3*	1.3 (0.7 to 2.0) <sup>NIP</sup>	376
Pulmonary heart disease (I26-I28)	2.5	2.6	2.6	2.6	2.6	2.4	2.4	2.2	2.1	2.2	2.2	2.2	2.2	2.2	2.4	2.3	2.5	2.5	0.01	0.06	3.6	19.7*	0.0	1.7 (0.8 to 2.5)^	93
<b>Diseases of the digestive system (K00-K92)</b>																									
Alcoholic liver disease (K70)	5.8	5.9	5.9	5.8	5.9	6.0	6.0	6.1	6.8	6.9	7.0	7.3	7.6	7.9	8.2	8.5	9.2	9.4	0.21	0.37	62.4*	63.0*	2.9*	4.1 (3.7 to 4.5)^	3,901
<b>Mental and behavioral disorders (F01-F99)</b>																									
Mental/behavioral disorders involving psychoactive substances (F10-F19)	4.0	4.1	4.3	4.6	4.9	5.2	5.3	5.5	4.0	3.9	3.8	4.1	4.3	4.5	4.7	5.1	5.6	6.3	0.14	0.40	58.9*	66.7*	2.6*	7.4 (5.3 to 9.5)^	2,493
Organic mental disorders (F01-F09)	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.7	0.6	0.02	-0.03	185.9*	NA	6.1*	-8.9 (-17.3 to 0.4)^	442
<b>Infectious and parasitic diseases (A00-B99)</b>																									
Misc. infectious diseases (A00-A99) <sup>5</sup>	3.7	3.8	3.9	4.2	4.3	4.4	4.4	4.3	4.6	4.8	4.9	4.7	5.0	5.0	5.3	5.5	5.6	5.7	0.12	0.14	53.9*	NA	2.4*	2.4 (2.2 to 2.7) <sup>NIP</sup>	2,149
<b>Neoplasms (C00-D48)</b>																									
Liver cancer (C22)	2.2	2.4	2.4	2.6	2.7	2.8	3.0	3.0	3.2	3.4	3.6	3.7	4.0	4.1	4.1	4.1	4.2	4.0	0.11	0.01	80.0*	NA	3.7*	0.0 (-1.3 to 1.3)^	1,931
Cancer of lip/oral cavity/pharynx (C00-C14)	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.8	1.9	1.8	1.7	1.9	1.9	2.0	1.9	2.0	1.9	2.1	0.01	0.04	10.5*	23.5*	0.4	1.8 (0.6 to 3.0)^	215
Pancreatic cancer (C25)	5.3	5.3	5.3	5.2	5.1	5.3	5.4	5.4	5.4	5.4	5.5	5.6	5.4	5.5	5.4	5.6	5.5	5.5	0.01	0.03	3.3	7.6*	0.3*	0.3 (0.2 to 0.5) <sup>NIP</sup>	188

Endocrine, nutritional, and metabolic diseases (E00-E88)																									
Obesity (E65-E68)	1.2	1.4	1.5	1.7	1.8	1.8	2.0	2.0	2.0	2.0	2.2	2.2	2.3	2.4	2.4	2.5	2.7	2.7	0.09	0.08	124.6*	NA	4.9*	3.3 (2.9 to 3.7) <sup>^</sup>	1,616
Diabetes (E10-E14)	9.3	9.5	9.7	9.8	9.9	9.7	9.6	9.3	9.2	9.1	8.9	9.6	9.2	9.5	9.8	10.2	10.1	0.05	0.11	8.9*	14.2*	0.5*	2.2 (1.4 to 3.0) <sup>^</sup>	879	
Metabolic disorders (E70-E88)	1.7	1.8	1.9	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.3	2.4	2.5	2.6	2.5	0.05	0.05	46.2*	NA	2.0*	2.0 (1.8 to 2.3) <sup>NJP</sup>	858
Misc. endocrine disorders (E00-E07, 15-16, 20-34, 40-46) <sup>6</sup>	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.01	0.01	31.1*	38.9*	1.7*	1.7 (1.2 to 2.2) <sup>NJP</sup>	154
Diseases of the respiratory system (J00-J98)																									
Chronic lower respiratory diseases (J40-J47)	11.5	11.0	11.2	10.9	11.1	10.5	11.1	10.6	10.7	11.4	11.4	11.1	11.5	11.5	11.8	12.0	12.2	12.3	0.04	0.17	6.6*	17.1*	0.5*	1.4 (0.9 to 1.9) <sup>^</sup>	835
Lung diseases due to external agents (J60-J70)	0.8	0.9	0.9	0.9	1.0	0.9	1.0	1.0	0.9	1.0	1.0	1.0	1.1	1.1	1.2	1.2	1.3	1.3	0.03	0.04	60.3*	NA	2.4*	2.4 (2.0 to 2.8) <sup>NJP</sup>	542
Misc. respiratory system disorders (J96-J98) <sup>7</sup>	0.8	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.9	0.8	0.9	1.0	1.1	1.1	1.2	1.3	2.4	0.09	0.27	206.5*	252.1*	6.3*	37.4 (20.1 to 57.1) <sup>^</sup>	1,709
Diseases of the nervous system (G00-G98)																									
Alzheimer's/degenerative disorders (G30-G31)	0.6	0.6	0.7	0.6	0.7	0.6	0.7	0.7	0.7	0.8	0.7	0.7	0.8	0.8	0.9	0.9	0.9	1.1	0.03	0.06	76.8*	84.5*	2.8*	2.8 (2.1 to 3.4) <sup>NJP</sup>	498
Epilepsy/episodic, paroxysmal disorders (G40-G47)	0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.9	0.8	0.8	0.8	0.9	0.9	0.9	1.0	0.02	0.04	60.6*	NA	2.4*	2.4 (2.0 to 2.9) <sup>NJP</sup>	401
Inflammatory diseases (G00-G14) <sup>8</sup>	1.9	2.1	2.0	2.1	2.2	2.1	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.4	2.3	2.3	0.02	-0.01	17.1*	NA	0.8*	0.8 (0.5 to 1.1) <sup>NJP</sup>	353
Cerebral palsy (G80-G83)	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.9	0.8	0.9	0.9	0.02	0.02	59.1*	15.3*	3.2*	2.1 (1.2 to 3.1) <sup>^</sup>	346
Extrapyramidal/movement disorders (G20-G25)	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.01	0.03	65.6*	NA	2.0*	2.0 (1.3 to 2.7) <sup>NJP</sup>	189
Misc. peripheral diseases (G50-G72) <sup>9</sup>	0.6	0.6	0.5	0.7	0.6	0.6	0.7	0.6	0.7	0.6	0.7	0.6	0.7	0.7	0.7	0.6	0.6	0.7	0.01	0.01	29.9*	34.0*	1.0*	1.0 (0.4 to 1.6) <sup>NJP</sup>	177
Misc. disorders (G90-G98) <sup>10</sup>	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.6	1.7	1.8	1.9	1.9	1.9	2.0	2.1	2.2	2.3	2.3	0.06	0.08	78.5*	NA	3.5*	3.3 (2.5 to 4.1)	1,084
Diseases of the genitourinary system (N00-N98)																									
Renal failure (N17-N19)	2.4	2.7	2.8	2.8	2.9	3.0	2.9	3.0	2.9	3.0	3.0	3.0	2.9	2.8	2.9	2.9	3.1	3.2	0.05	0.08	33.7*	13.5*	1.6*	5.3 (-2.9 to 14.2)	865
Other urinary system diseases (N00-N15, N20-39) <sup>11</sup>	0.8	0.8	0.8	0.8	0.9	0.9	1.0	1.0	1.1	1.0	1.0	1.1	0.9	0.9	1.0	1.0	1.2	1.2	0.02	0.06	43.3*	31.6*	1.8*	1.8 (1.2 to 2.4) <sup>NJP</sup>	385

†Average year-to-year changes (from 1999 to 2016) in absolute mortality rates (deaths per 100,000). See text for more details.

‡Slopes from fitted model, in which joinpoint analysis<sup>30</sup> was used to plot trend lines that best fit the 17 annual mortality rates (see Methods). *Joinpoints* (grey boxes) are points of inflection when mortality trend lines changed significantly. *APC* = annual percentage rate change, the slope for the interval(s) between joinpoints. *AAPC* = average annual percent change, the slope for the entire (1999-2016) period based on the weighted average of the APCs. For brevity, the table presents APC values only for the final interval ending in 2016 (or the entire 1999-2016 period when there are no joinpoints). Table S8 of this supplement provides all AAPC values, APC values for every segment, and related 95% confidence intervals and p values. The Joinpoint Chartbook in this supplement displays the fitted model for each cause of death and racial-ethnic group.

\* Statistically significant changes in mortality rates (p < 0.05)

<sup>^</sup>APC (slope) for interval ending in 2016 differed significantly (p < 0.05) from slope of preceding period. *NJP* = no joinpoint (i.e., the fitted slope had no significant inflection between 1999 and 2016). Values equal the AAPC for the entire 1999-2016 period.

NA = Not applicable; data were inadequate for calculation

1. Accidents involving other land, water transport, air/space, and other/unspecified transport
2. Accidental poisoning by organic solvents, halogenated hydrocarbons, other gases and vapors, pesticides, and unspecified chemicals and noxious substances
3. Also includes deaths from submersion, smoke, and flames
4. Arrhythmias, cardiomyopathy, heart failure, cardiac arrest, myocarditis, and valvular and pericardial disease.
5. Intestinal infections, tuberculosis, and zoonotic and other bacterial, sexually transmitted, spirochetal, chlamydial, rickettsial, central nervous system, arthropod-borne, and viral hemorrhagic infections
6. Disorders of thyroid and other endocrine glands, malnutrition, and disorders of glucose regulation and pancreatic internal secretion
7. Respiratory failure, not elsewhere classified, and other respiratory disorders
8. Inflammatory diseases (e.g., meningitis, encephalitis) and systemic atrophies (e.g., Huntington's disease) affecting the central nervous system
9. Nerve/nerve root/plexus disorders, polyneuropathies and other disorders of the peripheral nervous system, diseases of myoneural junction and muscle
10. Disorders of autonomic nervous system, hydrocephalus, toxic encephalopathy, and other disorders of nervous system, not elsewhere classified
11. Glomerular and renotubular interstitial diseases, urolithiasis, and other diseases of urinary system

Notes: Grey cells with bolded borders denote joinpoints, which demarcate changes in the APC (slope). Green shading denotes decreasing mortality (negative APC values that differ significantly from zero [p < 0.05]). Red shading denotes increasing mortality (positive APC values that differ significantly from zero [p < 0.05]). No shading indicates statistically stable trends (APC values that did not differ significantly from zero). Rows with no color and diagonal hashmarks had inadequate data, due to unreported mortality rates for certain years, to perform joinpoint analysis. Nadirs (mortality rates significantly below 2016 rates) are underlined and bolded. See text for methods for

calculating average year-to-year increases and excess deaths. Increases in midlife mortality from homicide (X85-Y09) and viral hepatitis (B15-B19) were statistically significant on two-point comparisons but were not confirmed on joinpoint analysis and are not presented here. For brevity, data are not shown here for deaths aggregated by broad categories (e.g., circulatory system disorders), those making relatively small contributions to increasing mortality (average year-to-year increase  $\leq 0.01/100,000$  during 1999-2016), and increases that lacked statistical significance on two-point comparisons (with support from joinpoint analysis). Some excluded conditions that did not yield statistically significant increases in mortality in 1999-2016 (or increases  $> 0.01/100,000$ ) did produce statistically significant post-nadir increases. Additional data are available in Tables S2-S4 of the online supplement.

TABLE S3. MORTALITY RATES BY LEADING CAUSES AMONG NON-HISPANIC AMERICAN INDIANS AND ALASKAN NATIVES, BLACKS, HISPANICS, AND ASIANS AND PACIFIC ISLANDERS, AGES 25-64 YEARS, 1999-2016

Causes of death (ICD-10 codes)	Age-adjusted mortality rates (deaths per 100,000), by year																		Average absolute year-to-year changes (per 100,000) <sup>†</sup>		Proportional (%) changes				Excess deaths (1999-2016)
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	1999-2016	2012-2016	2016 vs 1999	2016 vs nadir	Fitted model <sup>‡</sup>		
																							AAPC (1999-2016)	Final APC (95% CI)	
<b>NON-HISPANIC AMERICAN INDIANS AND ALASKAN NATIVES</b>																									
Drug overdoses (X40-X44)	7.0	6.7	8.1	10.6	13.6	15.5	17.1	17.8	18.0	20.5	24.9	23.4	24.8	28.0	27.0	31.0	32.7	35.9	1.70	2.22	411.4*	NA	10.9*	7.1 (5.7 to 8.5) <sup>^</sup>	370
Alcoholic liver disease (K70)	29.3	27.3	27.6	28.7	29.8	27.6	29.3	28.9	33.6	34.9	32.5	39.3	38.8	41.4	44.7	44.5	50.3	48.6	1.14	1.96	65.9*	78.0*	3.5*	5.3 (4.3 to 6.3) <sup>^</sup>	254
Suicide (X60-X84)	14.9	15.5	17.2	16.8	16.6	20.4	18.6	18.6	18.6	18.5	19.3	20.6	21.4	21.7	23.6	24.0	25.8	28.4	0.80	1.40	91.2*	NA	3.5*	6.6 (1.4 to 12.1)	176
Hypertensive diseases (I10-I15)	3.9	4.3	4.1	4.1	7.3	7.7	7.2	8.1	7.7	8.0	9.5	10.1	9.3	9.5	12.4	13.5	13.8	14.3	0.61	1.01	269.3*	NA	7.8*	7.8 (6.4 to 9.3) <sup>NIP</sup>	134
Other heart disease (I30-I51) <sup>1</sup>	15.7	15.7	16.3	14.9	18.2	16.0	17.2	17.4	17.5	17.4	17.1	17.4	16.1	16.2	17.6	15.7	20.5	20.1	0.26	0.79	27.7	34.9*	0.9*	0.9 (0.2 to 1.6) <sup>NIP</sup>	57
Colorectal cancer (C17-21)	6.7	7.2	7.1	9.8	7.0	7.6	8.6	7.5	8.4	9.6	9.7	9.1	9.6	8.3	10.1	9.3	9.1	10.8	0.24	0.24	60.6*	NA	2.0*	2.0 (1.1 to 3.0) <sup>NIP</sup>	52
Liver cancer (C22)	3.2	4.6	4.1	3.5	4.9	5.5	4.2	4.3	5.7	5.4	5.5	5.4	5.7	6.4	7.6	5.7	7.4	6.8	0.21	0.22	115.1*	NA	4.0*	4.0 (2.7 to 5.2) <sup>NIP</sup>	45
Falls, drowning, fire (W00-W19, W65-W74, X00-X09) <sup>2</sup>	8.3	9.2	8.2	9.8	9.0	8.8	9.6	8.0	8.1	7.8	8.4	8.9	8.6	11.0	10.6	10.7	9.8	11.6	0.19	0.59	39.3	49.0*	1.3	4.1 (1.3 to 6.9) <sup>^</sup>	43
Viral hepatitis (B15-B19)	2.3	4.5	3.4	4.0	4.5	4.2	3.6	6.1	6.5	5.8	6.6	5.5	5.5	6.1	6.9	6.0	5.2	4.8	0.15	-0.12	112.1*	NA	3.7*	3.7 (1.5 to 5.9) <sup>NIP</sup>	29
Diabetes (E10-E14)	28.6	23.1	23.1	26.6	27.9	25.8	25.8	26.1	22.6	22.4	22.5	25.3	27.6	26.7	26.8	27.8	29.1	30.9	0.13	0.66	7.9	37.7*	0.9	3.7 (0.7 to 6.7) <sup>^</sup>	38
Homicide (X85-Y09)	13.5	10.3	9.3	12.0	10.0	9.9	11.0	11.6	10.1	11.8	11.1	12.0	11.7	11.9	11.9	12.2	13.4	14.5	0.06	0.56	7.6*	55.3*	1.2*	1.2 (0.3 to 2.2) <sup>NIP</sup>	19
Mental/behavioral disorders involving psychoactive substances (F10-F19)	17.3	14.0	16.0	13.8	17.9	17.8	16.7	18.1	12.2	13.4	11.7	10.7	12.3	14.0	13.0	17.2	16.9	17.3	0.00	1.02	0.2	61.8*	1.1	9.0 (2.6 to 15.8) <sup>^</sup>	6
Misc. nervous system disorders (G90-G98) <sup>3</sup>	UR	UR	2.5	UR	1.7	2.2	2.7	2.1	2.5	2.8	2.4	2.9	3.2	3.1	2.6	2.7	2.8	3.5	NA	0.05	NA	108.9*	Insufficient data		24
Alcohol poisoning (X45)	2.2	UR	UR	UR	UR	UR	UR	2.1	4.6	7.6	8.2	9.3	9.1	9.8	9.7	9.8	10.2	NA	0.21	366.6*	NA	Insufficient data		104	
<b>NON-HISPANIC BLACKS</b>																									
Drug overdoses (X40-X44)	10.2	10.0	10.4	11.4	11.4	11.8	13.8	16.3	14.1	12.1	11.9	11.6	12.9	12.9	14.5	15.5	18.1	25.5	0.90	2.51	149.6*	119.1*	5.8*	28.7 (11.4 to 48.7) <sup>^</sup>	3,187
Homicide (X85-Y09)]	22.8	23.6	23.7	25.1	25.1	24.5	25.6	26.2	25.5	23.4	22.2	21.8	21.9	23.2	22.9	21.7	25.5	27.6	0.29	1.15	21.4*	27.2*	1.1	11.3 (3.8 to 19.3) <sup>^</sup>	1,005
Hypertensive diseases (I10-I15)	24.7	25.1	25.4	26.7	28.4	28.0	26.8	26.9	26.6	27.4	28.0	26.9	26.5	27.3	27.4	27.7	28.2	28.5	0.23	0.40	15.5*	NA	0.7*	0.1 (-0.2 to 0.5) <sup>^</sup>	725
Obesity (E65-E68)	2.3	2.8	3.0	3.3	3.1	3.6	3.8	3.6	3.7	3.7	3.6	3.7	4.1	3.8	3.9	4.7	4.9	5.1	0.16	0.20	120.7*	NA	4.8*	9.6 (1.4 to 18.4)	545
Liver cancer (C22)	4.8	5.4	5.4	5.4	5.9	5.9	6.5	6.6	6.5	7.0	7.5	7.7	7.7	7.6	7.7	7.6	7.2	7.2	0.14	-0.10	49.5*	NA	2.2*	-1.8 (-3.6 to 0.0) <sup>^</sup>	430
Misc. nervous system disorders (G90-G98) <sup>3</sup>	3.7	3.7	3.5	3.5	3.8	3.8	3.9	4.0	4.0	4.4	4.4	4.3	4.2	4.7	4.6	5.0	5.0	5.1	0.08	0.17	35.8*	NA	2.2*	2.2 (1.8 to 2.5) <sup>NIP</sup>	268
Pedestrian/cyclist/motorcycle injury (V01-V29)	5.4	5.5	5.5	5.4	5.6	5.8	6.0	6.0	6.1	5.7	5.1	4.9	5.1	5.5	5.7	5.5	6.4	6.6	0.08	0.31	23.7*	36.5*	1.2	5.1 (3.4 to 6.8) <sup>^</sup>	265
Misc. land/other transport accidents (V80-V99)	6.4	6.7	6.1	5.3	5.8	5.7	5.5	6.2	5.7	5.4	5.8	5.7	5.2	5.8	6.3	6.4	6.9	7.5	0.07	0.45	17.7*	42.8*	1.1	6.5 (2.6 to 10.5) <sup>^</sup>	264
Metabolic disorders (E70-E88)	2.4	2.5	2.4	2.7	2.6	2.5	2.6	2.5	2.7	2.6	2.7	2.6	2.8	2.8	2.9	3.2	3.4	3.5	0.06	0.13	43.2*	47.2*	2.0*	4.6 (2.8 to 6.5) <sup>^</sup>	216

Misc. respiratory system disorders (J96-J98) <sup>4</sup>	1.3	1.4	1.5	1.3	1.3	<u>1.3</u>	1.4	1.4	1.5	1.7	1.4	1.7	1.5	1.6	2.1	1.9	2.1	2.4	0.06	0.18	75.8*	87.3*	3.5*	8.7 (2.8 to 14.9) <sup>^</sup>	212	
Suicide (X60-X84)	7.2	7.1	7.2	7.3	7.1	7.2	7.1	7.0	<u>7.0</u>	<u>7.0</u>	7.1	7.4	7.5	7.8	7.6	7.5	7.6	8.2	0.06	0.14	13.7*	17.7*	0.6*	1.5 (0.9 to 2.0) <sup>^</sup>	213	
Organic mental disorders (F01-F09)	0.3	0.5	0.4	0.4	0.5	0.4	0.5	0.9	0.9	0.9	0.7	1.0	1.0	1.1	1.3	1.1	1.0	0.9	0.04	-0.02	215.3*	NA	6.2*	-10.5 (-31.5 to 17.1)	119	
Cerebral palsy (G80-G83)	0.6	0.7	<u>0.9</u>	1.0	0.9	0.9	1.1	1.0	1.0	1.1	1.0	1.1	1.0	0.9	1.0	1.0	1.2	1.2	0.03	0.03	93.4*	NA	3.5*	1.3 (0.4 to 2.1)	109	
Alzheimer's/degenerative disorders (G30-G31)	0.4	0.5	0.4	0.5	0.4	<u>0.4</u>	0.5	0.6	0.4	0.5	0.5	0.4	0.5	0.5	0.6	0.7	0.7	0.6	0.01	0.01	54.1	64.9*	2.5*	2.5 (1.2 to 3.8) <sup>NIP</sup>	42	
Lung diseases due to external agents (J60-J70)	1.6	1.5	1.4	1.4	1.6	1.5	1.5	1.3	1.4	1.4	1.4	<u>1.2</u>	1.4	1.4	1.5	1.5	1.5	1.6	-0.00	0.05	-1.1	30.1*	0.1	3.1 (0.8 to 5.4) <sup>^</sup>	4	
Pancreatic cancer (C25)	8.1	7.6	<u>7.3</u>	7.6	7.9	<u>7.7</u>	7.6	7.6	7.6	7.6	7.4	7.2	<u>7.1</u>	7.5	7.3	7.4	7.6	7.8	-0.01	0.15	-3.1	10.6*	-0.2	1.6 (0.3 to 2.9) <sup>^</sup>	(29)	
Misc. infectious diseases (A00-A99) <sup>5</sup>	12.2	12.5	12.5	12.5	12.7	12.3	12.0	12.3	11.9	12.0	11.7	11.0	<u>10.9</u>	<u>10.5</u>	11.0	10.6	11.2	11.5	-0.04	0.12	-5.8	8.9*	-0.6	2.1 (0.0 to 4.3) <sup>^</sup>	(134)	
Pulmonary heart disease (I26-I28)	6.3	5.9	6.0	5.9	6.0	5.5	5.6	5.2	4.7	<u>4.7</u>	5.3	5.1	5.1	5.3	5.1	5.2	5.5	5.5	-0.05	0.09	-12.3	17.9*	-0.8*	1.5 (0.2 to 2.7) <sup>^</sup>	(126)	
Chronic lower respiratory diseases (J40-J47)	13.7	13.4	12.4	12.4	12.0	11.5	11.9	11.1	<u>10.6</u>	11.3	11.0	10.8	10.8	11.0	11.5	11.3	11.3	11.7	-0.12	0.17	-14.66*	9.5*	-1.0*	0.7 (0.0 to 1.3) <sup>^</sup>	(339)	
Alcoholic liver disease (K70)	7.7	7.2	6.8	5.8	5.8	5.4	5.1	<u>4.3</u>	4.9	4.8	4.5	4.7	5.0	4.6	4.9	5.0	5.3	5.2	-0.14	0.04	-31.59*	20.4*	-2.3*	1.2 (0.3 to 2.1) <sup>^</sup>	(418)	
Car accidents (V40-V49)	6.2	6.1	6.0	6.3	5.9	5.8	5.3	5.7	5.0	4.2	3.6	3.1	3.3	3.1	<u>2.5</u>	2.6	2.8	3.2	-0.18	-0.03	-48.52*	25.5*	-4.2*	6.9 (-4.0 to 19.0) <sup>^</sup>	(574)	
Mental/behavioral disorders involving psychoactive substances (F10-F19)	9.0	8.5	8.7	8.3	8.0	7.5	7.5	7.8	5.4	4.6	4.6	4.4	4.2	<u>4.0</u>	4.3	4.4	4.3	4.9	-0.24	0.13	-45.13*	23.3*	-3.9*	1.4 (-0.3 to 3.2) <sup>^</sup>	(749)	
Diabetes (E10-E14)	27.1	25.6	26.1	26.3	26.5	24.7	24.7	24.5	23.4	21.2	21.2	21.1	21.9	<u>21.0</u>	21.7	21.6	22.3	22.4	-0.28	0.10	-17.29*	7.0*	-1.1	1.0 (0.0 to 2.0)	(852)	
Other heart disease (I30-I51)	37.7	35.6	35.8	35.4	35.0	33.7	33.8	32.6	32.4	31.7	30.9	30.1	<u>28.3</u>	29.0	30.2	30.3	31.2	32.2	-0.32	0.78	-14.53*	13.8*	-0.9*	2.3 (1.5 to 3.2) <sup>^</sup>	(948)	
<b>HISPANICS</b>																										
Drug overdoses (X40-X44)	7.9	6.6	6.2	7.4	7.8	7.1	8.0	9.1	8.4	8.2	8.2	<u>7.8</u>	8.7	9.0	9.6	9.8	11.2	14.3	0.37	1.11	80.0*	83.3*	4.3*	22.4 (-4.8 to 57.3)	1,777	
Hypertensive diseases (I10-I15)	4.7	4.9	5.2	<u>5.9</u>	6.0	5.7	5.8	5.8	6.0	6.1	6.2	6.1	5.6	6.0	6.2	6.3	6.5	6.6	0.11	0.21	40.6*	NA	1.9*	0.8 (0.3 to 1.3) <sup>^</sup>	410	
Liver cancer (C22)	4.0	4.2	4.4	4.5	4.9	5.0	<u>5.4</u>	5.1	5.0	5.3	5.5	5.3	5.7	5.9	6.1	5.5	5.4	5.6	0.10	-0.01	41.8*	NA	2.2*	0.9 (0.1 to 1.8) <sup>^</sup>	333	
Suicide (X60-X84)	7.1	7.0	7.0	7.1	6.9	7.2	6.9	<u>6.7</u>	7.7	7.0	7.3	7.3	7.2	7.3	<u>7.2</u>	8.0	7.7	8.6	0.09	0.29	21.9*	28.9*	1.2*	5.3 (-0.3 to 11.2)	426	
Alcohol poisoning (X45)	0.3	0.2	0.2	0.3	<u>0.2</u>	0.2	<u>0.3</u>	0.2	0.9	<u>1.1</u>	1.1	1.2	1.2	1.1	1.2	1.2	1.3	1.2	0.06	0.00	354.0*	657.7*	10.5*	0.8 (-4.7 to 6.6) <sup>^</sup>	224	
Obesity (E65-E68)	0.8	0.8	0.9	1.0	1.1	1.0	1.0	1.3	1.2	1.3	1.3	1.3	1.3	1.3	1.4	1.5	1.4	1.6	0.05	0.07	106.6*	NA	3.8*	3.8 (3.1 to 4.6) <sup>NIP</sup>	193	
Metabolic disorders (E70-E88)	0.8	0.9	1.0	0.9	1.0	0.8	1.0	1.0	0.9	1.0	1.0	1.1	1.2	1.3	1.1	1.2	1.2	1.3	0.03	0.02	60.0*	NA	2.2*	2.2 (1.5 to 3.0) <sup>NIP</sup>	110	
Misc. nervous system disorders (G90-G98)	1.0	1.1	1.1	<u>1.0</u>	1.1	1.2	1.2	1.1	1.3	1.2	1.3	1.4	1.3	1.3	1.5	1.4	1.6	1.5	0.03	0.03	42.0*	47.6*	2.5*	2.5 (1.9 to 3.0) <sup>NIP</sup>	99	
Pedestrian/cyclist/motorcycle injury (V01-V29)	4.6	4.5	4.9	4.6	5.0	4.6	4.7	<u>4.9</u>	4.6	4.4	<u>3.8</u>	3.9	4.0	4.3	4.3	4.1	4.4	4.9	0.02	0.20	7.5	30.7*	0.1	2.7 (0.8 to 4.6)	114	
Alzheimer's/degenerative disorders (G30-G31)	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.6	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.02	0.02	108.7*	NA	3.2*	3.2 (1.7 to 4.7) <sup>NIP</sup>	62	
Epilepsy/episodic, paroxysmal disorders (G40-G47)	0.3	0.5	0.5	0.6	0.5	0.4	0.5	0.6	0.6	0.5	0.5	0.5	<u>0.4</u>	0.6	0.5	0.6	0.7	0.6	0.02	0.04	78.4*	46.5*	1.5*	1.5 (0.1 to 2.9) <sup>NIP</sup>	56	
Organic mental disorders (F01-F09)	0.2	0.2	0.2	0.2	0.2	UR	0.3	0.4	0.2	0.4	0.4	0.4	0.4	0.6	0.5	0.4	0.4	0.4	NA	0.01	113.9*	NA	Insufficient data		42	
Alcoholic liver disease (K70)	10.4	10.7	10.3	9.6	9.4	<u>8.7</u>	8.7	8.9	9.3	9.1	9.1	9.2	9.4	9.3	<u>9.1</u>	9.9	10.2	10.4	0.00	0.21	0.6	20.3*	-0.2	4.0 (0.6 to 7.5)	131	
Misc. respiratory system disorders (J96-J98) <sup>4</sup>	0.4	0.3	0.3	0.4	0.3	0.3	0.4	<u>0.3</u>	0.4	0.4	0.3	0.4	0.4	0.4	0.5	0.5	0.7	0.5	0.01	0.03	41.8	79.0*	3.2*	3.2 (1.7 to 4.8) <sup>NIP</sup>	40	
Misc. peripheral nervous system diseases (G50-G72) <sup>6</sup>	0.2	0.3	0.2	0.4	0.3	0.2	0.3	0.2	0.3	0.3	0.2	0.4	0.3	0.2	0.3	0.3	0.4	0.4	0.01	0.02	83.7*	NA	2.0*	2.0 (0.3 to 3.7) <sup>NIP</sup>	39	

Misc. land/other transport accidents (V80-V99) <sup>7</sup>	5.4	5.5	5.4	4.0	4.4	4.2	4.2	4.9	5.0	4.5	3.7	3.8	<b>3.4</b>	3.9	4.3	4.4	4.8	5.1	<b>-0.02</b>	0.34	-5.5	49.1*	-0.4	8.8 (3.0 to 15.0) <sup>^</sup>	32	
Mental/behavioral disorders involving psychoactive substances (F10-F19)	5.1	4.7	4.6	4.8	4.9	4.5	5.0	4.8	3.3	2.9	2.8	2.7	<b>2.6</b>	2.6	3.0	3.0	3.0	3.3	<b>-0.11</b>	0.15	-35.4*	28.8*	-2.5	3.4 (1.4 to 5.6) <sup>^</sup>	(355)	
Homicide (X85-Y09)	8.4	8.4	8.1	8.1	8.3	7.8	8.2	7.9	7.5	7.2	6.7	6.0	5.6	5.7	<b>5.3</b>	5.4	5.8	6.4	<b>-0.12</b>	0.16	-23.5*	22.0*	-1.6*	7.0 (2.6 to 11.5) <sup>^</sup>	(408)	
<b>NON-HISPANIC ASIANS AND PACIFIC ISLANDERS</b>																										
Drug overdoses (X40-X44)	0.9	0.9	<b>0.8</b>	1.0	1.2	1.3	1.5	1.6	1.7	1.6	1.6	1.7	2.1	2.4	2.5	2.5	3.1	3.6	<b>0.16</b>	0.30	300.6*	NA	8.2*	11.4 (8.9 to 14.0) <sup>^</sup>	258	
Hypertensive diseases (I10-I15)	3.1	<b>2.6</b>	3.3	3.1	2.9	3.4	3.4	3.3	3.0	3.2	3.0	3.2	3.0	3.0	3.3	3.8	3.7	4.0	<b>0.05</b>	0.19	28.3*	51.9*	1.2*	1.2 (0.3 to 2.0) <sup>NJP</sup>	93	
Alcoholic liver disease (K70)	1.2	1.6	1.4	1.5	1.2	1.3	1.5	1.6	1.6	1.6	1.8	1.4	1.8	1.4	1.7	1.8	2.0	2.0	<b>0.04</b>	0.04	62.9*	NA	2.0*	2.0 (1.0 to 3.1) <sup>NJP</sup>	68	
Brain/central nervous system cancers (C69-C72)	1.3	1.6	1.5	1.8	1.5	1.7	1.5	1.5	1.5	1.5	<b>1.4</b>	1.7	1.5	1.7	1.9	1.8	1.9	2.0	<b>0.04</b>	0.08	56.6*	36.5*	1.4*	1.4 (0.5 to 2.4) <sup>NJP</sup>	61	
Mental/behavioral disorders involving psychoactive substances (F10-F19)	0.6	0.6	0.7	0.9	0.9	0.9	1.0	1.2	0.7	0.6	0.7	<b>0.5</b>	0.7	0.8	0.8	0.9	0.9	0.8	<b>0.01</b>	0.03	39.2	73.1*	2.7	8.2 (3.0 to 13.7)	16	
Suicide (X60-X84)	7.2	6.4	<b>6.0</b>	6.3	6.4	6.9	6.2	6.4	7.0	6.7	7.2	7.7	7.5	7.9	7.5	7.3	7.3	7.8	<b>0.03</b>	0.04	7.4	29.7*	0.7	1.7 (1.1 to 2.3)	73	

†Average year-to-year changes (from 1999 to 2016) in absolute mortality rates (deaths per 100,000). See text for more details.

‡Slopes from fitted model, in which joinpoint analysis<sup>30</sup> was used to plot trend lines that best fit the 17 annual mortality rates (see Methods). *Joinpoints* (grey boxes) are points of inflection when mortality trend lines changed significantly. *APC* = annual percentage rate change, the slope for the interval(s) between joinpoints. *AAPC* = average annual percent change, the slope for the entire (1999-2016) period based on the weighted average of the APCs. For brevity, the table presents APC values only for the final interval ending in 2016 (or the entire 1999-2016 period when there are no joinpoints). Tables S8 of this supplement provide all AAPC values, APC values for every segment, and related 95% confidence intervals and p values. The Joinpoint Chartbook in the online supplement displays the fitted model for each cause of death and racial-ethnic group.

\* Statistically significant changes in mortality (p < 0.05)

<sup>^</sup>APC (slope) for interval ending in 2016 differed significantly (p < 0.05) from slope of preceding period. *NJP* = no joinpoint (i.e., the fitted slope had no significant inflection between 1999 and 2016). Values equal the AAPC for the entire 1999-2016 period.

NA = Not applicable; data were inadequate for calculation

UR=Unreliable data; fewer than 20 deaths from the specified cause of death in the given year and racial-ethnic group.

1. Arrhythmias, cardiomyopathy, heart failure, cardiac arrest, myocarditis, and valvular and pericardial disease.
2. Also includes deaths from submersion, smoke, and flames
3. Disorders of autonomic nervous system, hydrocephalus, toxic encephalopathy, and other disorders of nervous system, not elsewhere classified
4. Respiratory failure, not elsewhere classified, and other respiratory disorders
5. Intestinal infections, tuberculosis, and zoonotic and other bacterial, sexually transmitted, spirochetal, chlamydial, rickettsial, central nervous system, arthropod-borne, and viral hemorrhagic infections
6. Nerve/nerve root/plexus disorders, polyneuropathies and other disorders of the peripheral nervous system, diseases of myoneural junction and muscle
7. Accidents involving other land, water transport, air/space, and other/unspecified transport

Notes: Grey cells with bolded borders denote joinpoints, which demarcate changes in the trend line (slope). Green shading denotes decreasing mortality (downward slopes derived from joinpoint analysis that differ significantly from zero [p < 0.05]). Red shading denotes increasing mortality (upward slopes derived from joinpoint analysis that differ significantly from zero [p < 0.05]). No shading indicates statistically stable trends (slopes that did not differ significantly from zero). Rows with no color and diagonal hashmarks had inadequate data, due to unreported mortality rates for certain years, to perform joinpoint analysis. Nadirs (mortality rates significantly below 2016 rates) are underlined and bolded. See text for methods for calculating average year-to-year increases and excess deaths. Increases in midlife mortality among NH blacks from venous/lymphatic diseases (I80-I89); alcohol poisoning (X45); miscellaneous urinary system diseases, including glomerular and renotubular interstitial diseases and urolithiasis (N00-N15, N20-39); epilepsy/episodic, paroxysmal disorders (G40-G47); miscellaneous endocrine disorders, including thyroid disease (E00-E07, 15-16, 20-34, 40-46); and miscellaneous injuries, such as from mechanical forces and electricity (W20-W64, W75-W99, X10-X39, X50-59) were statistically significant on two-point comparisons but were not confirmed on joinpoint analysis and are not presented here. The same was true for mortality from car accidents (V40-V49) among Hispanics and pedestrian/cyclist/motorcycle injury (V01-V29) among NH Asians and Pacific Islanders. For brevity, data are not shown here for deaths aggregated by broad categories (e.g., circulatory system disorders), those making relatively small contributions to increasing mortality (average year-to-year increase ≤ 0.01/100,000 during 1999-2016), and increases that lacked statistical significance on two-point comparisons (with support from joinpoint analysis). Additional data are available in Tables S2-S4 of the online supplement.

**TABLE S4: MORTALITY RATES FROM ALL CAUSES AND BROAD CATEGORIES OF CAUSES OF DEATH (COMPLETE LIST), AGES 25-64 YEARS, 1999-2016, BY RACE-ETHNICITY**

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Changes in mortality rates					Excess deaths
																			Average absolute year-to-year changes (per 100,000)†		Proportional (%) changes			
																			1999-2016	2012-2016	2016 vs 1999	2016 vs nadir	AAPC‡	
<b>ALL-CAUSE MORTALITY</b>																								
NH AIAN	439.8	<b>425.8</b>	444.6	453.0	474.1	458.7	477.0	464.4	462.2	471.9	477.2	479.7	482.7	492.6	502.6	526.0	548.7	556.8	6.9	14.8	26.6*	30.8*	1.4*	1,531
NH API	177.6	174.1	173.1	164.8	160.4	153.9	155.7	152.4	146.7	144.3	142.1	141.2	142.8	143.8	143.2	139.9	<b>139.3</b>	145.6	-1.9	0.6	-18.0*	4.5*	-1.3*	(2,316)
NH blacks	656.1	646.7	636.7	629.6	623.8	598.1	593.4	577.8	558.1	535.2	523.4	503.5	496.1	491.3	492.8	<b>490.2</b>	495.9	509.8	-8.6	2.7	-22.3*	4.0*	-1.5*	(27,338)
NH whites	338.9	340.6	342.4	341.5	340.6	333.9	336.3	334.5	330.9	333.0	332.2	<b>328.0</b>	332.7	332.4	335.5	341.3	347.1	356.6	1.0	4.8	5.2*	8.7*	0.2*	18,882
Hispanics	284.3	281.7	279.5	274.6	272.8	260.5	261.2	255.2	247.6	241.0	238.0	228.9	<b>224.6</b>	226.5	226.1	225.7	226.8	234.8	-2.9	2.1	-17.4*	4.6*	-1.2*	(9,991)
<b>EXTERNAL CAUSES (V01-Y89)</b>																								
NH AIAN	99.8	<b>94.4</b>	94.5	108.9	109.2	107.4	115.8	120.0	114.4	114.6	120.6	119.9	125.6	133.2	127.4	138.2	147.6	157.2	3.4	6.3	57.5*	66.5*	2.5*	752
NH API	23.6	22.9	21.5	21.6	22.3	21.9	21.7	21.5	21.5	19.8	<b>19.4</b>	20.5	20.5	21.3	20.6	20.3	20.4	22.0	-0.1	0.3	-6.8	13.4*	-0.5	(62)
NH blacks	76.6	76.6	76.4	78.1	77.6	77.1	80.5	83.2	79.5	72.6	69.9	<b>68.0</b>	69.9	71.5	72.9	73.3	81.6	94.1	1.0	4.8	22.8*	38.4*	1.3*	3,845
NH whites	52.8	53.6	56.1	59.8	61.3	63.1	65.3	68.3	70.6	71.4	70.0	71.6	74.5	75.2	76.0	78.9	84.7	93.6	2.4	3.8	77.3*	NA	3.5*	43,733
Hispanics	47.6	46.6	48.0	48.2	48.8	46.9	48.2	49.3	47.5	44.3	42.2	<b>40.6</b>	41.2	41.5	41.8	42.2	45.1	51.4	0.2	2.0	7.9*	26.5*	0.4	1,338
<b>ORGAN DISEASES</b>																								
<b>Diseases of the circulatory system (I00-I99)</b>																								
NH AIAN	91.7	93.2	94.1	90.8	101.2	90.2	96.7	91.1	89.1	<b>87.2</b>	89.3	88.9	90.1	87.2	93.5	94.1	102.0	97.7	0.4	1.5	6.5	12.0*	0.4	81
NH API	52.3	49.6	47.3	45.4	45.2	41.0	42.1	40.8	38.1	37.7	36.7	35.3	35.9	36.0	36.9	35.3	35.1	35.7	-1.0	0.0	-31.7*	NA	-2.1*	(1,259)
NH blacks	202.1	198.9	194.9	191.8	190.1	180.7	177.3	170.6	164.2	159.1	154.7	149.7	145.3	145.2	145.6	144.9	145.4	147.3	-3.2	0.4	-27.1*	NA	-1.9*	(10,313)
NH whites	91.0	89.7	86.8	86.2	84.4	81.0	80.0	78.5	76.3	76.0	74.1	73.6	73.5	<b>73.2</b>	73.4	74.2	74.6	75.6	-0.9	0.4	-17.0*	3.2*	-1.1*	(16,571)
Hispanics	70.6	68.1	64.5	66.4	63.1	61.2	60.5	58.3	56.3	53.2	52.9	51.1	49.4	48.8	48.7	48.5	48.9	49.3	-1.3	0.0	-30.1*	NA	-2.1*	(4,414)
<b>Diseases of the respiratory system (J00-J98)</b>																								
NH AIAN	22.2	22.9	21.8	<b>21.2</b>	26.7	21.6	23.4	21.4	23.2	28.6	30.6	25.1	25.4	24.5	24.8	28.9	27.1	27.1	0.3	0.3	22.0	27.8*	1.4*	62
NH API	5.8	6.1	5.8	5.1	5.2	4.5	4.9	4.4	4.4	4.8	5.5	<b>4.2</b>	4.8	4.5	5.1	5.2	4.6	5.1	0.0	0.1	-11.7	21.5*	-1.1	(35)
NH blacks	29.1	28.5	27.2	26.4	26.5	25.0	25.5	23.5	23.1	24.7	24.6	<b>22.2</b>	22.8	22.6	24.7	24.9	24.2	25.2	-0.2	0.5	-13.5	13.1*	-0.7*	(661)
NH whites	18.7	18.6	18.5	18.2	18.5	17.7	18.6	<b>17.7</b>	17.7	18.9	20.3	18.3	19.5	18.8	20.3	21.3	20.4	21.1	0.1	0.3	12.9*	19.3*	0.7*	2,610
Hispanics	10.4	10.7	9.8	10.0	9.9	9.3	9.7	8.9	8.4	9.1	11.2	9.0	8.6	<b>8.6</b>	9.4	10.1	8.7	9.5	-0.1	0.2	-8.5	10.9*	-0.7	(147)
<b>Diseases of the digestive system (K00-K92)</b>																								
NH AIAN	55.6	<b>53.0</b>	55.5	56.7	58.1	55.8	55.7	54.8	63.2	65.7	60.0	66.1	66.3	69.2	73.2	74.9	79.8	79.0	1.4	2.5	42.1*	49.1*	2.3*	307
NH API	5.5	6.2	5.8	5.9	5.3	5.3	5.8	5.9	5.3	5.6	5.7	5.5	5.5	5.3	5.5	5.2	5.6	5.7	0.0	0.0	2.9	NA	-0.3	16
NH blacks	28.6	28.6	28.2	25.8	26.4	24.9	23.3	22.0	22.5	21.6	21.1	20.6	20.8	20.1	20.7	19.9	19.7	19.6	-0.5	-0.2	-31.4*	NA	-2.4*	(1,698)
NH whites	17.6	17.8	18.2	18.4	18.5	18.2	18.3	18.6	19.0	19.5	19.8	20.2	20.8	21.3	21.7	22.1	22.9	22.6	0.3	0.4	28.8*	NA	1.6*	5,463
Hispanics	24.9	24.5	23.8	23.9	23.6	21.9	21.7	21.6	22.0	22.1	21.8	21.5	21.9	22.3	21.5	22.2	21.8	21.6	-0.2	-0.1	-13.5*	NA	-0.8*	(659)
<b>Endocrine, nutritional and metabolic diseases (E00-E88)</b>																								
NH AIAN	31.9	<b>26.9</b>	27.8	30.7	31.8	30.1	32.3	32.0	27.7	27.9	29.5	32.8	34.5	34.5	33.5	36.6	37.5	39.4	0.4	1.0	23.5*	46.3*	1.5*	105
NH API	6.0	5.9	6.3	5.9	6.3	6.1	6.2	6.5	6.4	6.0	6.3	5.8	5.9	6.4	6.5	6.2	6.3	6.8	0.1	0.2	15.1	NA	0.4	89
NH blacks	33.3	32.1	32.6	33.7	33.3	32.0	32.2	31.8	30.9	28.6	<b>28.5</b>	28.5	29.7	28.6	29.8	30.7	31.8	32.2	-0.1	0.5	-3.5	12.9*	-0.2	(146)
NH whites	12.7	13.3	13.5	14.0	14.1	13.9	14.2	14.2	13.9	13.9	14.0	13.7	<b>14.7</b>	14.4	14.9	15.4	16.0	16.1	0.2	0.3	26.4*	NA	1.4*	3,590
Hispanics	16.2	16.2	16.1	16.0	16.7	14.8	15.7	14.3	14.1	13.9	13.3	13.3	<b>13.2</b>	13.4	13.6	13.7	13.6	14.4	-0.1	0.2	-11.3*	8.9*	-1.0*	(326)
<b>Mental and behavioral disorders (F01-F99)</b>																								
NH AIAN	17.7	14.2	16.6	14.7	18.4	18.4	17.5	18.9	13.3	13.7	12.1	<b>11.7</b>	13.1	14.6	13.8	17.9	17.7	17.7	0.0	0.9	-0.1	51.8*	0.9	5
NH API	0.7	0.9	0.8	1.1	1.2	1.1	1.2	1.5	1.0	1.0	1.0	0.9	0.9	1.2	1.1	1.1	1.2	1.2	0.0	0.1	68.8	NA	2.3	41
NH blacks	9.8	9.3	9.7	9.1	9.0	8.5	8.5	9.3	6.9	6.0	<b>5.8</b>	5.9	5.7	<b>5.7</b>	6.0	6.0	5.9	6.5	-0.2	0.2	-33.6*	14.5*	-2.6*	(605)
NH whites	4.6	4.8	5.0	5.3	5.6	6.0	6.1	6.5	5.1	5.1	<b>4.9</b>	5.3	5.5	5.8	6.0	6.3	6.7	7.4	0.2	0.4	61.1*	51.0*	2.7*	2,996
Hispanics	5.5	5.1	4.9	5.2	5.2	4.8	5.5	5.4	3.7	3.5	3.3	3.3	<b>3.2</b>	3.3	3.8	3.6	3.6	3.9	-0.1	0.1	-29.1*	22.0*	-1.8	(312)
<b>Diseases of the nervous system (G00-G98)</b>																								
NH AIAN	5.5	5.9	7.2	<b>5.4</b>	5.8	7.3	8.5	7.5	7.7	8.4	9.2	7.6	9.2	7.7	9.9	9.5	11.0	10.9	0.3	0.4	99.8*	19.5*	3.7*	70
NH API	2.2	2.3	2.2	2.3	2.3	<b>1.9</b>	2.4	2.3	2.2	2.7	2.3	2.5	2.3	2.7	3.1	2.9	2.8	2.8	0.0	0.1	27.6	47.5*	1.7*	55
NH blacks	10.2	10.5	10.6	10.6	11.1	10.7	11.2	11.2	11.0	11.3	11.6	11.0	11.0	11.9	11.6	12.6	12.3	12.2	0.1	0.2	20.4*	NA	1.0*	399
NH whites	7.1	7.6	7.6	7.8	7.9	7.9	8.3	8.3	8.4	8.6	8.8	8.8	8.8	8.9	9.3	9.3	9.5	9.8	0.2	0.2	38.9*	NA	1.6*	2,955
Hispanics	3.7	4.2	3.9	4.3	4.6	4.3	4.5	4.5	4.6	4.5	4.6	4.5	4.6	4.5	5.0	4.8	5.2	5.2	0.1	0.1	40.4*	NA	1.4*	336
<b>Diseases of the genitourinary system (N00-N98)</b>																								
NH AIAN	8.1	8.7	10.5	9.2	9.1	8.2	7.5	9.4	8.3	9.7	8.7	8.6	<b>7.3</b>	7.7	8.5	10.5	10.1	10.4	0.1	0.6	29.0*	42.5*	0.4	30
NH API	2.4	2.3	2.8	2.5	2.1	2.2	2.4	2.4	2.3	2.5	2.2	2.3	2.0	2.1	2.3	2.1	2.3	2.3	0.0	0.1	-7.9	NA	-0.7	(14)
NH blacks	14.7	15.2	15.5	15.5	16.4	16.2	15.6	15.5	15.1	14.9	14.3	14.3	12.9	13.2	13.0	<b>12.7</b>	13.6	13.8	-0.1	0.2	-6.1	8.1*	-0.4	(193)
NH whites	3.4	3.5	3.6	3.7	3.9	3.9	3.9	4.1	4.0	4.0	4.1	4.1	<b>3.8</b>	3.9	4.0	4.1	4.4	4.6	0.1	0.1	35.7*	18.9*	1.8*	1,278
Hispanics	4.7	4.4	4.5	4.6	4.9	4.8	4.7	5.0	4.8	5.1	5.2	4.8	4.2	4.4	4.2	4.2	4.4	4.7	0.0	0.1	-0.8	NA	0.2	(5)
<b>Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99)</b>																								
NH AIAN	UR	UR	UR	UR	UR	UR	1.7	UR	UR	UR	UR	1.6	UR	1.5	1.5	1.5	1.6	2.3	NA	0.2	NA	NA	NA	10
NH API	0.6	0.6																						

NH whites	1.0	1.1	1.1	1.2	1.1	1.1	1.1	1.0	1.1	1.1	1.1	1.0	1.2	1.2	1.1	1.2	1.2	1.2	0.0	0.0	14.7*	NA	0.5*	161
Hispanics	1.2	1.3	1.2	1.2	1.2	1.1	1.1	1.1	0.9	1.0	1.1	1.0	0.9	0.9	1.1	1.2	1.0	1.0	0.0	0.0	-16.3	NA	-0.9	(38)
<b>Diseases of the skin and subcutaneous tissue (L00-L98)</b>																								
NH AIAN	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	1.4	1.4	UR	1.9	NA	NA	NA	NA	NA	-
NH API	UR	UR	UR	UR	UR	UR	UR	0.3	UR	UR	UR	UR	0.3	0.3	0.2	0.2	UR	0.3	NA	NA	NA	NA	NA	(5)
NH blacks	1.4	1.2	1.3	1.5	1.6	1.4	1.3	1.1	1.2	1.1	1.2	1.1	1.1	1.2	1.1	1.0	1.2	1.1	0.0	0.0	-18.2	NA	-1.5*	(47)
NH whites	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.0	0.0	65.0*	NA	2.6*	227
Hispanics	0.3	0.4	0.5	0.4	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.0	0.0	47.4	NA	-0.5	27
<b>Pregnancy, childbirth and the puerperium (O00-O99)</b>																								
NH AIAN	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	NA	NA	NA	NA	NA
NH API	UR	UR	UR	UR	0.3	0.3	0.4	0.5	0.4	0.3	0.3	0.4	0.4	0.3	0.4	0.4	0.4	0.4	NA	0.1	NA	NA	NA	16
NH blacks	0.6	0.6	0.6	0.6	0.8	0.9	1.0	1.0	0.9	1.0	1.1	1.1	1.2	1.4	1.5	1.5	1.5	1.6	0.1	0.3	167.9*	NA	6.4*	192
NH whites	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.5	0.5	0.5	0.6	0.0	0.1	411.0*	NA	12.2*	482
Hispanics	0.3	0.3	0.3	<b>0.3</b>	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.3	0.5	0.5	0.5	0.5	0.5	0.0	0.2	101.5*	106.3*	3.3*	60
<b>Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99)</b>																								
NH AIAN	5.7	7.4	8.1	8.5	6.9	5.5	6.0	4.8	6.7	7.8	5.3	6.4	6.7	8.0	7.4	8.0	5.8	7.6	0.1	0.2	32.5	NA	0.3	23
NH API	1.5	2.4	3.1	1.3	1.2	1.3	1.2	1.3	1.0	1.2	1.5	1.0	1.2	1.3	1.2	1.4	1.1	1.3	0.0	0.0	-17.2	NA	-2.6*	(25)
NH blacks	10.3	11.2	10.4	10.0	9.9	7.8	8.6	6.7	7.1	8.1	9.2	6.3	5.7	6.2	5.7	<u>5.7</u>	5.9	6.4	-0.2	0.1	-37.4*	12.2*	-3.9*	(722)
NH whites	4.5	6.3	6.7	5.4	5.6	4.6	5.2	4.3	<b>3.9</b>	5.0	6.0	4.0	4.0	4.4	4.4	4.2	4.4	4.5	0.0	0.1	-0.4	15.4*	-1.7*	(50)
Hispanics	3.0	6.3	6.3	3.4	3.1	3.2	3.2	2.7	2.9	3.2	3.0	2.3	<u>2.1</u>	2.5	2.5	2.5	2.7	3.1	0.0	0.2	6.5	51.2*	-3.4*	9

† Average year-to-year changes (from 1999 to 2016) in absolute mortality rates (deaths per 100,000). See text for more details.

‡ AAPC = average annual percent change, based on joinpoint analysis (see Methods). See Table S8 for complete jointpoint data (including relevant APC values for each segment) and the Joinpoint Chartbook for displays of the fitted model by cause of death and racial-ethnic group.

\* Statistically significant changes in mortality ( $p < 0.05$ )

NA = Not applicable; data were inadequate for calculation

UR = Unreliable data; fewer than 20 deaths from the specified cause of death in the given year and racial-ethnic group.

Notes: Nadirs (mortality rates significantly below 2016 rates) are underlined and bolded. See text for methods for calculating average year-to-year increases and excess deaths. No statistically significant increases by race-ethnicity were reported at the broad categorical level for neoplasms (C00-D48), infectious and parasitic diseases (A00-B99), and diseases of the musculoskeletal system and connective tissue (M00-M99). Data were suppressed (unreliable) by race-ethnicity for diseases of the eye and adnexa (H00-H57), diseases of the ear and mastoid process (H60-H93), certain conditions originating in the perinatal period (P00-P96), and codes for special purposes (U00-U99).



**TABLE S5: MORTALITY RATES FROM EXTERNAL CAUSES (COMPLETE LIST), AGES 25-64 YEARS, 1999-2016, BY RACE-ETHNICITY**

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Changes in mortality rates					Excess deaths
																			Average absolute year-to-year changes (per 100,000)†		Proportional (%) changes			
																			1999-2016	2012-2016	2016 vs 1999	2016 vs nadir	AAPC	
<b>Accidental drug poisoning (X40-X44)</b>																								
NH AIAN	7.0	6.7	8.1	10.6	13.6	15.5	17.1	17.8	18.0	20.5	24.9	23.4	24.8	28.0	27.0	31.0	32.7	35.9	1.70	2.22	411.4*	NA	10.9*	370
NH API	0.9	0.9	0.8	1.0	1.2	1.3	1.5	1.6	1.7	1.6	1.6	1.7	2.1	2.4	2.5	2.5	3.1	3.6	0.16	0.30	300.6*	NA	8.2*	258
NH blacks	10.2	10.0	10.4	11.4	11.4	11.8	13.8	16.3	14.1	12.1	11.9	<u>11.6</u>	12.9	12.9	14.5	15.5	18.1	25.5	0.90	2.51	149.6*	119.1*	5.8*	3,187
NH whites	6.2	6.8	7.7	10.1	11.4	12.6	14.2	16.7	18.1	18.7	19.2	20.3	22.4	22.4	24.0	26.3	30.1	37.0	1.81	2.91	494.3*	NA	11.1*	33,003
Hispanics	7.9	6.6	6.2	7.4	7.8	7.1	8.0	9.1	8.4	8.2	8.2	<u>7.8</u>	8.7	9.0	9.6	9.8	11.2	14.3	0.37	1.11	80.0*	83.3*	4.3*	1,777
<b>Accidental alcohol poisoning (X45)</b>																								
NH AIAN	2.2	UR	UR	UR	UR	UR	UR	2.1	4.6	7.6	8.2	9.3	9.1	9.8	9.7	9.8	9.9	10.2	NA	0.21	366.6*	NA	NA	104
NH API	UR	UR	UR	UR	UR	UR	UR	UR	UR	0.3	0.2	0.3	0.3	0.3	0.4	0.2	0.2	0.3	NA	0.02	NA	NA	NA	7
NH blacks	0.2	0.2	0.2	0.3	0.2	0.1	<u>0.1</u>	0.2	0.5	0.7	0.8	0.8	0.7	0.8	0.8	0.9	0.9	0.8	0.03	0.02	242.0*	461.5*	7.6	116
NH whites	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.7	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	0.06	0.01	674.5*	NA	12.3*	1,146
Hispanics	0.3	0.2	0.2	0.3	<u>0.2</u>	0.2	0.3	0.2	0.9	1.1	1.1	1.2	1.2	1.1	1.2	1.2	1.3	1.2	0.06	0.00	354.0*	657.7*	10.5*	224
<b>Suicide (X60-X84)</b>																								
NH AIAN	14.9	15.5	17.2	16.8	16.6	20.4	18.6	18.6	18.6	18.5	19.3	20.6	21.4	21.7	23.6	24.0	25.8	28.4	0.80	1.40	91.2*	NA	3.5*	176
NH API	7.2	6.4	<u>6.0</u>	6.3	6.4	6.9	6.2	6.4	7.0	6.7	7.2	7.7	7.5	7.9	7.5	7.3	7.3	7.8	0.03	0.04	7.4	29.7*	0.7	73
NH blacks	7.2	7.1	7.2	7.3	7.1	7.2	7.1	7.0	7.0	<u>7.0</u>	7.1	7.4	7.5	7.8	7.6	7.5	7.6	8.2	0.06	0.14	13.7*	17.7*	0.6*	213
NH whites	15.6	15.7	16.6	17.3	17.4	17.7	17.7	18.4	19.2	20.0	20.4	21.1	21.6	22.1	22.1	22.7	23.5	23.3	0.45	0.35	49.4*	NA	2.5*	8,300
Hispanics	7.1	7.0	7.0	7.1	6.9	7.2	6.9	<u>6.7</u>	7.7	7.0	7.3	7.3	7.2	7.3	7.2	8.0	7.7	8.6	0.09	0.29	21.9*	28.9*	1.2*	426
<b>Homicide (X85-Y09)</b>																								
NH AIAN	13.5	10.3	<u>9.3</u>	12.0	10.0	9.9	11.0	11.6	10.1	11.8	11.1	12.0	11.7	11.9	11.9	12.2	13.4	14.5	0.06	0.56	7.6*	55.3*	1.2*	19
NH API	3.4	3.6	3.1	3.2	3.0	2.8	2.9	2.9	2.5	2.0	2.3	2.2	2.2	2.3	1.9	1.9	1.8	2.1	-0.07	-0.02	-37.5*	NA	-3.7*	(101)
NH blacks	22.8	23.6	23.7	25.1	25.1	24.5	25.6	26.2	25.5	23.4	22.2	21.8	21.9	23.2	22.9	<u>21.7</u>	25.5	27.6	0.29	1.15	21.4*	27.2*	1.1	1,005
NH whites	3.5	3.4	3.6	3.5	3.3	3.4	3.3	3.3	3.5	3.6	3.2	<u>3.1</u>	3.2	3.3	3.1	3.1	3.4	3.8	0.01	0.11	7.2*	21.8*	0.4	267
Hispanics	8.4	8.4	8.1	8.1	8.3	7.8	8.2	7.9	7.5	7.2	6.7	6.0	5.6	5.7	<u>5.3</u>	5.4	5.8	6.4	-0.12	0.16	-23.5*	22.0*	-1.6*	(408)
<b>Accidental falls, drowning, fire (W00-W19, W65-W74, X00-X09)</b>																								
NH AIAN	8.3	9.2	8.2	9.8	9.0	8.8	9.6	8.0	8.1	<u>7.8</u>	8.4	8.9	8.6	11.0	10.6	10.7	9.8	11.6	0.19	0.59	39.3	49.0*	1.3	43
NH API	1.9	2.0	2.0	1.8	1.9	1.9	1.9	2.3	2.3	1.8	1.9	1.9	2.0	2.0	2.2	2.1	1.8	2.0	0.01	-0.01	5.1	NA	0.2	5
NH blacks	5.6	5.4	5.5	5.0	5.0	5.3	4.9	4.7	4.6	4.3	4.6	4.3	4.4	4.1	4.1	4.0	4.1	4.3	-0.08	-0.02	-24.0*	NA	-1.9*	(249)
NH whites	3.7	3.8	3.8	3.9	4.0	4.1	4.2	4.2	4.3	4.2	4.2	4.4	4.2	4.2	4.3	4.4	4.3	4.4	0.04	0.03	19.4*	NA	1.0*	768
Hispanics	3.4	3.3	3.6	3.6	3.6	3.5	3.5	3.8	3.5	3.4	3.2	3.2	3.4	3.0	3.1	3.1	3.2	3.4	0.00	0.00	1.7	NA	-0.3	11

Pedestrian, cyclist, and motorcycle injury in transport accident (V01-V29)																								
NH AIAN	9.7	8.7	9.6	10.0	10.1	9.9	10.7	12.3	10.7	10.9	9.6	9.0	9.7	11.9	10.2	9.7	11.6	11.8	0.14	0.42	21.4	NA	0.8	28
NH API	1.7	1.8	1.6	1.9	1.5	1.9	2.0	1.9	1.8	1.6	<u>1.4</u>	1.7	1.5	1.6	1.7	1.7	1.7	2.1	0.03	0.13	28.2	54.3*	0.3	46
NH blacks	5.4	5.5	5.5	5.4	5.6	5.8	6.0	6.0	6.1	5.7	5.1	<u>4.9</u>	5.1	5.5	5.7	5.5	6.4	6.6	0.06	0.31	23.7*	36.5*	1.2	203
NH whites	3.4	3.5	3.8	4.0	4.1	4.4	4.6	4.9	4.8	4.9	4.4	4.3	4.4	4.7	4.3	4.3	4.7	5.1	0.09	0.14	50.1*	NA	2.4*	1,404
Hispanics	4.6	4.5	4.9	4.6	5.0	4.6	4.7	4.9	4.6	4.4	<u>3.8</u>	3.9	4.0	4.3	4.3	4.1	4.4	4.9	0.02	0.20	7.5	30.7*	0.1	114
Other land transport and water, air, space, and other/unspecified transport accidents (V80-V99)																								
NH AIAN	13.4	14.5	13.2	15.5	14.8	13.4	15.3	16.8	15.0	13.0	13.4	12.2	14.8	13.5	13.2	15.7	16.1	15.0	0.09	0.04	11.9	NA	0.2	20
NH API	3.2	2.9	2.7	2.3	2.7	2.5	2.3	2.0	2.0	2.1	1.9	1.7	1.8	1.6	1.8	1.8	1.8	1.9	-0.08	0.02	-42.7*	NA	-2.7*	(100)
NH blacks	6.4	6.7	6.1	5.3	5.8	5.7	5.5	6.2	5.7	5.4	5.8	5.7	<u>5.2</u>	5.8	6.3	6.4	6.9	7.5	0.07	0.45	17.7*	42.8*	1.1	264
NH whites	6.7	6.8	6.5	6.1	5.9	6.3	6.5	6.6	6.5	6.3	<u>5.9</u>	6.2	5.9	6.5	6.6	6.6	7.0	7.2	0.03	0.27	7.8*	23.5*	0.2	561
Hispanics	5.4	5.5	5.4	4.0	4.4	4.2	4.2	4.9	5.0	4.5	3.7	3.8	<u>3.4</u>	3.9	4.3	4.4	4.8	5.1	-0.02	0.34	-5.5	49.1*	0.4	32

† Average year-to-year changes (from 1999 to 2016) in absolute mortality rates (deaths per 100,000). See text for more details.

‡ AAPC = average annual percent change, based on joinpoint analysis (see Methods). See Table S8 for complete jointpoint data (including relevant APC values for each segment) and the Joinpoint Chartbook for displays of the fitted model by cause of death and racial-ethnic group.

\* Statistically significant changes in mortality ( $p < 0.05$ )

NA = Not applicable; data were inadequate for calculation

UR = Unreliable data; fewer than 20 deaths from the specified cause of death in the given year and racial-ethnic group.

Notes: Nadirs (mortality rates significantly below 2016 rates) are underlined and bolded. See text for methods for calculating average year-to-year increases and excess deaths.

TABLE S6: MORTALITY RATES FOR ORGAN DISEASES (COMPLETE LIST), AGES 25-64 YEARS 1999-2016, BY RACE-ETHNICITY

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Changes in mortality rates					Excess deaths
																			Average absolute year-to-year changes (per 100,000)†		Proportional (%) changes			
																			1999-2016	2012-2016	2016 vs 1999	2016 vs nadir	AAPC	
<b>Hypertensive diseases (I10-I15)</b>																								
NH AIAN	3.9	4.3	4.1	4.1	7.3	7.7	7.2	8.1	7.7	8.0	9.5	10.1	9.3	9.5	12.4	13.5	13.8	14.3	0.61	1.01	269.3*	NA	7.8*	134
NH API	3.1	<u>2.6</u>	3.3	3.1	2.9	3.4	3.4	3.3	3.0	3.2	3.0	3.2	3.0	3.0	3.3	3.8	3.7	4.0	0.05	0.19	28.3*	51.9*	1.2*	93
NH blacks	24.7	25.1	25.4	26.7	28.4	28.0	26.8	26.9	26.6	27.4	28.0	26.9	26.5	27.3	27.4	27.7	28.2	28.5	0.23	0.40	15.5*	NA	0.7*	725
NH whites	3.8	4.0	4.3	4.8	5.2	5.3	5.5	5.8	5.8	6.4	6.6	6.6	7.0	7.2	7.7	8.2	8.4	8.8	0.29	0.36	129.8*	NA	5.1*	5,318
Hispanics	4.7	4.9	5.2	5.9	6.0	5.7	5.8	5.8	6.0	6.1	6.2	6.1	5.6	6.0	6.2	6.3	6.5	6.6	0.11	0.21	40.6*	NA	1.9*	410
<b>Arrhythmias, heart failure, and other forms of heart disease (I30-I51)</b>																								
NH AIAN	15.7	15.7	16.3	<u>14.9</u>	18.2	16.0	17.2	17.4	17.5	17.4	17.1	17.4	16.1	16.2	17.6	15.7	20.5	20.1	0.26	0.79	27.7	34.9*	0.9*	57
NH API	6.4	6.3	5.7	6.3	5.1	5.5	6.1	5.4	4.9	5.1	5.2	4.9	4.9	5.3	5.7	5.6	5.3	5.1	-0.08	0.03	-20.5*	NA	-1.0*	(102)
NH blacks	37.7	35.6	35.8	35.4	35.0	33.7	33.8	32.6	32.4	31.7	30.9	30.1	<u>28.3</u>	29.0	30.2	30.3	31.2	32.2	-0.32	0.78	-14.5*	13.8*	-0.9*	(948)
NH whites	14.2	13.8	13.7	13.8	13.6	13.3	13.4	13.4	13.2	<u>13.0</u>	13.1	13.3	13.4	13.3	13.8	14.1	14.6	15.0	0.05	0.33	6.0*	15.6*	0.4*	916
Hispanics	9.4	8.8	8.4	8.3	9.0	8.0	8.1	8.1	8.1	7.6	8.0	7.9	8.0	7.6	8.0	8.0	7.8	8.2	-0.07	0.05	-12.7*	NA	-0.7*	(187)
<b>Pulmonary heart disease (I26-I28)</b>																								
NH AIAN	2.8	2.0	2.1	1.9	3.2	2.2	2.6	2.7	2.3	1.9	2.2	2.5	2.7	1.8	1.8	2.4	2.4	2.9	0.00	0.03	2.4	NA	-0.1	2
NH API	0.8	0.8	0.8	0.5	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.7	0.4	0.5	0.7	-0.01	0.04	-16.8	NA	-2.0*	(5)
NH blacks	6.3	5.9	6.0	5.9	6.0	5.5	5.6	5.2	4.7	<u>4.7</u>	5.3	5.1	5.1	5.3	5.1	5.2	5.5	5.5	-0.05	0.09	-12.3	17.9*	-0.8*	(126)
NH whites	2.5	2.6	2.6	2.6	2.6	2.4	2.4	2.2	<u>2.1</u>	2.2	2.2	2.2	2.2	2.2	2.4	2.3	2.5	2.5	0.01	0.06	3.6	19.7*	0.0	93
Hispanics	1.4	1.5	1.4	1.4	1.4	1.4	1.2	1.2	1.1	1.1	1.2	1.0	1.1	1.0	1.0	1.1	1.2	1.2	-0.01	0.02	-13.5	NA	-0.9	(28)
<b>Diseases of veins, lymphatic vessels and lymph nodes (I80-I89)</b>																								
NH AIAN	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR
NH API	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	2.3	NA	NA	NA	NA	NA	NA
NH blacks	1.5	2.1	2.0	2.2	2.2	2.3	2.2	1.9	2.0	2.0	1.9	2.1	2.2	1.8	2.3	2.3	2.1	2.3	0.05	0.02	51.9*	NA	0.7	146
NH whites	0.7	0.9	0.8	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.9	0.9	1.0	1.0	1.0	0.9	0.9	1.0	0.02	0.01	51.5*	NA	1.3*	376
Hispanics	0.6	0.7	0.5	0.6	0.7	0.7	0.8	0.5	0.6	0.6	0.6	0.7	0.6	0.7	0.5	0.6	0.5	0.5	-0.01	-0.01	-17.7*	NA	-0.8	(32)
<b>Alcoholic liver disease (K70)</b>																								
NH AIAN	29.3	<u>27.3</u>	27.6	28.7	29.8	27.6	29.3	28.9	33.6	34.9	32.5	39.3	38.8	41.4	44.7	44.5	50.3	48.6	1.14	1.96	65.9*	78.0*	3.5*	254
NH API	1.2	1.6	1.4	1.5	1.2	1.3	1.5	1.6	1.6	1.6	1.8	1.4	1.8	1.4	1.7	1.8	2.0	2.0	0.04	0.04	62.9*	NA	2.0*	68
NH blacks	7.7	7.2	6.8	5.8	5.8	5.4	5.1	<u>4.3</u>	4.9	4.8	4.5	4.7	5.0	4.6	4.9	5.0	5.3	5.2	-0.14	0.04	-31.6*	20.4*	-2.3*	(418)
NH whites	5.8	5.9	5.9	<u>5.8</u>	5.9	6.0	6.0	6.1	6.8	6.9	7.0	7.3	7.6	7.9	8.2	8.5	9.2	9.4	0.21	0.37	62.4*	63.0*	2.9*	3,901
Hispanics	10.4	10.7	10.3	9.6	9.4	<u>8.7</u>	8.7	8.9	9.3	9.1	9.1	9.2	9.4	9.3	9.1	9.9	10.2	10.4	0.00	0.21	0.6	20.3*	-0.2	131
<b>Liver cancer (C22)</b>																								
NH AIAN	3.2	4.6	4.1	3.5	4.9	5.5	4.2	4.3	5.7	5.4	5.5	5.4	5.7	6.4	7.6	5.7	7.4	6.8	0.21	0.22	115.1*	NA	4.0*	45
NH API	8.2	7.7	6.8	7.3	6.7	6.9	6.3	6.3	6.3	5.8	5.9	5.7	6.4	6.1	6.0	5.7	5.6	5.4	-0.16	-0.21	-34.0*	NA	-2.0*	(225)
NH blacks	4.8	5.4	5.4	5.4	5.9	5.9	6.5	6.6	6.5	7.0	7.5	7.7	7.7	7.6	7.7	7.6	7.2	7.2	0.14	-0.10	49.5*	NA	2.2*	430
NH whites	2.2	2.4	2.4	2.6	2.7	2.8	3.0	3.0	3.2	3.4	3.6	3.7	4.0	4.1	4.1	4.1	4.2	4.0	0.11	0.01	80.0*	NA	3.7*	1,931
Hispanics	4.0	4.2	4.4	4.5	4.9	5.0	5.4	5.1	5.0	5.3	5.5	5.3	5.7	5.9	6.1	5.5	5.4	5.6	0.10	-0.01	41.8*	NA	2.2*	333
<b>Pancreatic cancer (C25)</b>																								
NH AIAN	3.2	4.2	2.8	4.1	4.0	5.5	4.0	3.5	4.4	3.9	4.4	5.4	4.4	5.0	4.4	4.1	4.5	4.9	0.11	0.11	56.7	NA	1.8*	22
NH API	3.4	2.7	3.0	3.1	3.3	3.5	3.4	3.1	3.0	2.9	3.0	2.8	3.2	3.1	2.8	2.8	2.9	3.3	-0.01	0.03	-2.7	NA	-0.4	8
NH blacks	8.1	7.6	7.3	7.6	7.9	7.7	7.6	7.6	7.6	7.6	7.4	7.2	<u>7.1</u>	7.5	7.3	7.4	7.6	7.8	-0.01	0.15	-3.1	10.6*	-0.2	(29)
NH whites	5.3	5.3	5.3	5.2	<u>5.1</u>	5.3	5.4	5.4	5.4	5.4	5.5	5.6	5.4	5.5	5.4	5.6	5.5	5.5	0.01	0.03	3.3	7.6*	0.3*	188
Hispanics	3.7	3.6	3.7	3.7	3.8	3.7	4.0	3.7	3.6	3.8	3.7	3.8	3.8	3.9	3.7	3.9	3.9	3.8	0.01	0.01	2.6	NA	0.3*	24
<b>Chronic lower respiratory diseases (J40-J47)</b>																								

NH AIAN	9.4	9.9	9.5	9.4	12.4	10.5	10.7	9.9	11.5	12.2	11.0	11.6	10.9	11.8	10.8	11.6	13.5	12.3	0.17	0.28	30.9	NA	1.4*	36
NH API	2.7	2.5	2.7	2.1	2.2	1.7	1.7	1.7	1.7	1.8	1.5	1.4	1.7	1.6	1.8	1.6	1.4	1.5	-0.07	-0.03	-44.2*	NA	-3.6*	(91)
NH blacks	13.7	13.4	12.4	12.4	12.0	11.5	11.9	11.1	10.6	11.3	11.0	10.8	10.8	11.0	11.5	11.3	11.3	11.7	-0.12	0.17	-14.7*	9.5*	-1.0*	(339)
NH whites	11.5	11.0	11.2	10.9	11.1	10.5	11.1	10.6	10.7	11.4	11.4	11.1	11.5	11.5	11.8	12.0	12.2	12.3	0.04	0.17	6.6*	17.1*	0.5*	835
Hispanics	4.1	3.7	3.7	3.7	3.5	3.3	3.3	3.0	2.9	3.1	3.0	3.2	2.9	2.8	3.1	2.7	2.9	3.1	-0.06	0.04	-24.8*	NA	-1.8*	(183)
<b>Lung diseases due to external agents (J60-J70)</b>																								
NH AIAN	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	1.7	1.9	UR	1.7	UR	1.9	2.2	2.1	NA	NA	NA	NA	NA	6
NH API	UR	UR	UR	UR	UR	0.3	UR	UR	UR	0.2	UR	0.2	0.2	0.3	0.4	0.3	0.3	0.4	NA	0.03	NA	NA	NA	16
NH blacks	1.6	1.5	1.4	1.4	1.6	1.5	1.5	1.3	1.4	1.4	1.4	1.2	1.4	1.4	1.5	1.5	1.5	1.6	0.00	0.05	-1.1	30.1*	0.1	4
NH whites	0.8	0.9	0.9	0.9	1.0	0.9	1.0	1.0	0.9	1.0	1.0	1.0	1.1	1.1	1.2	1.2	1.3	1.3	0.03	0.04	60.3*	NA	2.4*	542
Hispanics	0.4	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.6	0.6	0.6	0.7	0.7	0.01	0.03	57.4	NA	1.2*	53
<b>Diabetes mellitus (E10-E14)</b>																								
NH AIAN	28.6	23.1	23.1	26.6	27.9	25.8	25.8	26.1	22.6	22.4	22.5	25.3	27.6	26.7	26.8	27.8	29.1	30.9	0.13	0.66	7.9	37.7*	0.9	38
NH API	5.1	4.9	5.2	4.8	5.0	5.0	5.1	5.3	5.0	4.8	4.8	4.6	4.6	5.0	5.0	4.9	4.8	5.3	0.01	0.13	2.5	NA	-0.2	24
NH blacks	27.1	25.6	26.1	26.3	26.5	24.7	24.7	24.5	23.4	21.2	21.2	21.1	21.9	21.0	21.7	21.6	22.3	22.4	-0.28	0.10	-17.3*	7.0*	-1.1	(852)
NH whites	9.3	9.5	9.7	9.8	9.9	9.7	9.7	9.6	9.3	9.2	9.1	8.9	9.6	9.2	9.5	9.8	10.2	10.1	0.05	0.11	8.9*	14.2*	0.5*	879
Hispanics	14.3	14.1	14.0	13.8	14.3	12.7	13.4	11.6	11.7	11.3	10.6	10.5	10.3	10.5	10.7	10.7	10.8	11.1	-0.18	0.16	-22.0*	NA	-1.5*	(629)
<b>Obesity (E65-E68)</b>																								
NH AIAN	UR	UR	1.9	1.8	1.9	2.0	3.2	2.5	2.6	3.4	4.0	4.3	3.5	4.3	4.0	4.8	4.3	4.1	NA	0.11	NA	NA	NA	27
NH API	UR	UR	UR	UR	0.3	UR	UR	0.4	0.3	0.3	0.4	0.4	0.3	0.2	0.4	0.3	0.5	0.4	NA	0.03	NA	NA	NA	6
NH blacks	2.3	2.8	3.0	3.3	3.1	3.6	3.8	3.6	3.7	3.7	3.6	3.7	4.1	3.8	3.9	4.7	4.9	5.1	0.16	0.20	120.7*	NA	4.8*	545
NH whites	1.2	1.4	1.5	1.7	1.8	1.8	2.0	2.0	2.0	2.2	2.2	2.2	2.3	2.4	2.4	2.5	2.7	2.7	0.09	0.08	124.6*	NA	4.9*	1,616
Hispanics	0.8	0.8	0.9	1.0	1.1	1.0	1.0	1.3	1.2	1.3	1.3	1.3	1.3	1.3	1.4	1.5	1.4	1.6	0.05	0.07	106.6*	NA	3.8*	193
<b>Metabolic disorders (E70-E88)</b>																								
NH AIAN	UR	2.0	1.9	1.8	UR	UR	2.4	3.0	1.8	1.8	2.1	2.6	2.4	2.9	2.2	3.4	3.5	3.4	NA	0.21	NA	NA	NA	11
NH API	0.6	0.6	0.7	0.6	0.9	0.6	0.7	0.7	0.8	0.8	0.8	0.6	0.9	0.9	0.9	0.8	0.7	0.8	0.02	0.00	48.4	NA	2.0*	22
NH blacks	2.4	2.5	2.4	2.7	2.6	2.5	2.6	2.5	2.7	2.6	2.7	2.6	2.8	2.8	2.9	3.2	3.4	3.5	0.06	0.13	43.2*	47.2*	2.0*	216
NH whites	1.7	1.8	1.9	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.3	2.4	2.5	2.6	2.5	0.05	0.05	46.2*	NA	2.2*	858
Hispanics	0.8	0.9	1.0	0.9	1.0	0.8	1.0	1.0	0.9	1.0	1.0	1.1	1.2	1.3	1.1	1.2	1.2	1.3	0.03	0.02	60.0*	NA	-0.8	110
<b>Renal failure (N17-N19)</b>																								
NH AIAN	6.0	6.6	8.4	7.2	7.0	6.5	6.4	7.7	6.4	8.1	6.9	6.4	5.6	5.5	6.4	7.2	6.8	7.4	0.08	0.36	23.3	NA	-0.3	17
NH API	1.9	1.7	2.2	2.0	1.6	1.8	1.7	1.8	1.7	1.8	1.7	1.8	1.4	1.5	1.7	1.7	1.8	1.7	-0.01	0.05	-10.8	NA	-0.9*	(16)
NH blacks	12.3	13.0	13.2	13.2	14.0	13.9	13.3	13.1	12.6	12.3	11.8	11.5	11.1	11.1	10.8	10.6	11.2	11.3	-0.06	0.04	-8.4*	NA	-0.6*	(225)
NH whites	2.4	2.7	2.8	2.8	2.9	3.0	2.9	3.0	2.9	3.0	3.0	3.0	2.9	2.8	2.9	2.9	3.1	3.2	0.05	0.08	33.7*	13.5*	1.6*	865
Hispanics	3.6	3.5	3.5	3.8	4.1	3.9	3.8	3.9	3.7	4.0	4.1	3.8	3.3	3.5	3.3	3.3	3.4	3.7	0.01	0.08	2.9	NA	-0.1	22
<b>Intestinal, tuberculosis, zoonotic and other bacterial, sexually transmitted, spirochaetal, chlamydial, rickettsial, central nervous system, arthropod-borne, viral hemorrhagic diseases (A00-A99)</b>																								
NH AIAN	8.0	7.9	7.3	8.3	9.9	9.1	8.3	9.4	9.8	9.1	8.9	9.1	10.7	8.7	11.2	11.1	11.2	10.1	0.13	-0.12	26.6	NA	1.9*	26
NH API	2.2	2.0	2.0	2.2	2.3	2.4	1.8	2.1	2.1	2.1	2.2	2.0	2.3	2.0	2.1	2.1	2.3	2.2	0.00	-0.02	0.0	NA	0.1	6
NH blacks	12.2	12.5	12.5	12.5	12.7	12.3	12.0	12.3	11.9	12.0	11.7	11.0	10.9	10.5	11.0	10.6	11.2	11.5	-0.04	0.12	-5.8	8.9*	-0.6	(134)
NH whites	3.7	3.8	3.9	4.2	4.3	4.4	4.4	4.3	4.6	4.8	4.9	4.7	5.0	5.0	5.3	5.5	5.6	5.7	0.12	0.14	53.9*	NA	2.4*	2,149
Hispanics	3.8	3.7	3.7	3.7	3.9	4.0	3.9	4.0	3.8	3.9	4.6	4.1	4.3	4.4	4.1	4.5	4.2	4.1	0.02	-0.03	8.1	NA	1.0*	65
<b>Viral hepatitis (B15-B19)</b>																								
NH AIAN	2.3	4.5	3.4	4.0	4.5	4.2	3.6	6.1	6.5	5.8	6.6	5.5	5.5	6.1	6.9	6.0	5.2	4.8	0.15	-0.12	112.1*	NA	3.7*	29
NH API	2.7	3.2	2.2	2.2	1.6	1.5	1.4	2.0	1.8	1.7	1.5	1.6	1.7	1.5	1.3	1.4	0.8	1.0	-0.10	-0.14	-64.4*	NA	-5.0*	(149)
NH blacks	3.4	3.8	4.0	4.0	3.9	3.9	3.7	4.5	4.2	4.3	4.1	3.9	4.0	3.8	3.6	3.4	3.0	2.3	-0.07	-0.34	-33.4*	NA	-2.6*	(269)
NH whites	1.8	2.1	2.2	2.4	2.3	2.3	2.3	2.9	3.0	3.0	3.1	2.9	2.9	2.9	2.8	2.8	2.5	2.0	0.02	-0.18	14.3*	NA	0.5	275
Hispanics	3.8	4.1	4.5	4.1	3.6	3.6	3.8	5.2	4.9	5.0	4.4	4.4	4.3	4.3	4.0	3.4	3.2	2.5	-0.08	-0.36	-35.2*	NA	-2.4*	(429)

† Average year-to-year changes (from 1999 to 2016) in absolute mortality rates (deaths per 100,000). See text for more details.

‡ AAPC = average annual percent change, based on joinpoint analysis (see Methods). See Table S8 for complete joinpoint data (including relevant APC values for each segment) and the Joinpoint Chartbook for displays of the fitted model by cause of death and racial-ethnic group.

\* Statistically significant changes in mortality ( $p < 0.05$ )

NA = Not applicable; data were inadequate for calculation

UR = Unreliable data; fewer than 20 deaths from the specified cause of death in the given year and racial-ethnic group.

Notes: Nadirs (mortality rates significantly below 2016 rates) are underlined and bolded. See text for methods for calculating average year-to-year increases and excess deaths. See Table S4 for data on mental and neurologic disorders.

**POPULATION COUNTS**

<b>NH AIAN</b>	1113901	1153524	1163639	1177990	1191091	1206481	1222947	1240569	1257653	1275568	1292267	1305000	1321909	1331083	1341390	1354145	1367725	1382239
<b>NH API</b>	6105344	6354702	6733095	7029318	7311631	7598836	7897582	8202921	8489069	8762777	9017656	9201040	9477611	9815121	10107361	10532411	10932171	11115806
<b>NH blacks</b>	16999288	17226565	17521576	17776524	18017965	18321119	18635226	18965114	19280761	19578626	19874806	20104215	20397485	20627062	20852311	21168905	21483586	21753829
<b>NH whites</b>	105547575	105772008	106147193	106468658	106713073	107110016	107556206	108018235	108299657	108342914	108470953	108602705	108715096	108062690	107626908	107252241	107020536	106675849
<b>Hispanics</b>	15844820	16486088	17449334	18233331	18993140	19765613	20589625	21428413	22250926	23057584	23828159	24411039	25286694	25844725	26453270	27258367	27988947	28469499

**TABLE S7: MORTALITY RATES FOR MENTAL AND NEUROLOGIC DISORDERS (COMPLETE LIST), AGES 25-64 YEARS, 1999-2016, BY RACE-ETHNICITY**

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Changes in mortality rates					Excess deaths	
																			Average absolute year-to-year changes (per 100,000)†		Proportional (%) changes				
																			1999-2016	2012-2016	2016 vs 1999	2016 vs nadir	AAPC		
<b>Mental and behavioral disorders due to psychoactive substance use (F10-F19)</b>																									
NH AIAN	17.3	14.0	16.0	13.8	17.9	17.8	16.7	18.1	12.2	13.4	11.7	<u>10.7</u>	12.3	14.0	13.0	17.2	16.9	17.3	0.00	1.02	0.2	61.8*	1.1	-	
NH API	0.6	0.6	0.7	0.9	0.9	0.9	1.0	1.2	0.7	0.6	0.7	<u>0.5</u>	0.7	0.8	0.8	0.9	0.9	0.8	0.01	0.03	39.2	73.1*	2.7	3	
NH blacks	9.0	8.5	8.7	8.3	8.0	7.5	7.5	7.8	5.4	4.6	4.6	4.4	4.2	<u>4.0</u>	4.3	4.4	4.3	4.9	-0.24	0.13	-45.1*	23.3*	-3.9*	(311)	
NH whites	4.0	4.1	4.3	4.6	4.9	5.2	5.3	5.5	4.0	3.9	<u>3.8</u>	4.1	4.3	4.5	4.7	5.1	5.6	6.3	0.14	0.40	58.9*	66.7*	2.6*	480	
Hispanics	5.1	4.7	4.6	4.8	4.9	4.5	5.0	4.8	3.3	2.9	2.8	2.7	<u>2.6</u>	2.6	3.0	3.0	3.0	3.3	-0.11	0.15	-35.4*	28.8*	-2.5*	(1,956)	
<b>Organic mental disorders, including vascular dementia (F01-F09)</b>																									
NH AIAN	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR
NH API	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	0.2	0.3	UR	UR	0.2	NA	NA	NA	NA	NA	0
NH blacks	0.3	0.5	0.4	0.4	0.5	0.4	0.5	0.9	0.9	0.9	0.7	1.0	1.0	1.1	1.3	1.1	1.0	0.9	0.04	-0.02	215.3*	NA	6.2*	48	
NH whites	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.7	0.6	0.02	-0.03	185.9*	NA	6.1*	74	
Hispanics	0.2	0.2	0.2	0.2	0.2	UR	0.3	0.4	0.2	0.4	0.4	0.4	0.4	0.6	0.5	0.4	0.4	0.4	NA	0.01	113.9*	NA	NA	209	
<b>Episodic and paroxysmal disorders, including epilepsy (G40-G47)</b>																									
NH AIAN	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	1.7	UR	1.6	UR	1.6	1.9	1.6	2.1	NA	NA	NA	NA	NA	-
NH API	UR	UR	UR	UR	UR	UR	UR	UR	UR	0.3	UR	UR	0.2	UR	0.3	0.3	0.4	0.3	0.3	NA	NA	NA	NA	NA	0
NH blacks	1.5	1.3	1.4	1.4	1.5	1.4	1.5	1.4	1.4	<u>1.2</u>	1.5	1.3	1.3	1.6	1.5	1.6	1.5	1.6	0.00	0.05	2.4	26.3*	0.5*	8	
NH whites	0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.9	0.8	0.8	0.8	0.9	0.9	0.9	1.0	0.02	0.04	60.6*	NA	2.4*	74	
Hispanics	0.3	0.5	0.5	0.6	0.5	0.4	0.5	0.6	0.6	0.5	0.5	0.5	<u>0.4</u>	0.6	0.5	0.6	0.7	0.6	0.02	0.04	78.4*	46.5*	1.5*	290	
<b>Cerebral palsy and other paralytic syndromes (G80-G83)</b>																									
NH AIAN	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	1.6	UR	UR	UR	1.7	UR	1.5	1.3	NA	NA	NA	NA	NA	-
NH API	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	UR	0.2	0.2	NA	NA	NA	NA	NA	(1)
NH blacks	0.6	0.7	0.9	1.0	0.9	0.9	1.1	1.0	1.0	1.1	1.0	1.1	1.0	0.9	1.0	1.0	1.2	1.2	0.03	0.03	93.4*	NA	3.5*	47	
NH whites	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	<u>0.8</u>	0.9	0.8	0.9	0.9	0.02	0.02	59.1*	15.3*	3.2*	62	
Hispanics	0.3	0.2	0.3	0.4	0.4	0.3	0.4	0.4	0.4	0.5	0.5	0.4	0.3	0.4	0.4	0.5	0.5	0.4	0.01	0.01	39.9	NA	2.9*	118	
<b>Other disorders of the nervous system (G90-G98)</b>																									
NH AIAN	UR	UR	2.5	UR	<u>1.7</u>	2.2	2.7	2.1	2.5	2.8	2.4	2.9	3.2	3.1	2.6	2.7	2.8	3.5	NA	0.05	NA	108.9*	NA	-	
NH API	0.6	0.6	0.8	0.7	0.6	0.5	0.7	0.8	0.6	0.8	0.7	0.7	0.6	0.8	1.1	0.8	0.8	0.9	0.01	0.05	32.8	NA	1.8*	3	
NH blacks	3.7	3.7	3.5	3.5	3.8	3.8	3.9	4.0	4.0	4.4	4.4	4.3	4.2	4.7	4.6	5.0	5.0	5.1	0.08	0.17	35.8*	NA	2.2*	126	
NH whites	1.3	1.3	1.3	<u>1.4</u>	1.4	1.4	1.4	1.6	1.7	1.8	1.9	1.9	1.9	2.0	2.1	2.2	2.3	2.3	0.06	0.08	78.5*	NA	3.5*	199	
Hispanics	1.0	1.1	1.1	<u>1.0</u>	1.1	1.2	1.2	1.1	1.3	1.2	1.3	1.4	1.3	1.3	1.5	1.4	1.6	1.5	0.03	0.03	42.0*	47.6*	2.5*	470	

† Average year-to-year changes (from 1999 to 2016) in absolute mortality rates (deaths per 100,000). See text for more details.

‡ AAPC = average annual percent change, based on joinpoint analysis (see Methods). See Table S8 for complete joinpoint data (including relevant APC values for each segment) and the Joinpoint Chartbook for displays of the fitted model by cause of death and racial-ethnic group.

\* Statistically significant changes in mortality (p < 0.05)

NA = Not applicable; data were inadequate for calculation

UR = Unreliable data; fewer than 20 deaths from the specified cause of death in the given year and racial-ethnic group.

Notes: Nadirs (mortality rates significantly below 2016 rates) are underlined and bolded. See text for methods for calculating average year-to-year increases and excess deaths.

**POPULATION COUNTS**

<b>NH AIAN</b>	1113901	1153524	1163639	1177990	1191091	1206481	1222947	1240569	1257653	1275568	1292267	1305000	1321909	1331083	1341390	1354145	1367725	1382239
<b>NH API</b>	6105344	6354702	6733095	7029318	7311631	7598836	7897582	8202921	8489069	8762777	9017656	9201040	9477611	9815121	10107361	10532411	10932171	11115806
<b>NH blacks</b>	16999288	17226565	17521576	17776524	18017965	18321119	18635226	18965114	19280761	19578626	19874806	20104215	20397485	20627062	20852311	21168905	21483586	21753829
<b>NH whites</b>	105547575	105772008	106147193	106468658	106713073	107110016	107556206	108018235	108299657	108342914	108470953	108602705	108715096	108062690	107626908	107252241	107020536	106675849
<b>Hispanics</b>	15844820	16486088	17449334	18233331	18993140	19765613	20589625	21428413	22250926	23057584	23828159	24411039	25286694	25844725	26453270	27258367	27988947	28469499

## SUPPLEMENTAL FIGURES S1-S25

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**Figure S23: Diseases of the respiratory system (see Figure S5)**

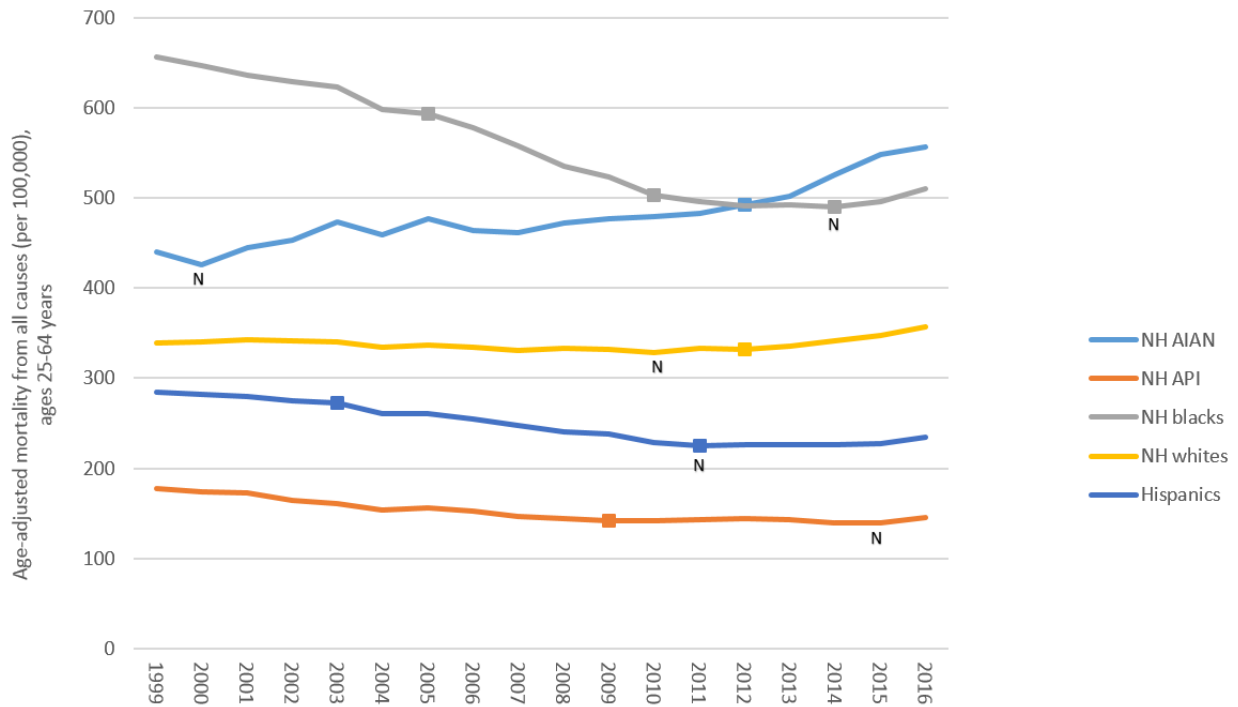
**Figure S24: Mental and behavioral disorders involving psychoactive substances**

**Figure S25: Homicides**

ICD-10 codes in parentheses. *NOC* = not elsewhere classified. In this analysis, causes of death were classified into 20 broad categories. Graphs are not included for four categories with unreliable data (due to small death counts): (1) eye and adnexal diseases (ICD-10 codes H00-H57); (2) ear and mastoid diseases (H60-H93); (3) perinatal conditions (P00-P96); and (4) codes for special purposes (U00-U99).

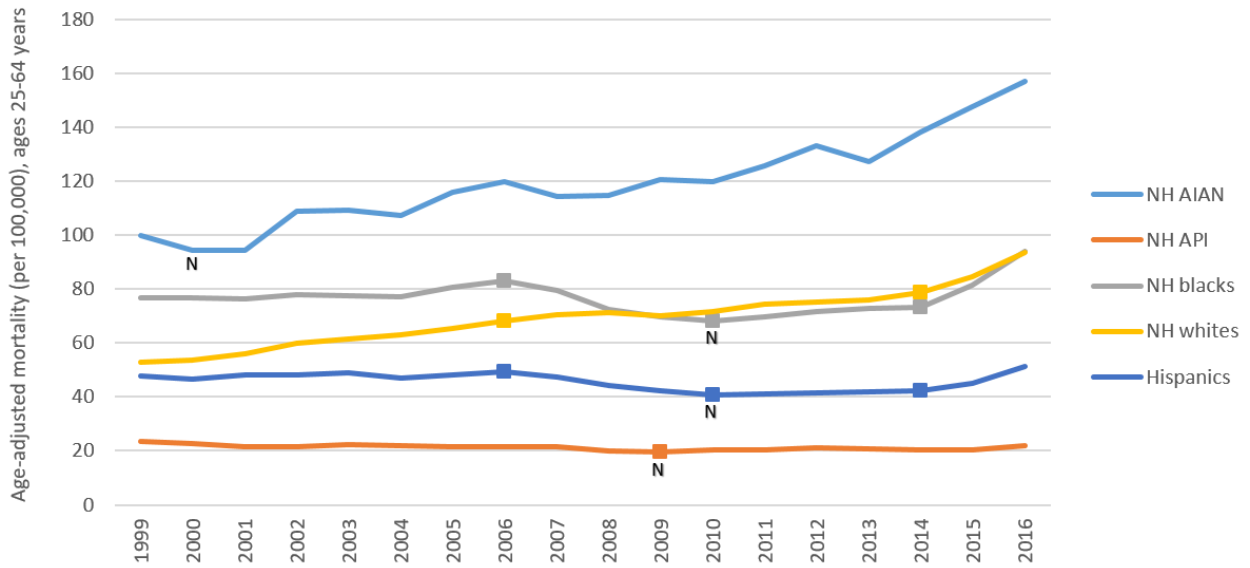


**Figure S1. All-cause mortality, US adults ages 25-64 years, 1999-2016, by race-ethnicity**



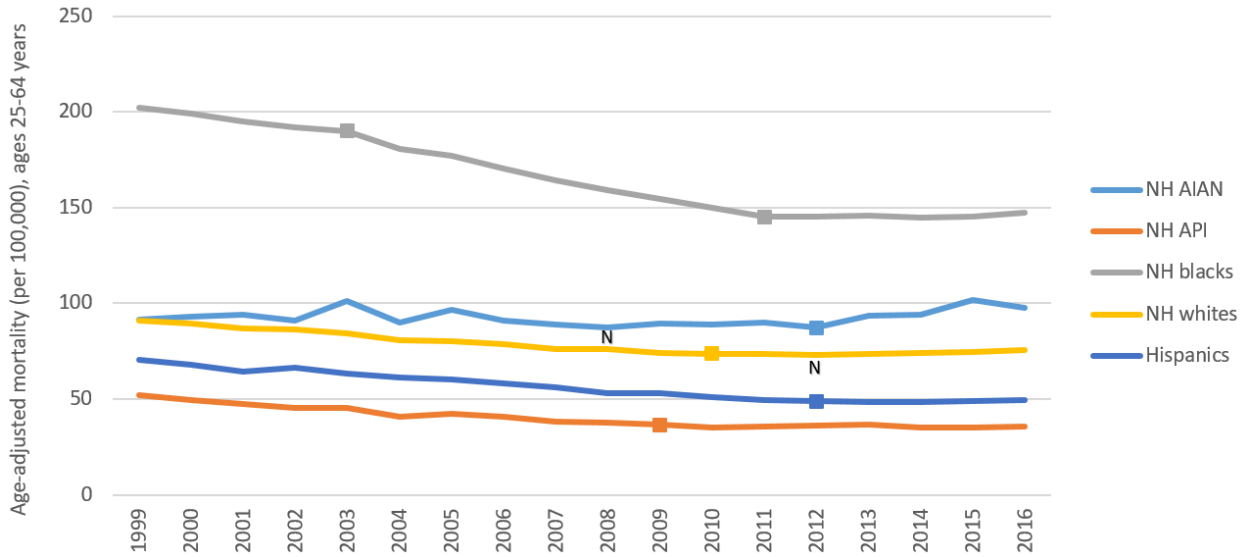
Notes: *AIAN* = Non-Hispanic American Indians and Alaskan Natives, *API* = NH Asians and Pacific Islanders, *N* = nadir (all-cause mortality rate significantly less than that of 2016), *NH* = Non-Hispanic. Square symbols (□) denote *joinpoints*, points of inflection when mortality trend lines (not shown) changed significantly ( $p < 0.05$ ). The trend lines, plotted by Joinpoint Regression Software, are displayed in the Jointpoint Chartbook later in this supplement.

**Figure S2. Age-adjusted mortality from external causes (V01-Y89), US adults ages 25-64 years, 1999-2016, by race-ethnicity**



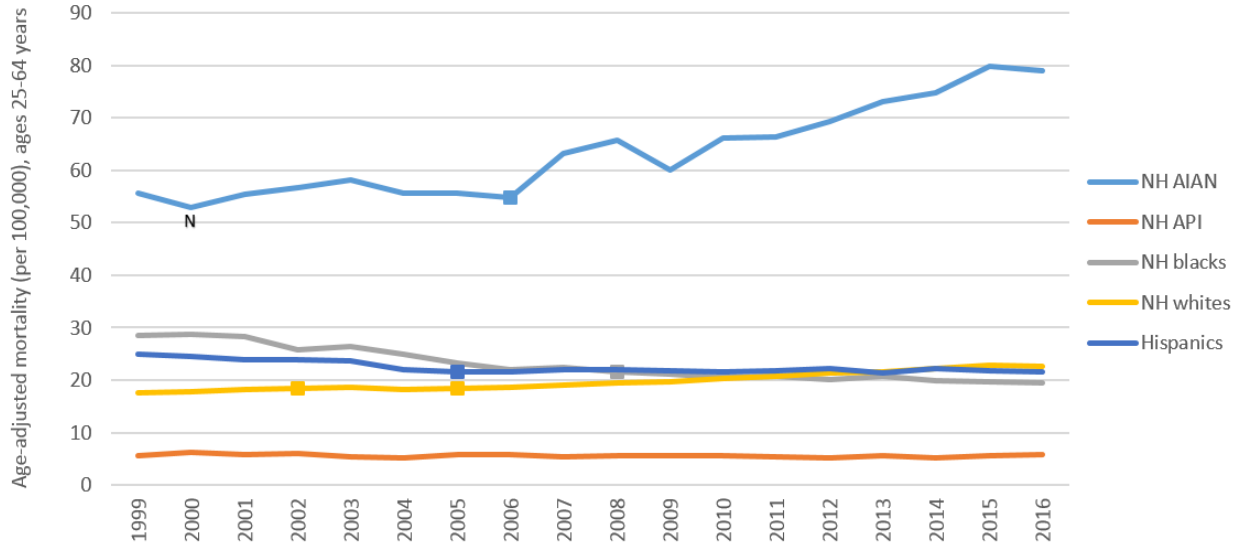
Notes: *AIAN* = Non-Hispanic American Indians and Alaskan Natives, *API* = NH Asians and Pacific Islanders, *N* = nadir (all-cause mortality rate significantly less than that of 2016), *NH* = Non-Hispanic. Square symbols (□) denote *joinpoints*, points of inflection when mortality trend lines (not shown) changed significantly ( $p < 0.05$ ). The trend lines, plotted by Joinpoint Regression Software, are displayed in the Jointpoint Chartbook later in this supplement.

**Figure S3. Age-adjusted mortality from diseases of the circulatory system (I00-I99), US adults ages 25-64 years, 1999-2016, by race-ethnicity**



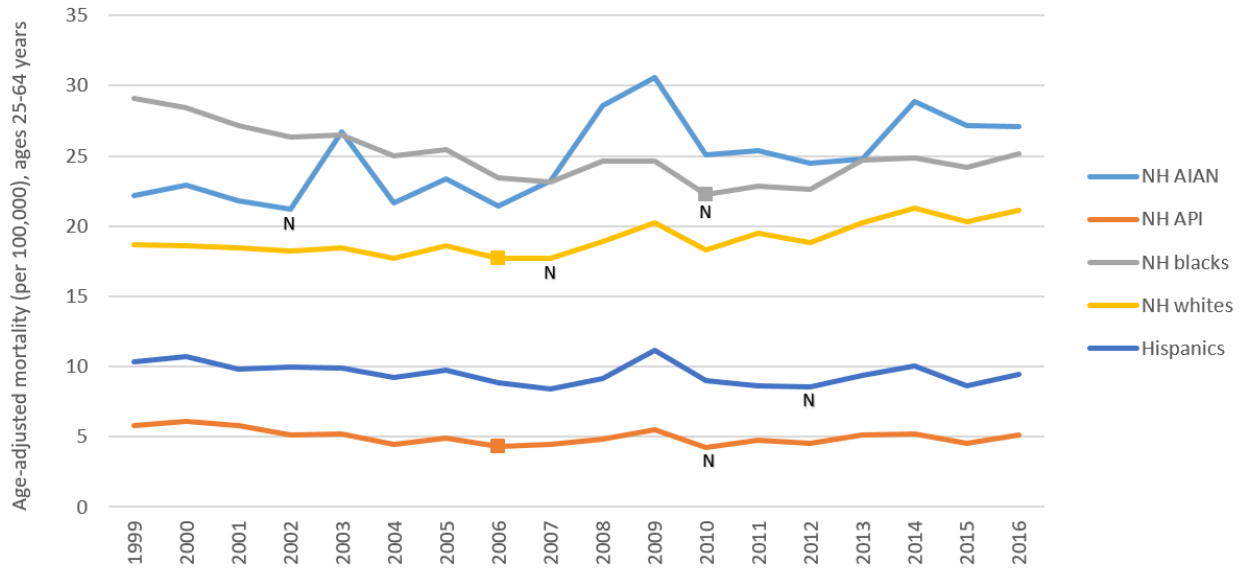
Notes: *AIAN* = Non-Hispanic American Indians and Alaskan Natives, *API* = NH Asians and Pacific Islanders, *N* = nadir (all-cause mortality rate significantly less than that of 2016), *NH* = Non-Hispanic. Square symbols (□) denote *joinpoints*, points of inflection when mortality trend lines (not shown) changed significantly ( $p < 0.05$ ). The trend lines, plotted by Joinpoint Regression Software, are displayed in the Jointpoint Chartbook later in this supplement.

**Figure S4. Age-adjusted mortality from diseases of the digestive system (K00-K92), US adults ages 25-64 years, 1999-2016, by race-ethnicity**



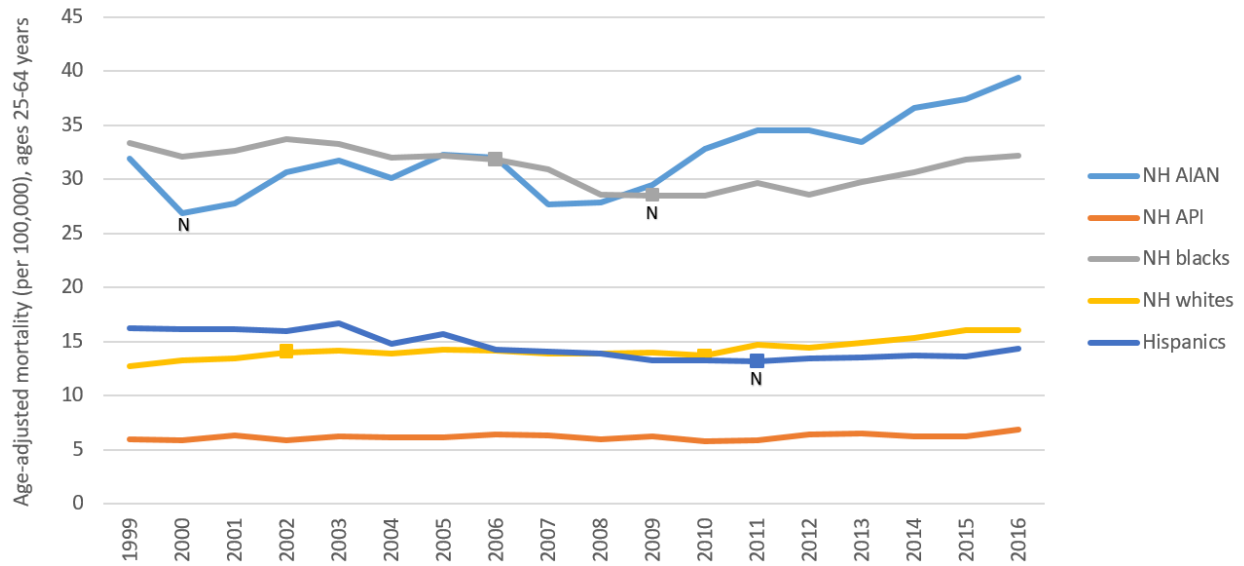
Notes: *AIAN* = Non-Hispanic American Indians and Alaskan Natives, *API* = NH Asians and Pacific Islanders, *N* = nadir (all-cause mortality rate significantly less than that of 2016), *NH* = Non-Hispanic. Square symbols (□) denote *joinpoints*, points of inflection when mortality trend lines (not shown) changed significantly ( $p < 0.05$ ). The trend lines, plotted by Joinpoint Regression Software, are displayed in the Jointpoint Chartbook later in this supplement.

**Figure S5. Age-adjusted mortality from diseases of the respiratory system (J00-J98), US adults ages 25-64 years, 1999-2016, by race-ethnicity**



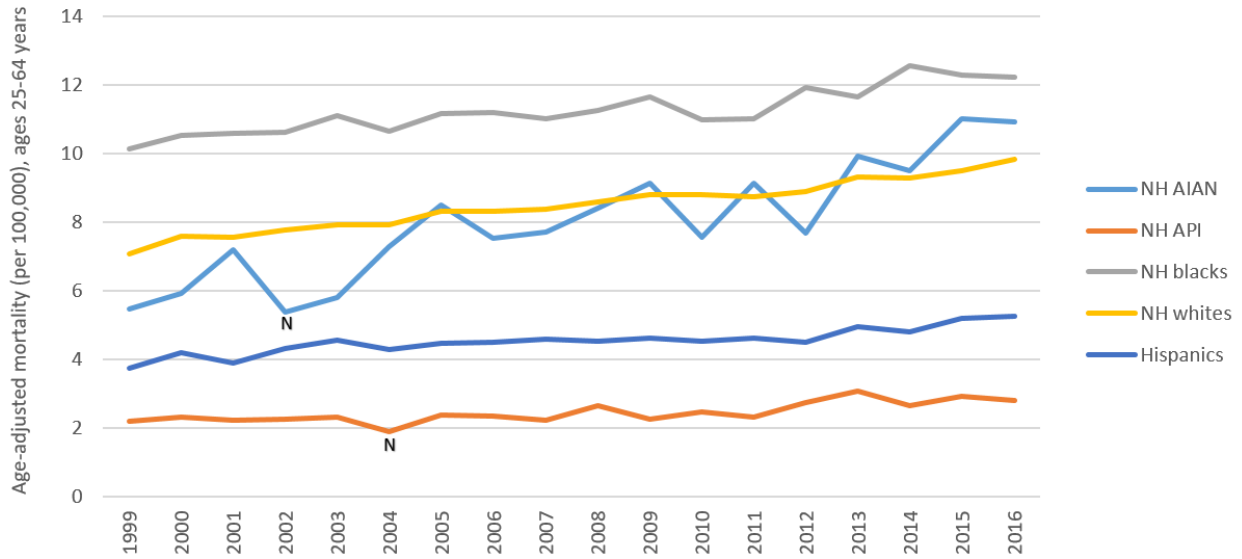
Notes: *AIAN* = Non-Hispanic American Indians and Alaskan Natives, *API* = NH Asians and Pacific Islanders, *N* = nadir (all-cause mortality rate significantly less than that of 2016), *NH* = Non-Hispanic. Square symbols (□) denote *joinpoints*, points of inflection when mortality trend lines (not shown) changed significantly ( $p < 0.05$ ). The trend lines, plotted by Joinpoint Regression Software, are displayed in the Jointpoint Chartbook later in this supplement.

**Figure S6. Age-adjusted mortality from endocrine, nutritional and metabolic diseases (E00-E88), US adults ages 25-64 years, 1999-2016, by race-ethnicity**



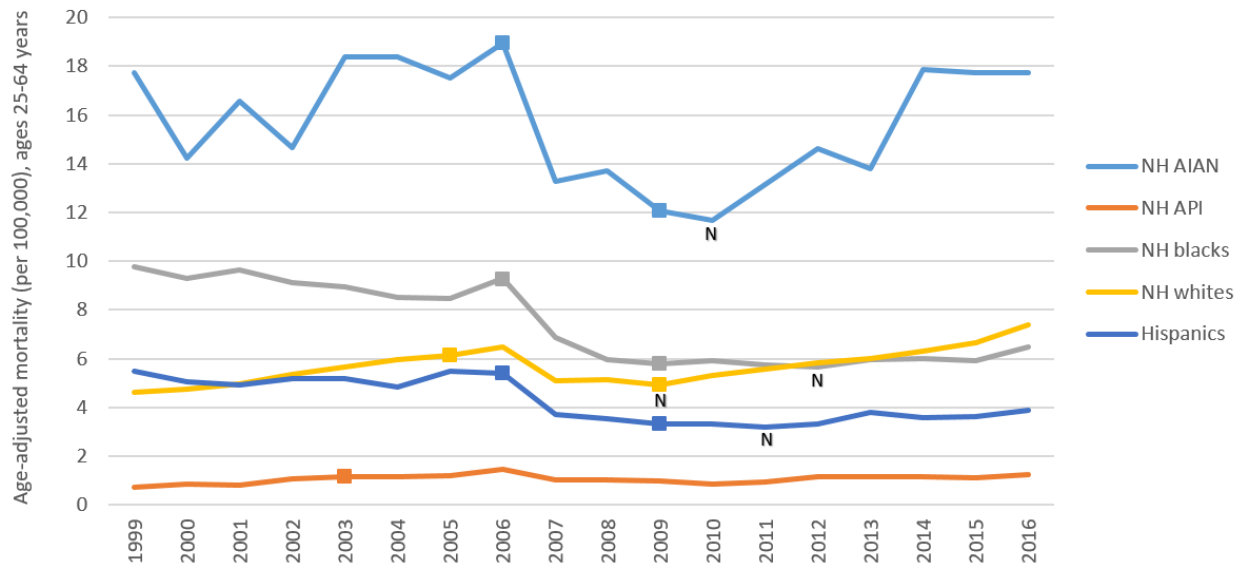
Notes: *AIAN* = Non-Hispanic American Indians and Alaskan Natives, *API* = NH Asians and Pacific Islanders, *N* = nadir (all-cause mortality rate significantly less than that of 2016), *NH* = Non-Hispanic. Square symbols (□) denote *joinpoints*, points of inflection when mortality trend lines (not shown) changed significantly ( $p < 0.05$ ). The trend lines, plotted by Joinpoint Regression Software, are displayed in the Jointpoint Chartbook later in this supplement.

**Figure S7. Age-adjusted mortality from diseases of the nervous system (G00-G98), US adults ages 25-64 years, 1999-2016, by race-ethnicity**



Notes: *AIAN* = Non-Hispanic American Indians and Alaskan Natives, *API* = NH Asians and Pacific Islanders, *N* = nadir (all-cause mortality rate significantly less than that of 2016), *NH* = Non-Hispanic. Square symbols (□) denote *joinpoints*, points of inflection when mortality trend lines (not shown) changed significantly ( $p < 0.05$ ). The trend lines, plotted by Joinpoint Regression Software, are displayed in the Jointpoint Chartbook later in this supplement.

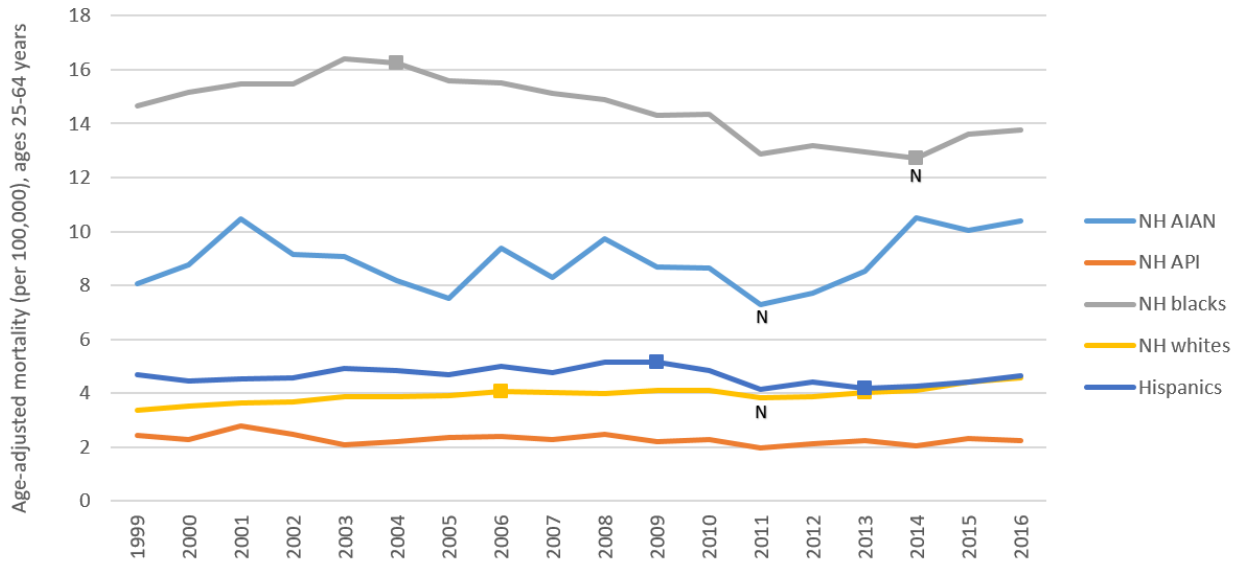
**Figure S8. Age-adjusted mortality from mental and behavioral disorders (F01-F99), US adults ages 25-64 years, 1999-2016, by race-ethnicity**



Notes: *AIAN* = Non-Hispanic American Indians and Alaskan Natives, *API* = NH Asians and Pacific Islanders, *N* = nadir (all-cause mortality rate significantly less than that of 2016), *NH* = Non-Hispanic. Square symbols (□) denote *joinpoints*, points of inflection when mortality trend lines (not shown) changed significantly ( $p < 0.05$ ). The trend lines, plotted by Joinpoint Regression Software, are displayed in the Jointpoint Chartbook later in this supplement.

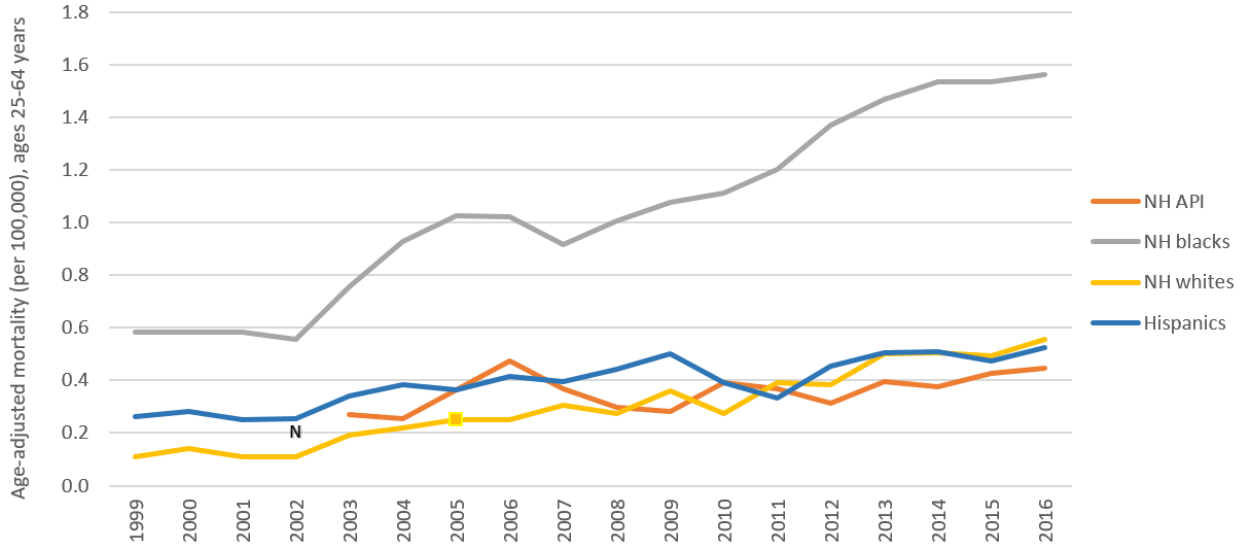


**Figure S9. Age-adjusted mortality from diseases of the genitourinary system (N00-N98), US adults ages 25-64 years, 1999-2016, by race-ethnicity**



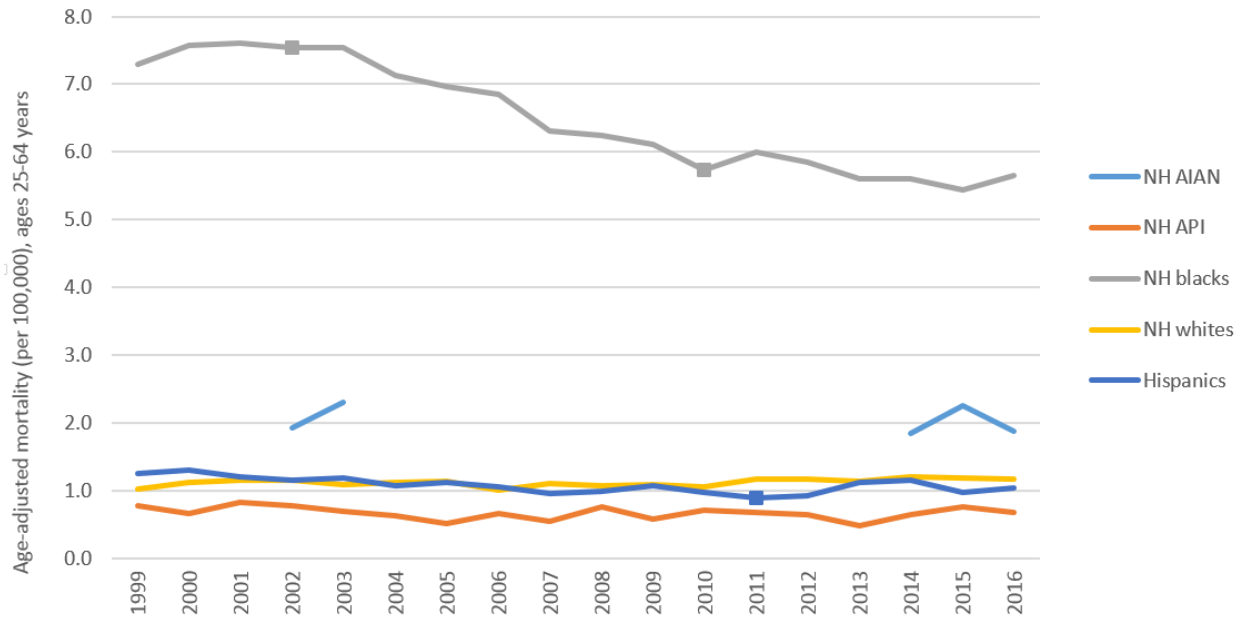
Notes: *AIAN* = Non-Hispanic American Indians and Alaskan Natives, *API* = NH Asians and Pacific Islanders, *N* = nadir (all-cause mortality rate significantly less than that of 2016), *NH* = Non-Hispanic. Square symbols (□) denote *joinpoints*, points of inflection when mortality trend lines (not shown) changed significantly ( $p < 0.05$ ). The trend lines, plotted by Joinpoint Regression Software, are displayed in the Jointpoint Chartbook later in this supplement.

**Figure S10. Age-adjusted mortality from pregnancy, childbirth and the puerperium (O00-O99), US adults ages 25-64 years, 1999-2016, by race-ethnicity**



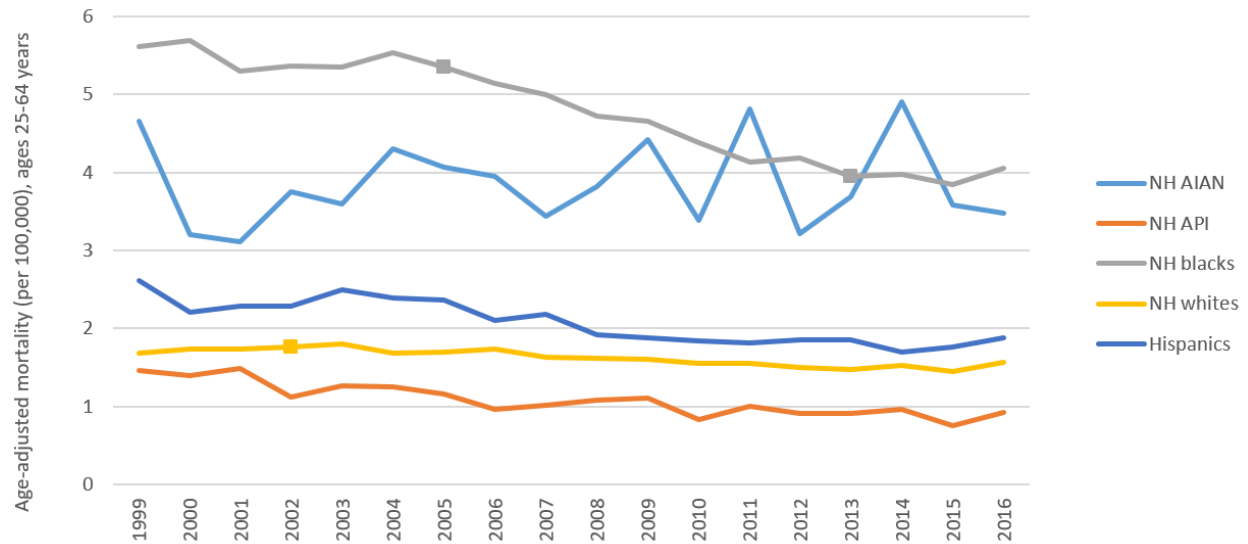
Notes: *API* = NH Asians and Pacific Islanders, *N* = nadir (all-cause mortality rate significantly less than that of 2016), *NH* = Non-Hispanic. Square symbols (□) denote *joinpoints*, points of inflection when mortality trend lines (not shown) changed significantly ( $p < 0.05$ ). Data for NH API were lacking for some years due to insufficient death counts. The trend lines, plotted by Joinpoint Regression Software, are displayed in the Jointpoint Chartbook later in this supplement.

**Figure S11. Age-adjusted mortality from diseases of the blood and immune mechanism (D50-D89), US adults ages 25-64 years, 1999-2016, by race-ethnicity**



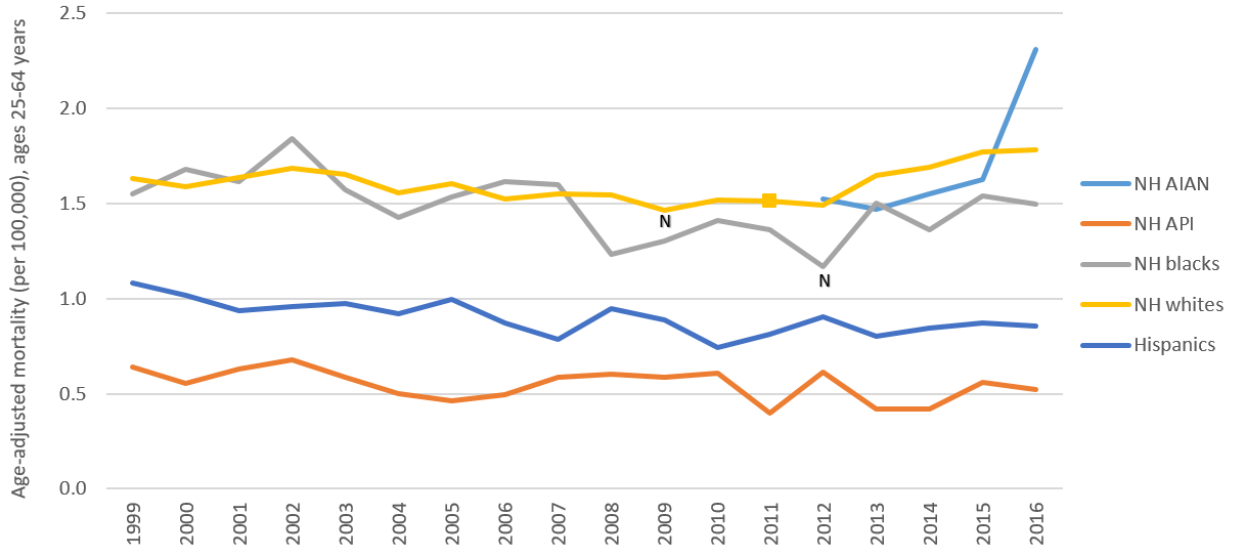
Notes: *AIAN* = Non-Hispanic American Indians and Alaskan Natives, *API* = NH Asians and Pacific Islanders, *NH* = Non-Hispanic. Square symbols (□) denote *joinpoints*, points of inflection when mortality trend lines (not shown) changed significantly ( $p < 0.05$ ). Data for NH AIAN were lacking for some years due to insufficient death counts. The trend lines, plotted by Joinpoint Regression Software, are displayed in the Jointpoint Chartbook later in this supplement.

**Figure S12. Age-adjusted mortality from diseases of the musculoskeletal system and connective tissue (M00-M99), US adults ages 25-64 years, 1999-2016, by race-ethnicity**



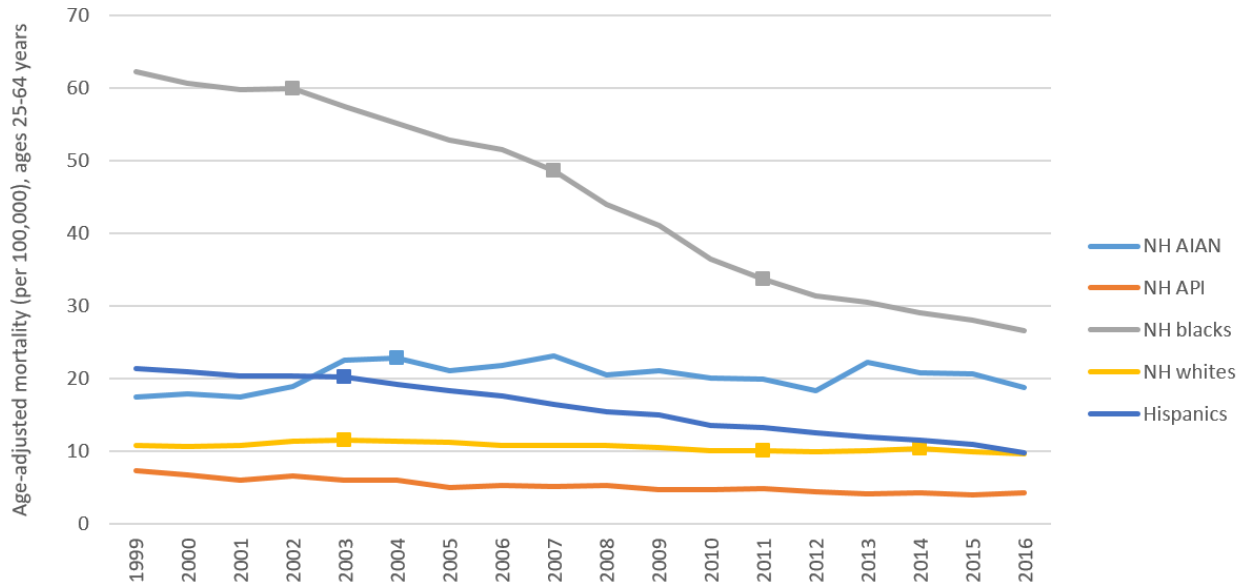
Notes: *AIAN* = Non-Hispanic American Indians and Alaskan Natives, *API* = NH Asians and Pacific Islanders, *NH* = Non-Hispanic. Square symbols (□) denote *joinpoints*, points of inflection when mortality trend lines (not shown) changed significantly ( $p < 0.05$ ). The trend lines, plotted by Joinpoint Regression Software, are displayed in the Jointpoint Chartbook later in this supplement.

**Figure S13. Age-adjusted mortality from congenital malformations, deformations and chromosomal abnormalities (Q00-Q99), US adults ages 25-64 years, 1999-2016, by race-ethnicity**



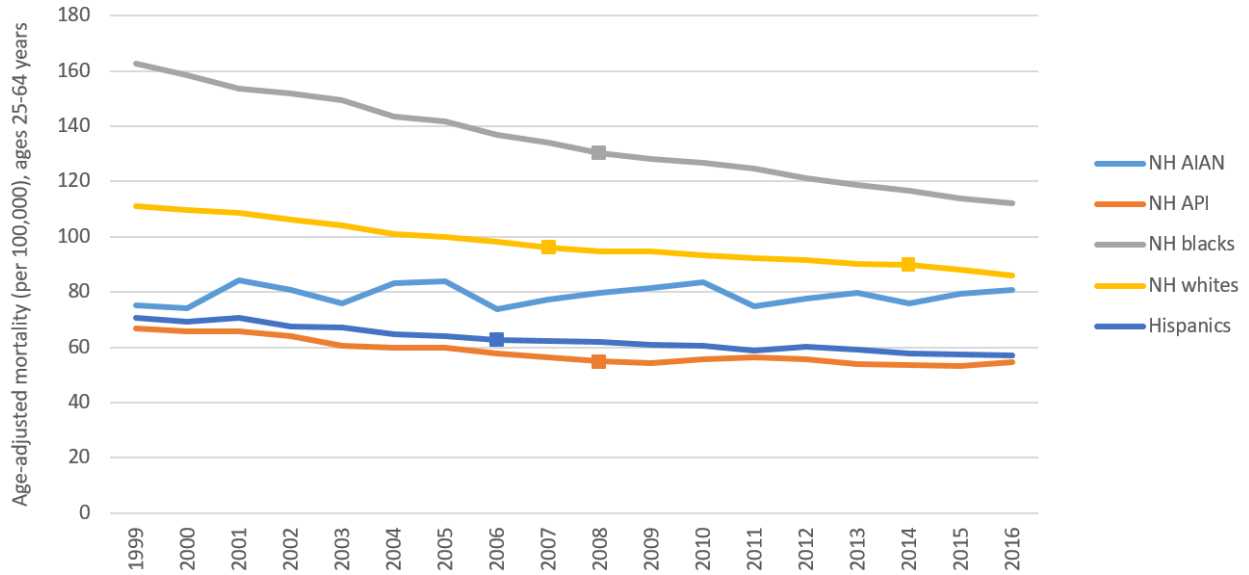
Notes: *AIAN* = Non-Hispanic American Indians and Alaskan Natives, *API* = NH Asians and Pacific Islanders, *N* = nadir (all-cause mortality rate significantly less than that of 2016), *NH* = Non-Hispanic. Square symbols (□) denote *joinpoints*, points of inflection when mortality trend lines (not shown) changed significantly ( $p < 0.05$ ). Data for NH AIAN were lacking for some years due to insufficient death counts. The trend lines, plotted by Joinpoint Regression Software, are displayed in the Jointpoint Chartbook later in this supplement.

**Figure S14. Age-adjusted mortality from infectious and parasitic diseases (A00-B99), US adults ages 25-64 years, 1999-2016, by race-ethnicity**



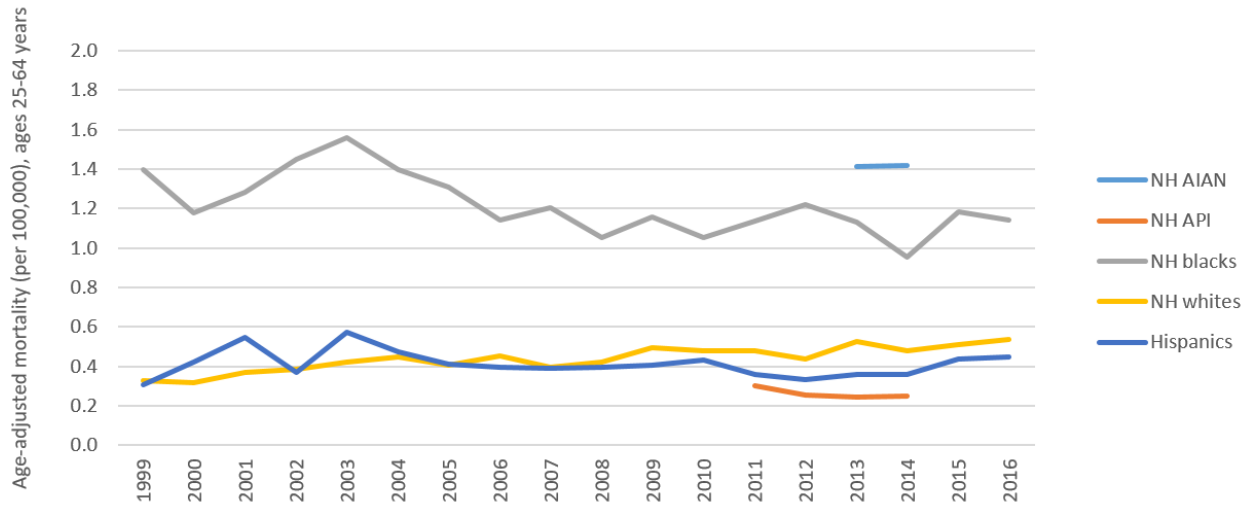
Notes: *AIAN* = Non-Hispanic American Indians and Alaskan Natives, *API* = NH Asians and Pacific Islanders, *NH* = Non-Hispanic. Square symbols (□) denote *joinpoints*, points of inflection when mortality trend lines (not shown) changed significantly ( $p < 0.05$ ). The trend lines, plotted by Joinpoint Regression Software, are displayed in the Jointpoint Chartbook later in this supplement.

**Figure S15. Age-adjusted mortality from neoplasms (C00-D48), US adults ages 25-64 years, 1999-2016, by race-ethnicity**



Notes: *AIAN* = Non-Hispanic American Indians and Alaskan Natives, *API* = NH Asians and Pacific Islanders, *NH* = Non-Hispanic. Square symbols (□) denote *joinpoints*, points of inflection when mortality trend lines (not shown) changed significantly ( $p < 0.05$ ). The trend lines, plotted by Joinpoint Regression Software, are displayed in the Jointpoint Chartbook later in this supplement.

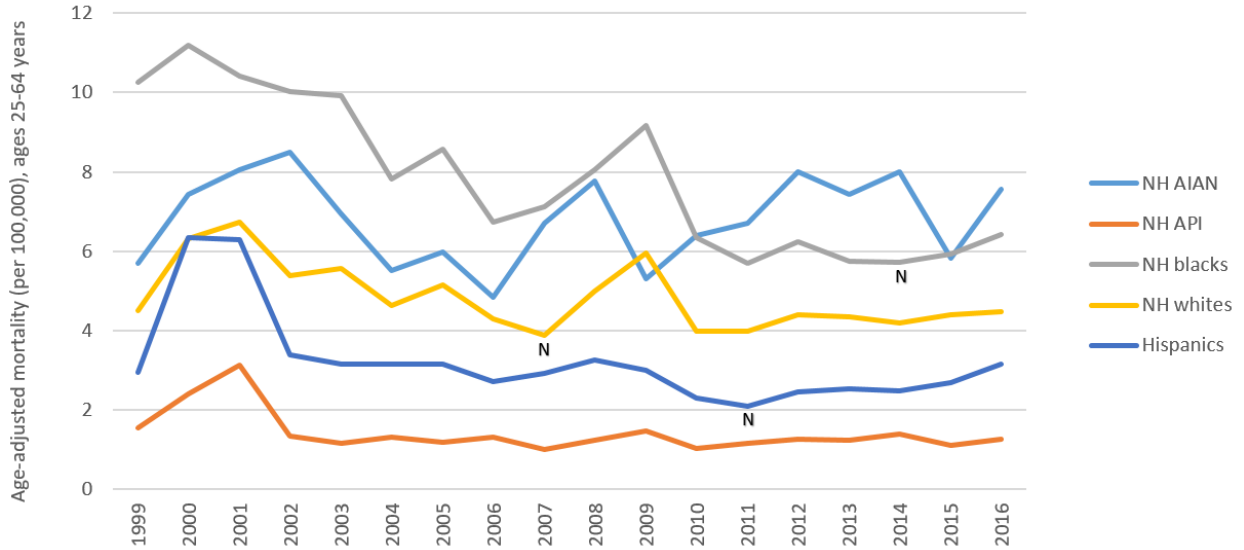
**Figure S16. Age-adjusted mortality from diseases of the skin and subcutaneous tissue (L00-L98), US adults ages 25-64 years, 1999-2016, by race-ethnicity**



Notes: *AIAN* = Non-Hispanic American Indians and Alaskan Natives, *API* = NH Asians and Pacific Islanders, *NH* = Non-Hispanic. Data for NH AIAN and API were lacking for some years due to insufficient death counts. The trend lines, plotted by Joinpoint Regression Software, are displayed in the Jointpoint Chartbook later in this supplement.

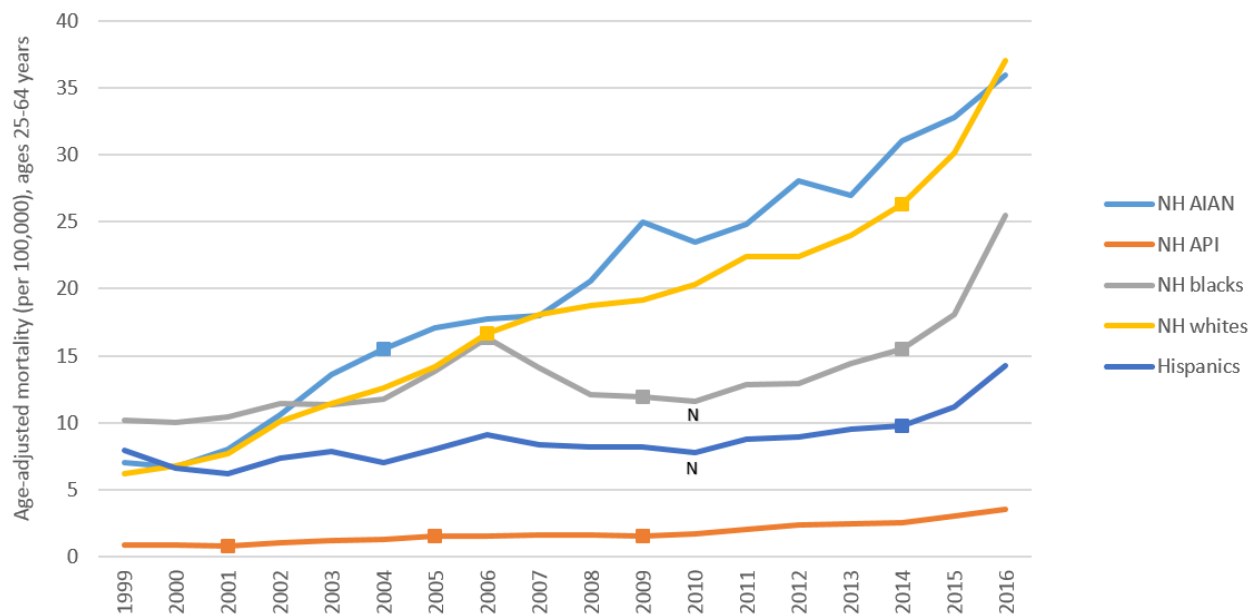


**Figure S17. Age-adjusted mortality from symptoms, signs, and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99), US adults ages 25-64 years, 1999-2016, by race-ethnicity**



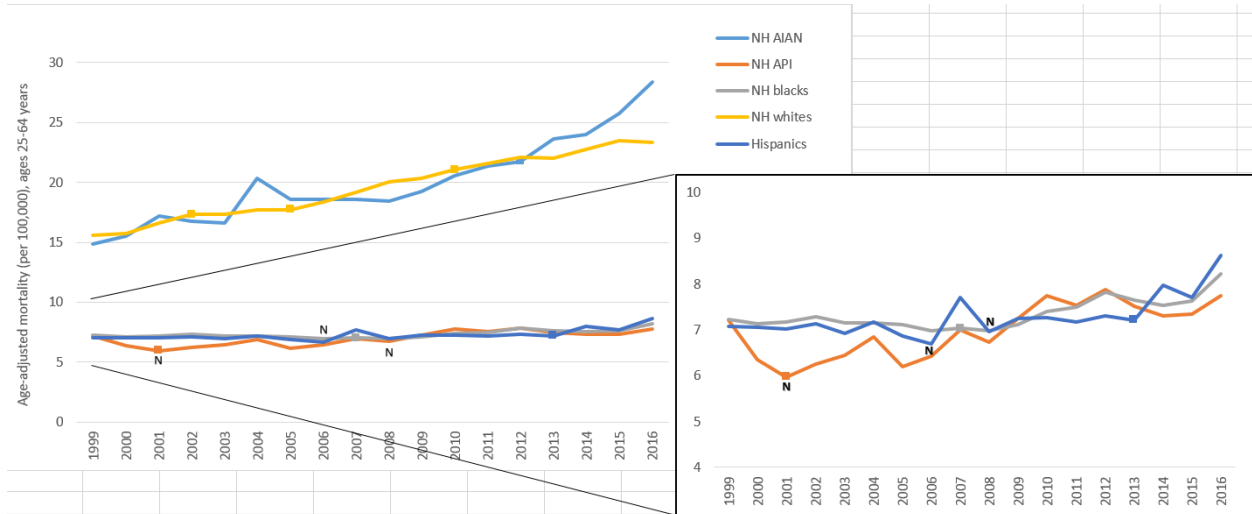
Notes: *AIAN* = Non-Hispanic American Indians and Alaskan Natives, *API* = NH Asians and Pacific Islanders, *N* = nadir (all-cause mortality rate significantly less than that of 2016), *NH* = Non-Hispanic. The trend lines, plotted by Joinpoint Regression Software, are displayed in the Jointpoint Chartbook later in this supplement.

**Figure S18. Age-adjusted mortality from accidental drug overdoses (X40-X44), US adults ages 25-64 years, 1999-2016, by race-ethnicity**



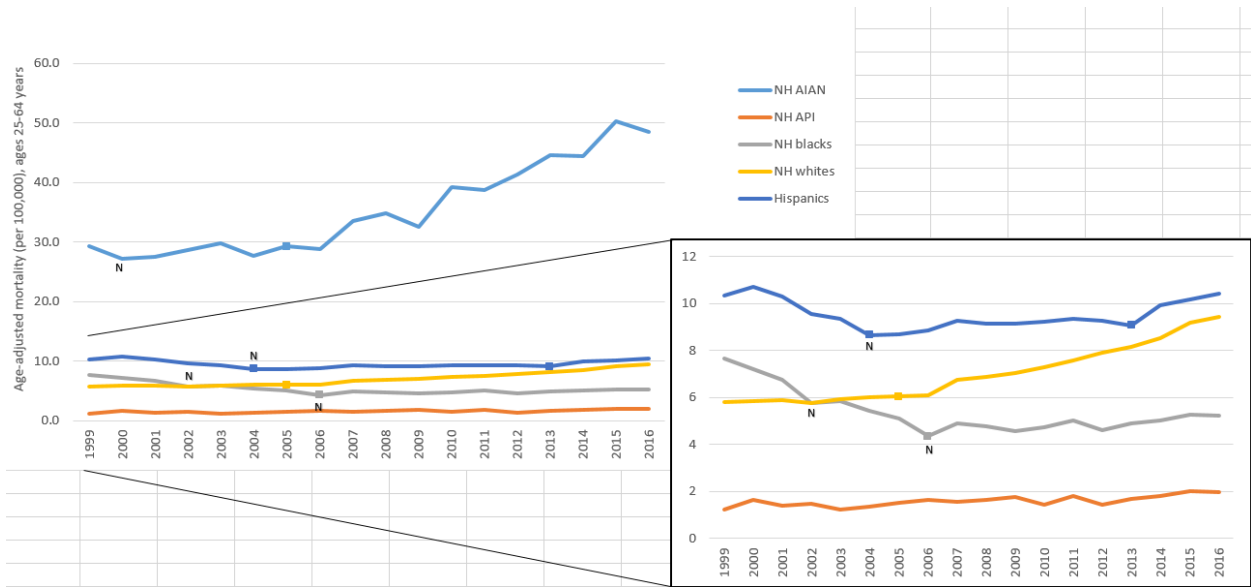
Notes: *AIAN* = Non-Hispanic American Indians and Alaskan Natives, *API* = NH Asians and Pacific Islanders, *N* = nadir (all-cause mortality rate significantly less than that of 2016), *NH* = Non-Hispanic. The trend lines, plotted by Joinpoint Regression Software, are displayed in the Jointpoint Chartbook later in this supplement.

**Figure S19. Age-adjusted mortality from suicides (X60-X84), US adults ages 25-64 years, 1999-2016, by race-ethnicity**



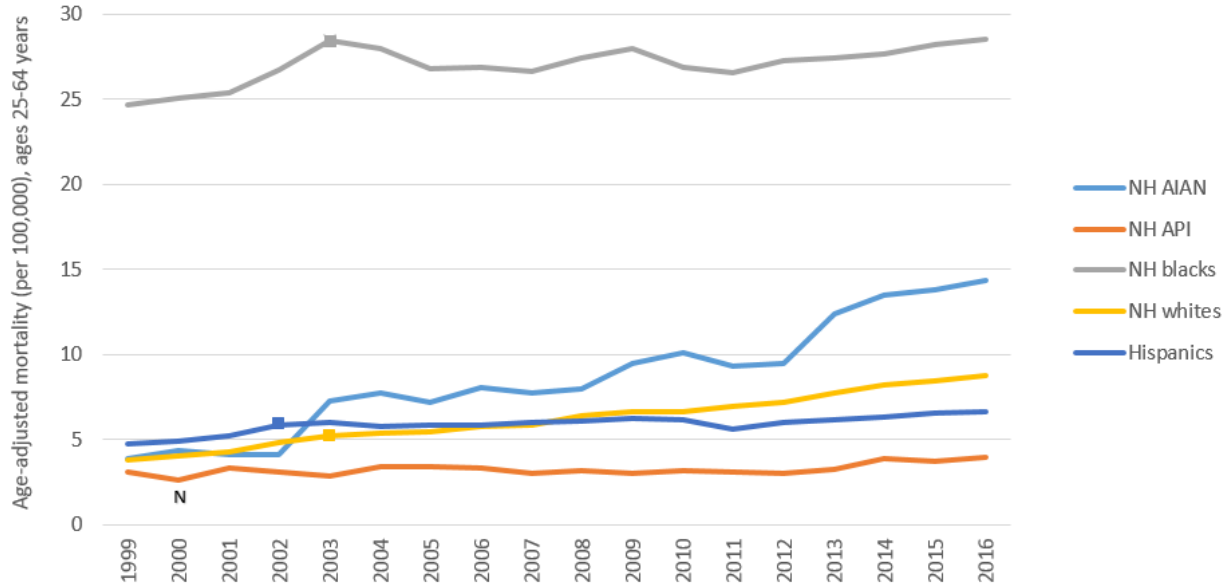
Notes: *AIAN* = Non-Hispanic American Indians and Alaskan Natives, *API* = NH Asians and Pacific Islanders, *N* = nadir (all-cause mortality rate significantly less than that of 2016), *NH* = Non-Hispanic. The trend lines, plotted by Joinpoint Regression Software, are displayed in the Jointpoint Chartbook later in this supplement.

**Figure S20. Age-adjusted mortality from alcoholic liver disease (K70), US adults ages 25-64 years, 1999-2016, by race-ethnicity**



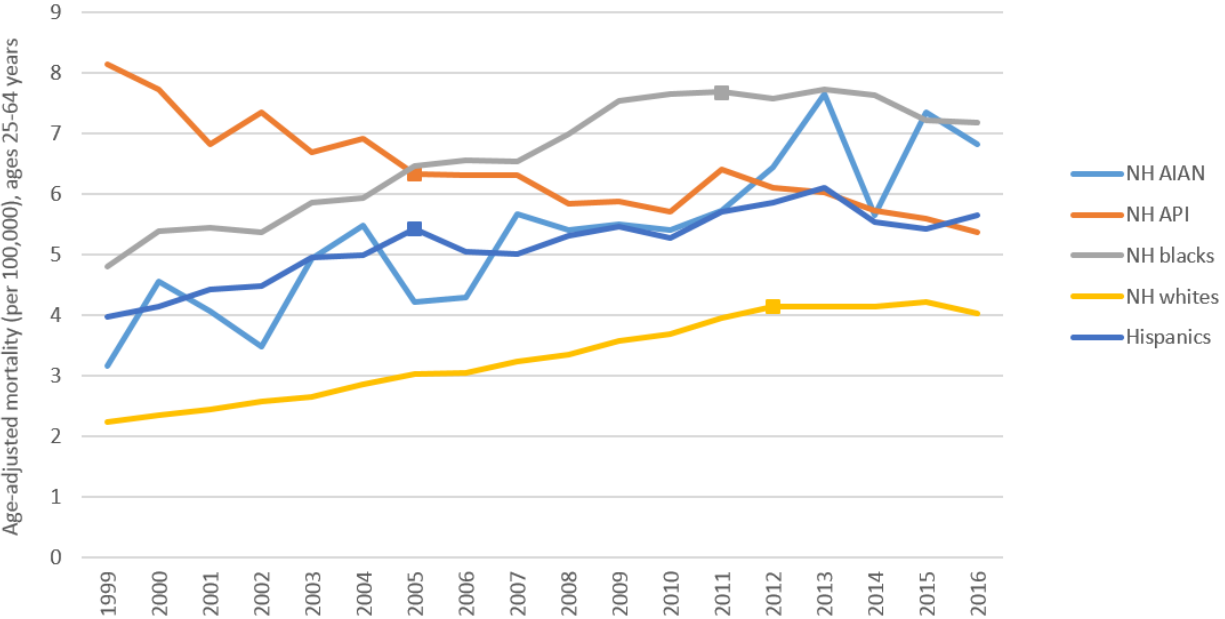
Notes: *AIAN* = Non-Hispanic American Indians and Alaskan Natives, *API* = NH Asians and Pacific Islanders, *N* = nadir (all-cause mortality rate significantly less than that of 2016), *NH* = Non-Hispanic. The trend lines, plotted by Joinpoint Regression Software, are displayed in the Jointpoint Chartbook later in this supplement.

**Figure S21. Age-adjusted mortality from hypertensive diseases (I10-I15), US adults ages 25-64 years, 1999-2016, by race-ethnicity**



Notes: *AIAN* = Non-Hispanic American Indians and Alaskan Natives, *API* = NH Asians and Pacific Islanders, *N* = nadir (all-cause mortality rate significantly less than that of 2016), *NH* = Non-Hispanic. The trend lines, plotted by Joinpoint Regression Software, are displayed in the Jointpoint Chartbook later in this supplement.

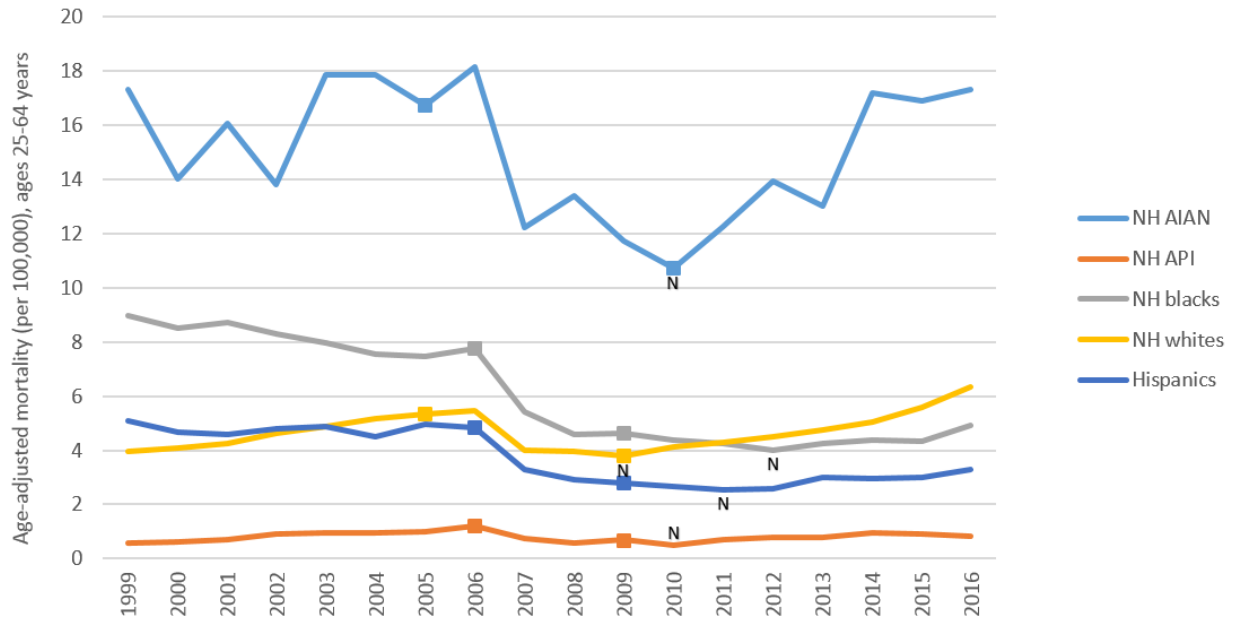
**Figure S22. Age-adjusted mortality from malignant neoplasm of liver and intrahepatic bile ducts (C22), US adults ages 25-64 years, 1999-2016, by race-ethnicity**



Notes: *AIAN* = Non-Hispanic American Indians and Alaskan Natives, *API* = NH Asians and Pacific Islanders, *N* = nadir (all-cause mortality rate significantly less than that of 2016), *NH* = Non-Hispanic. The trend lines, plotted by Joinpoint Regression Software, are displayed in the Jointpoint Chartbook later in this supplement.

**Figure S23: Diseases of the respiratory system (see Figure S4)**

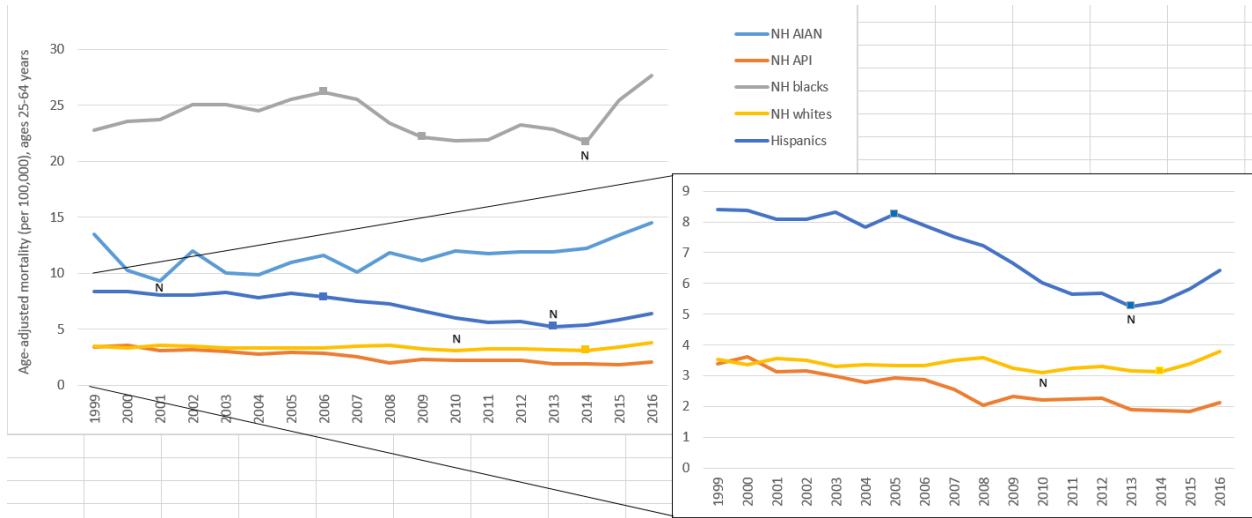
**Figure S24. Age-adjusted mortality from mental and behavioral disorders involving psychoactive substances (F10-F19), US adults ages 25-64 years, 1999-2016, by race-ethnicity**



Notes: *AIAN* = Non-Hispanic American Indians and Alaskan Natives, *API* = NH Asians and Pacific Islanders, *N* = nadir (all-cause mortality rate significantly less than that of 2016), *NH* = Non-Hispanic. The trend lines, plotted by Joinpoint Regression Software, are displayed in the Jointpoint Chartbook later in this supplement.



**Figure S25. Age-adjusted mortality from homicides (X85-Y09), US adults ages 25-64 years, 1999-2016, by race-ethnicity**

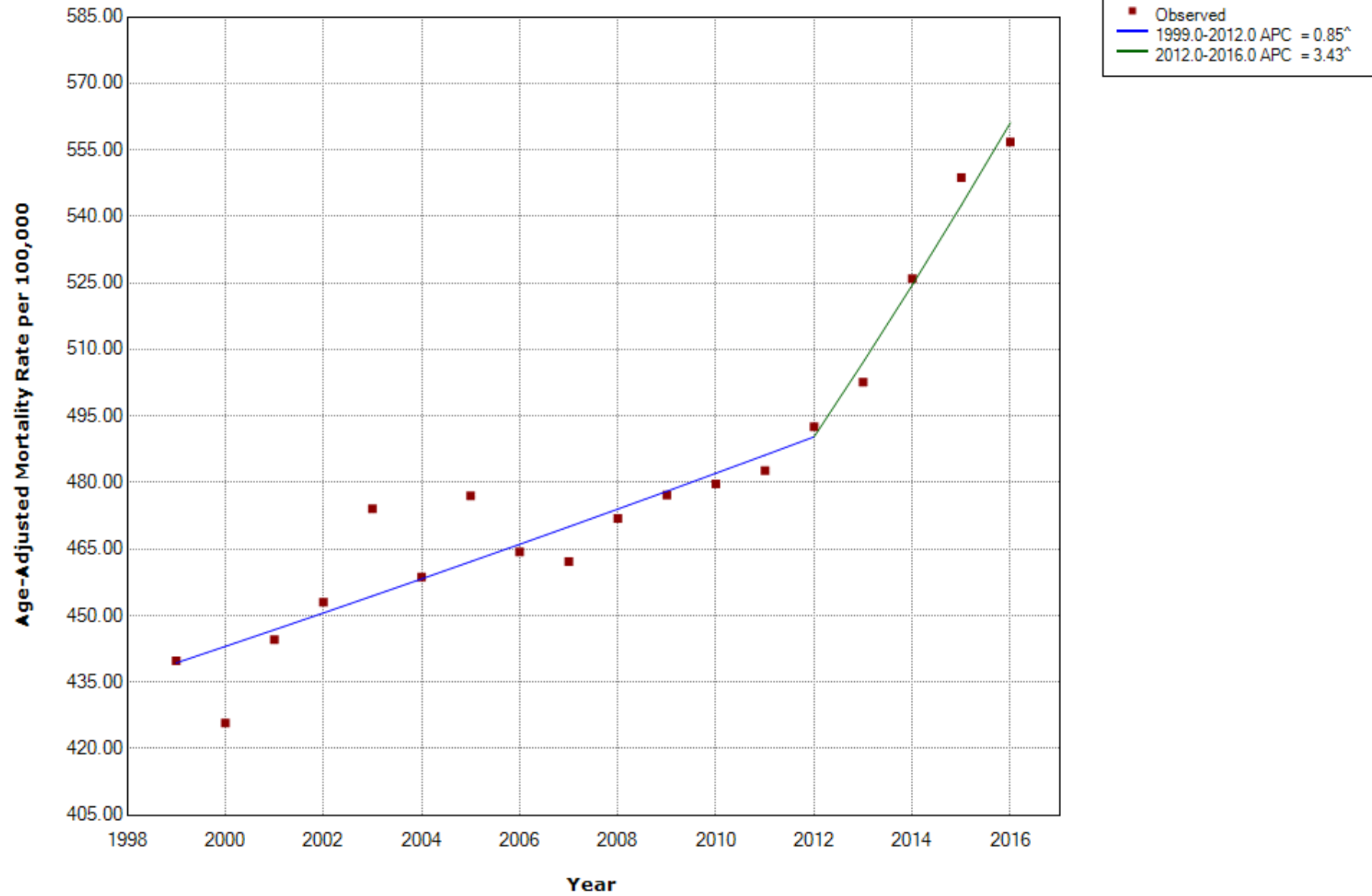


Notes: *AIAN* = Non-Hispanic American Indians and Alaskan Natives, *API* = NH Asians and Pacific Islanders, *N* = nadir (all-cause mortality rate significantly less than that of 2016), *NH* = Non-Hispanic. The trend lines, plotted by Joinpoint Regression Software, are displayed in the Jointpoint Chartbook later in this supplement.

# Joinpoint Chartbook

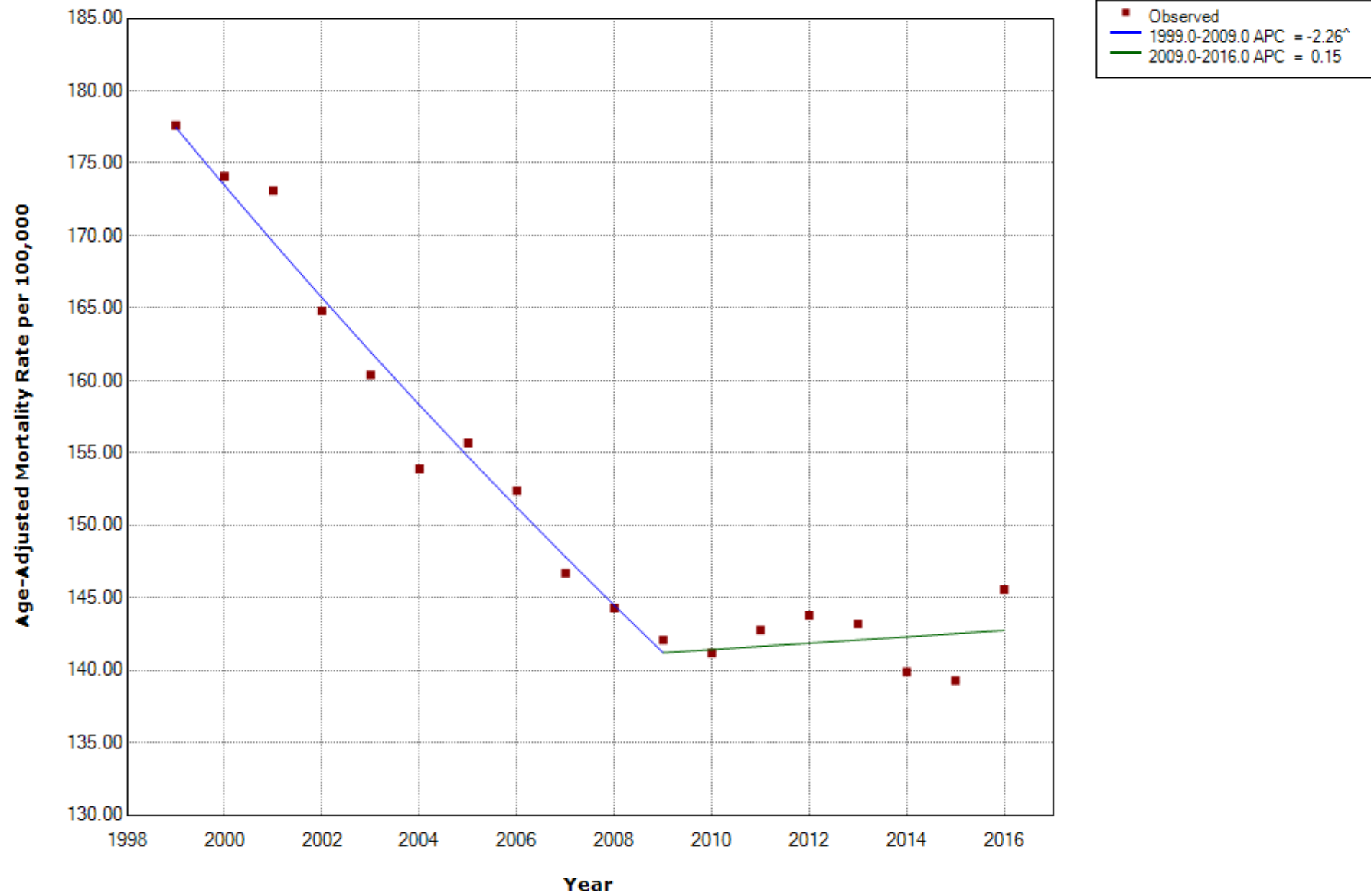
The following 241 graphs plot mortality trends for 1999-2016 as calculated by the Joinpoint Regression program. Five graphs are presented for each cause of death (except when data were insufficient), with each graph presenting results for a specific racial-ethnic group. The program used the Monte Carlo permutation method to model trend lines that best fit the 17 annual mortality rates (indicated by red dots). The legend (upper right-hand corner) presents the annual percent change (APC) for each interval, or segment. Positive values indicate an increase in mortality, negative values a decrease in mortality. The caret (^) indicates whether the slope (APC) for the segment differed significantly ( $p < 0.05$ ) from zero (i.e., whether the rate increased/decreased during the interval). Green, red, and neutral shading in Tables 1-3 of the main paper are based on these results.

### All-cause mortality (A00-Y89) / NH AIAN: 1 Joinpoint



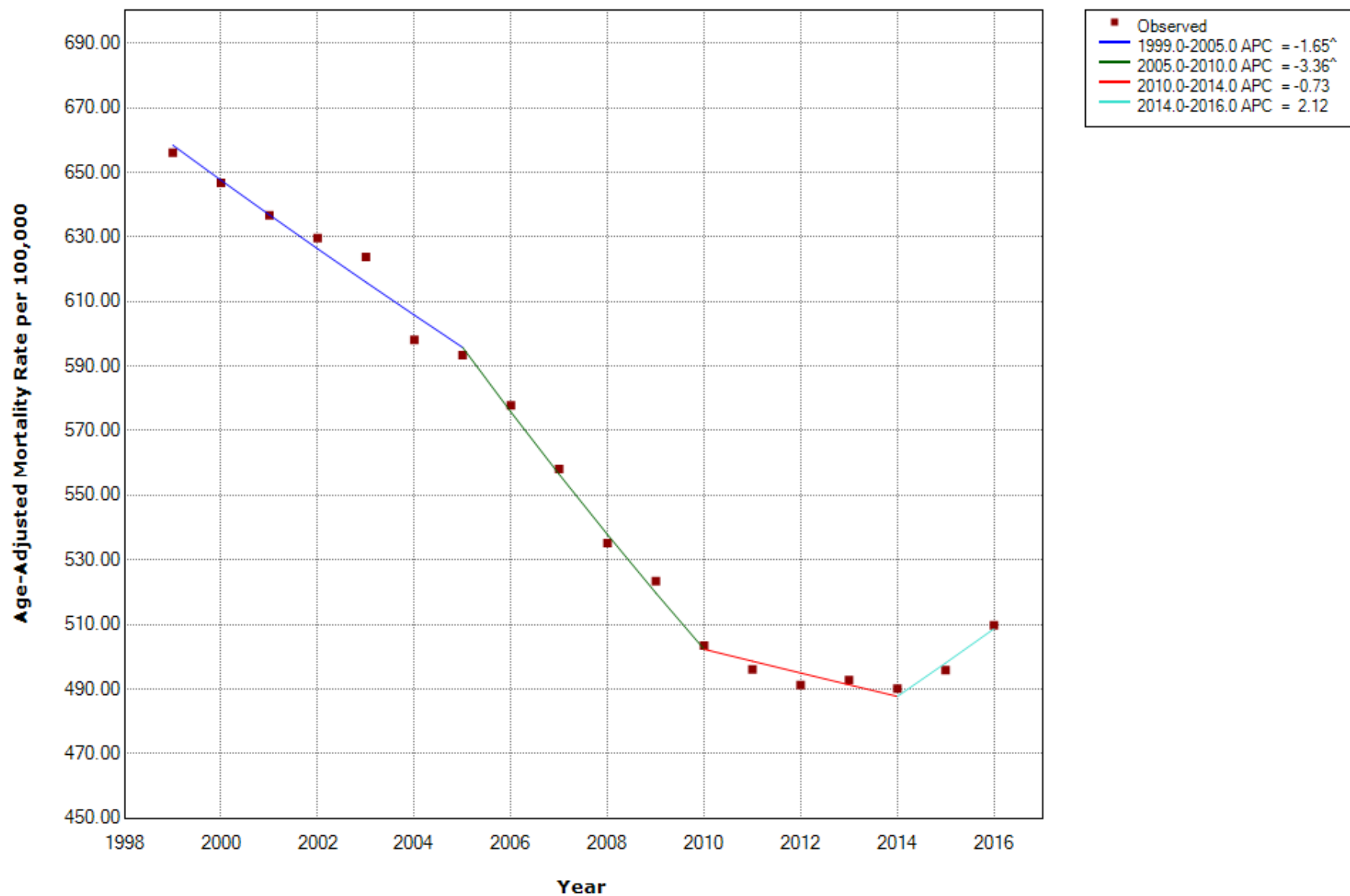
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

### All-cause mortality (A00-Y89) / NH API: 1 Joinpoint



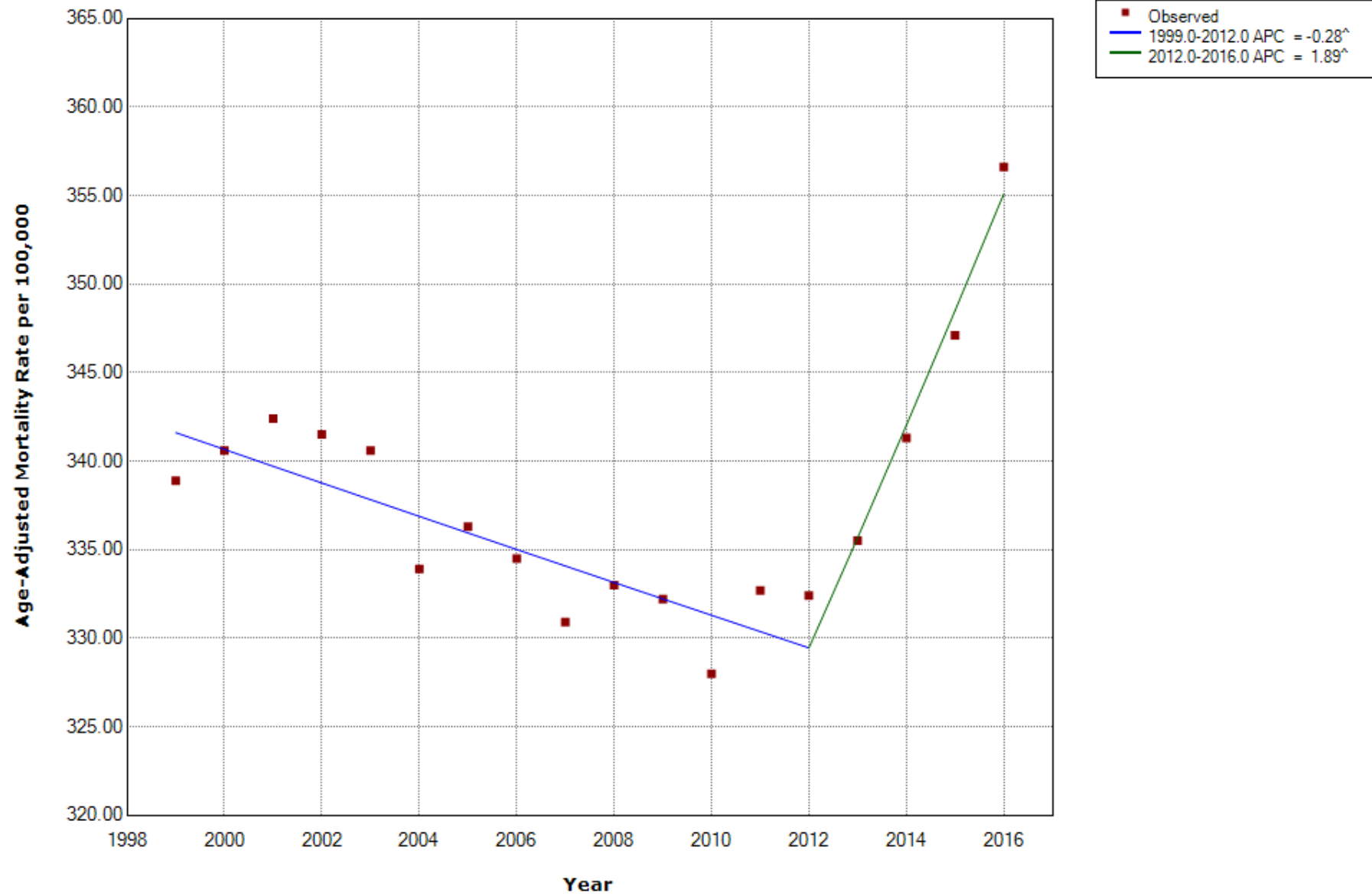
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

### All-cause mortality (A00-Y89) / NH Blacks: 3 Joinpoints



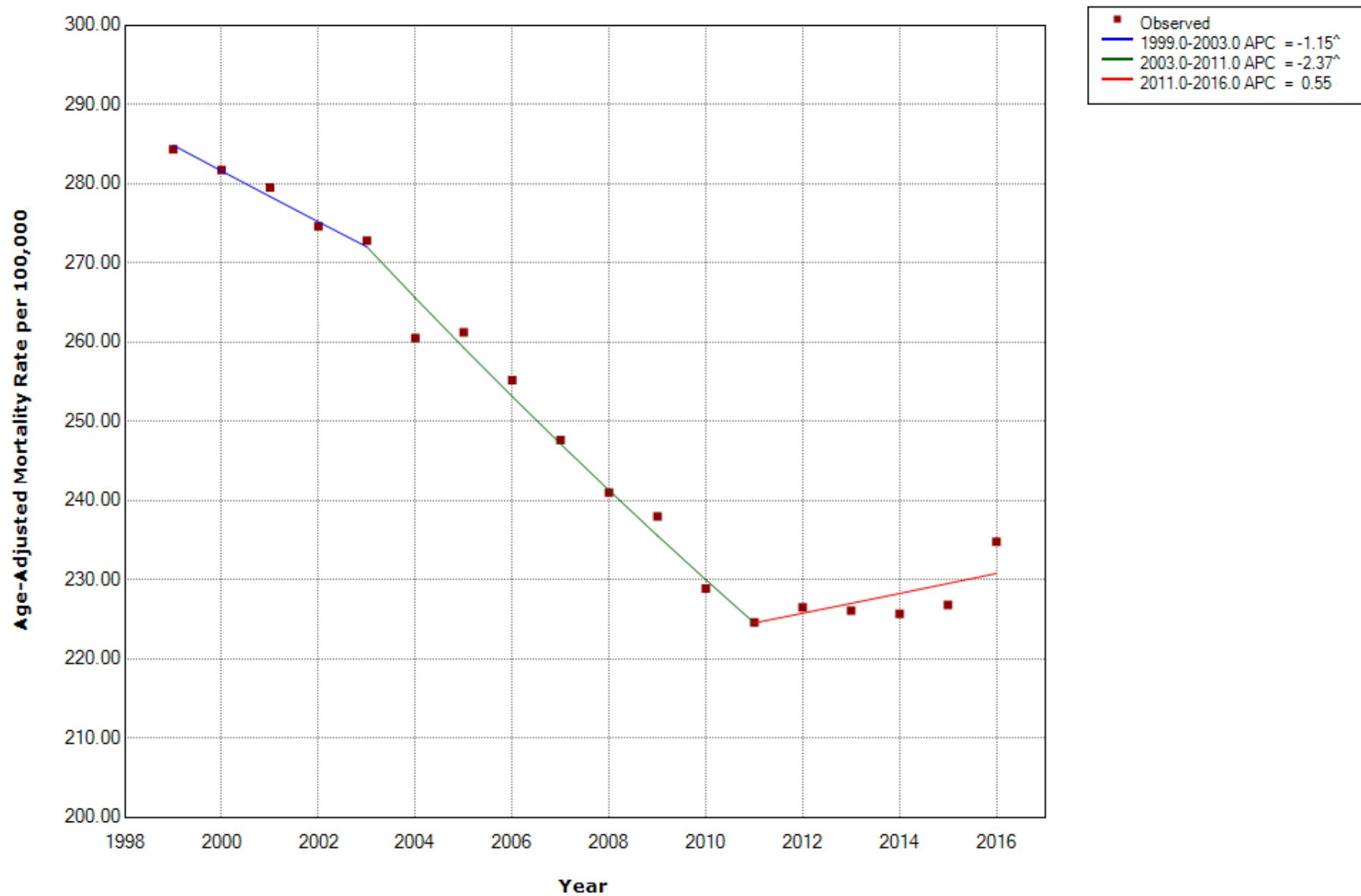
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 3 Joinpoints.

### All-cause mortality (A00-Y89) / NH whites: 1 Joinpoint



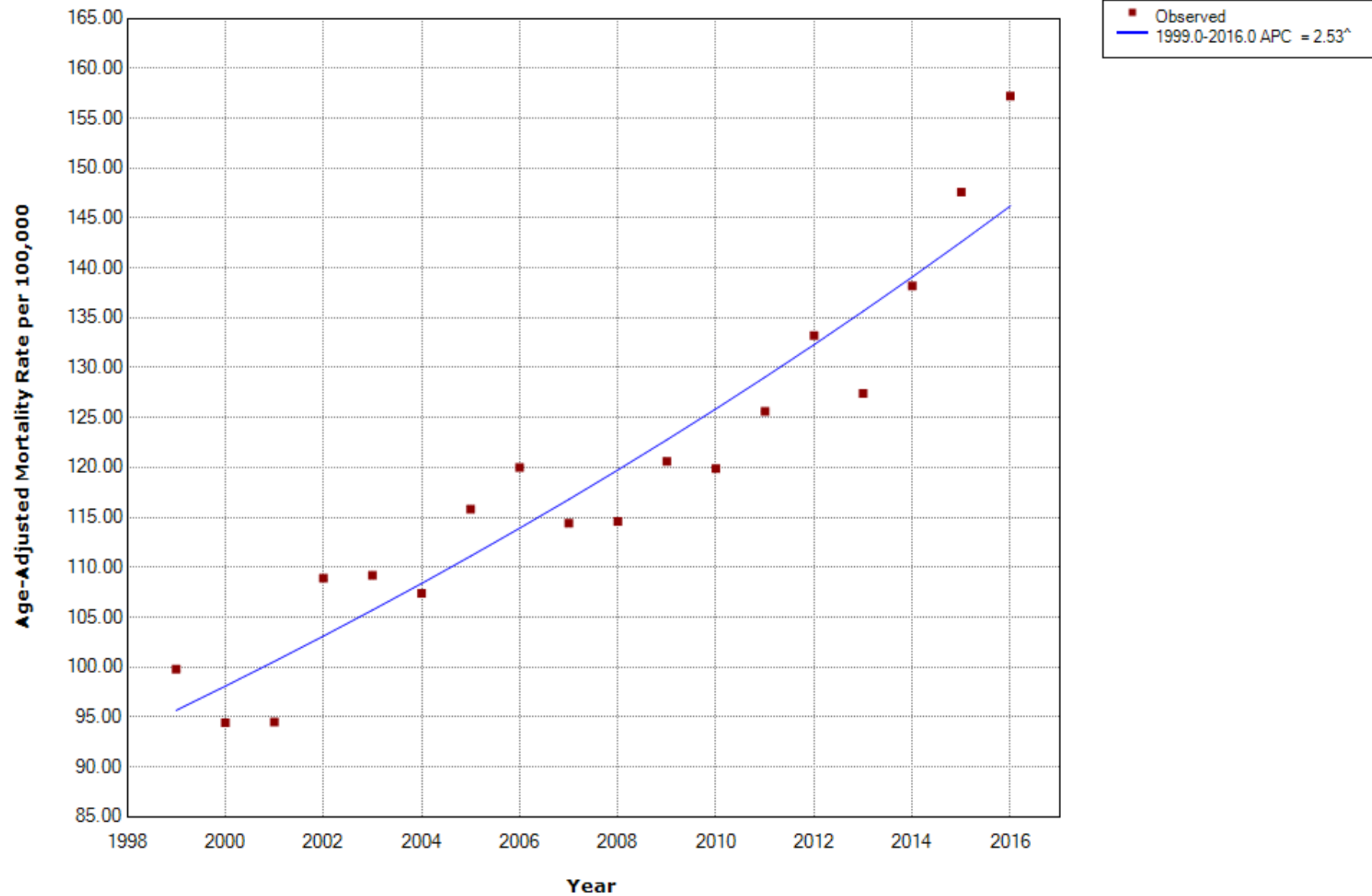
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

### All-cause mortality (A00-Y89) / Hispanics: 2 Joinpoints



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

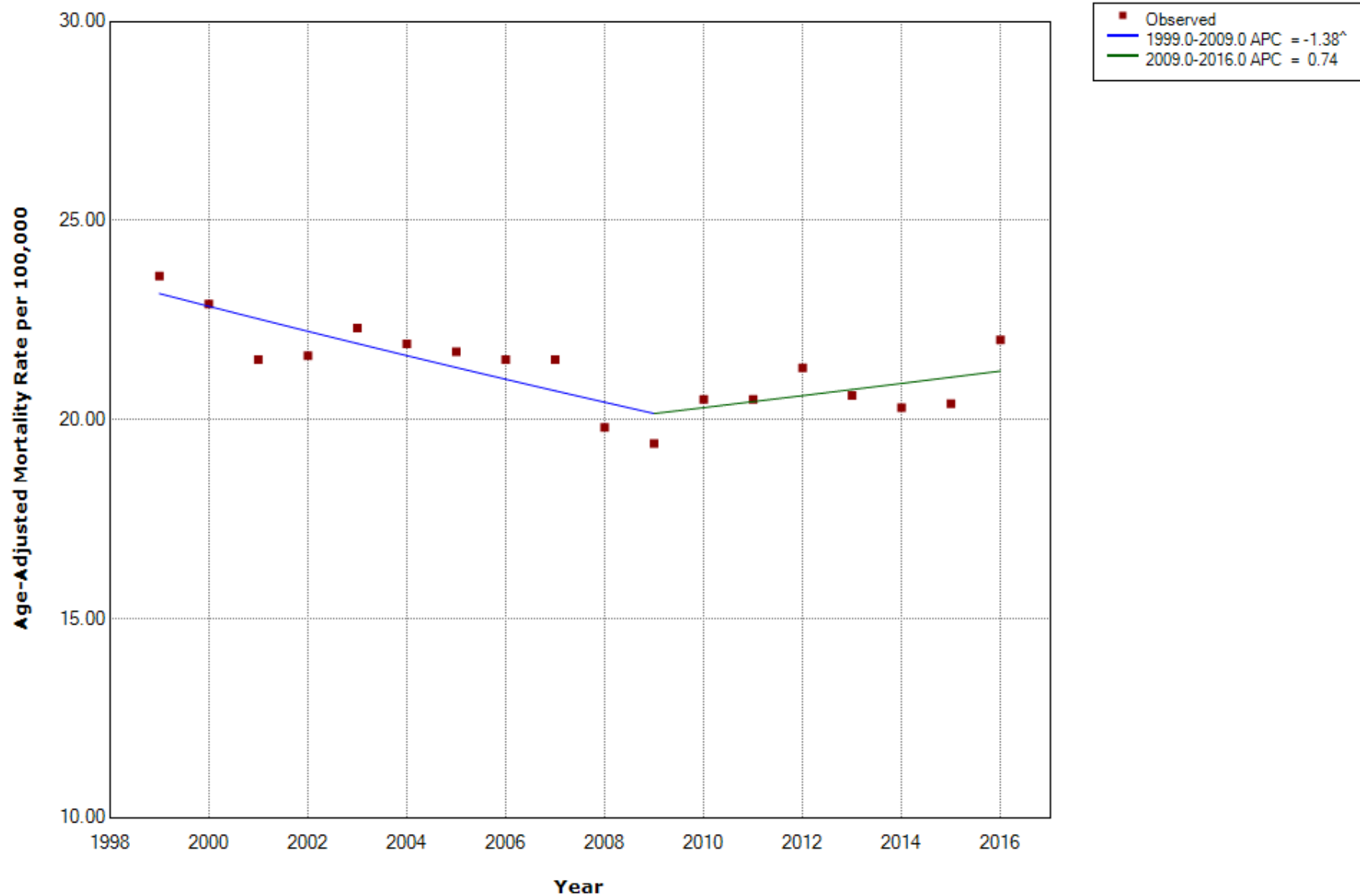
EXTRANEOUS (EXTERNAL) CAUSES (V01-Y89) / NH AIAN: 0 Joinpoints



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

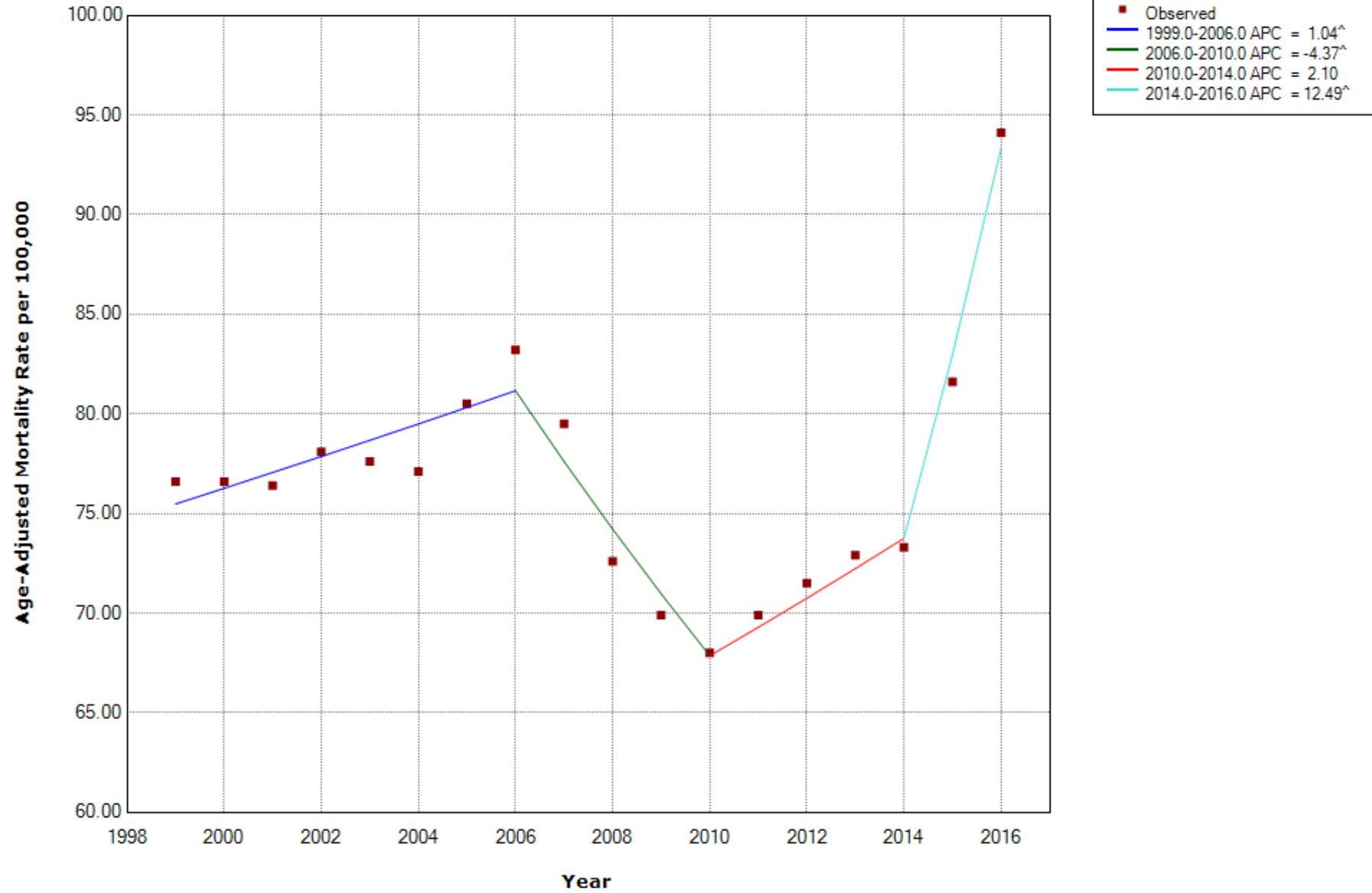


EXTRANEOUS (EXTERNAL) CAUSES (V01-Y89) / NH API: 1 Joinpoint



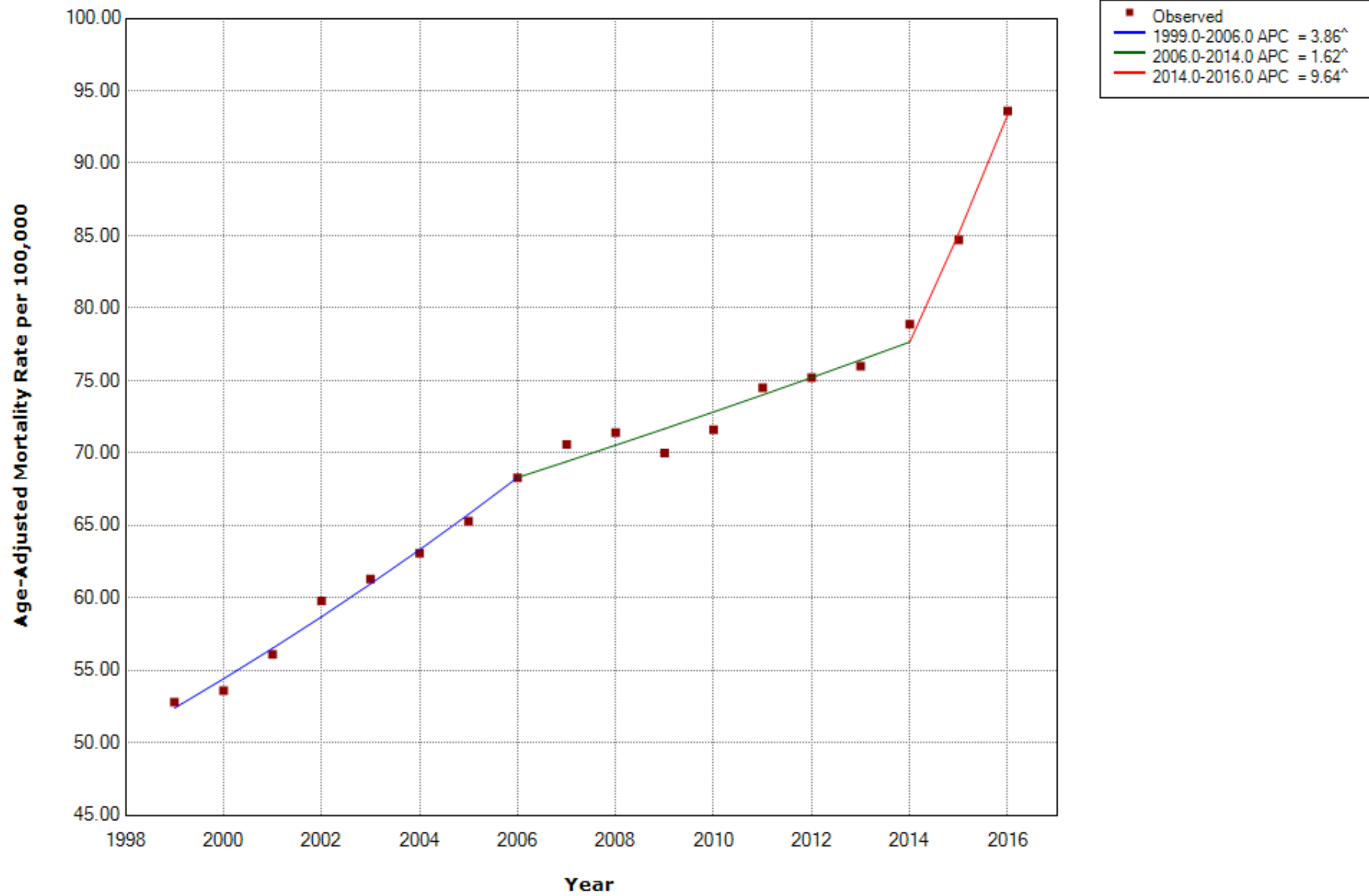
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

### EXTRANEOUS (EXTERNAL) CAUSES (V01-Y89) / NH Blacks: 3 Joinpoints



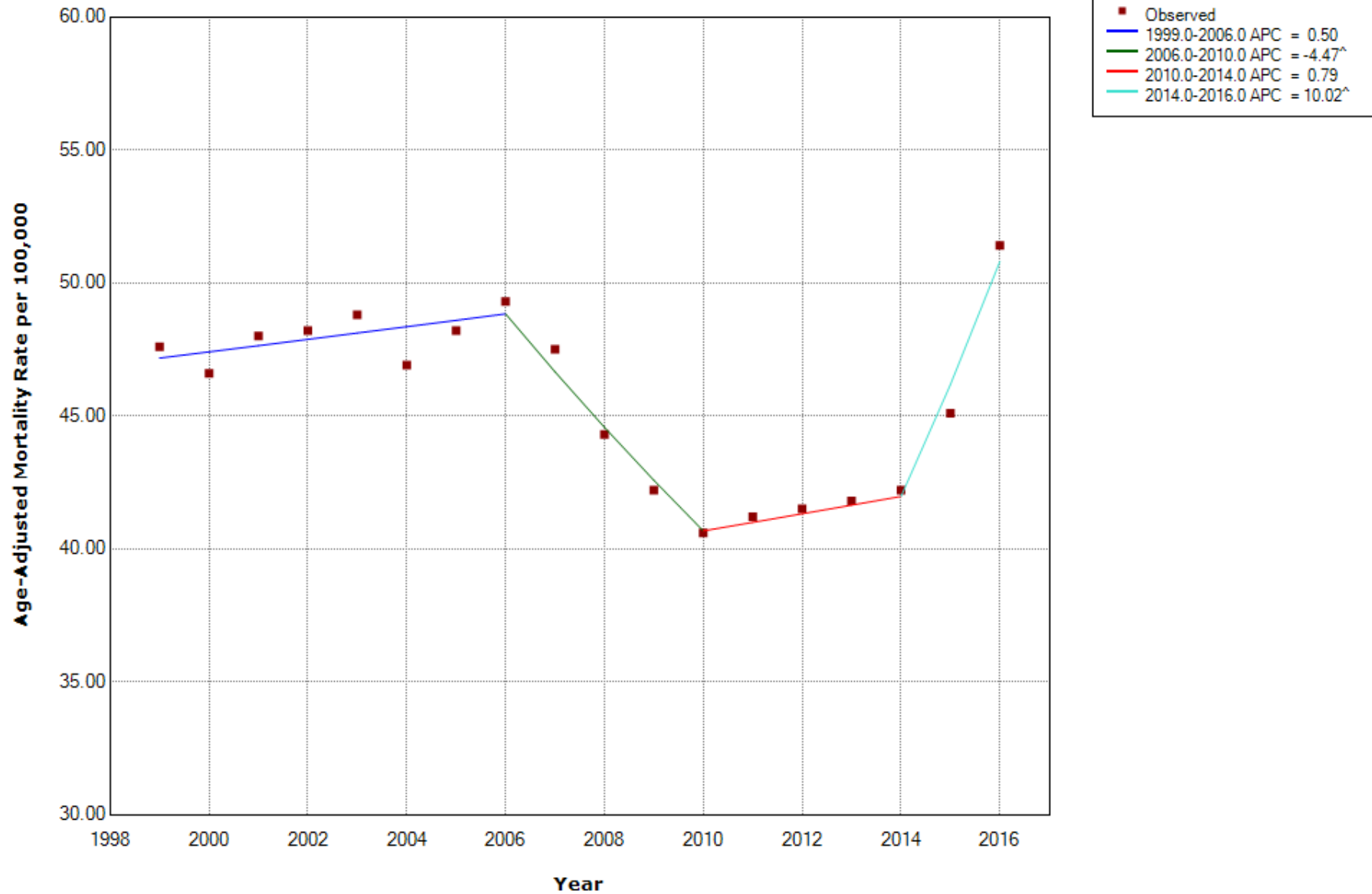
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 3 Joinpoints.

EXTRANEOUS (EXTERNAL) CAUSES (V01-Y89) / NH whites: 2 Joinpoints



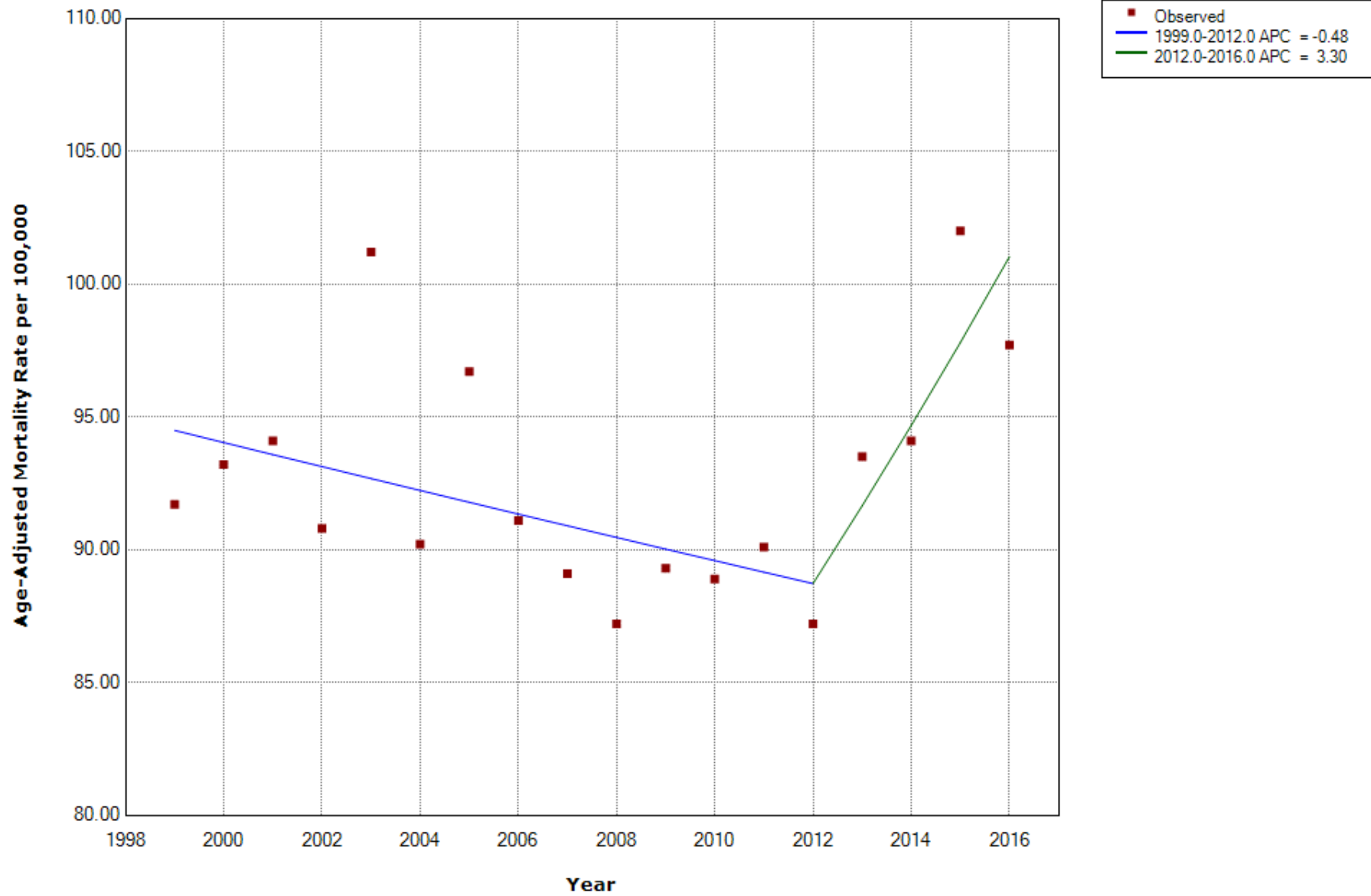
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

### EXTRANEOUS (EXTERNAL) CAUSES (V01-Y89) / Hispanics: 3 Joinpoints



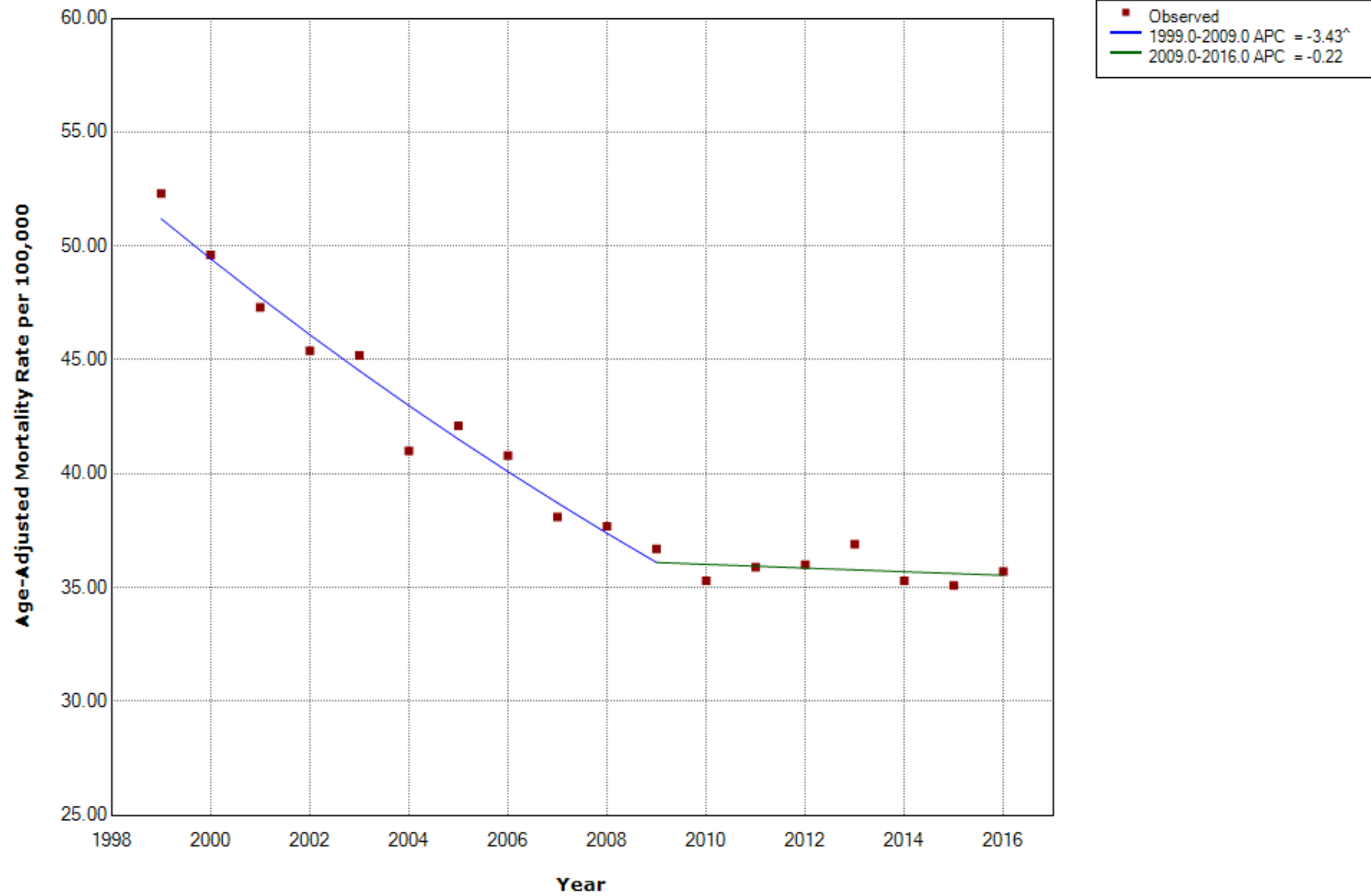
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 3 Joinpoints.

Diseases of the circulatory system (I00-I99) / NH AIAN: 1 Joinpoint



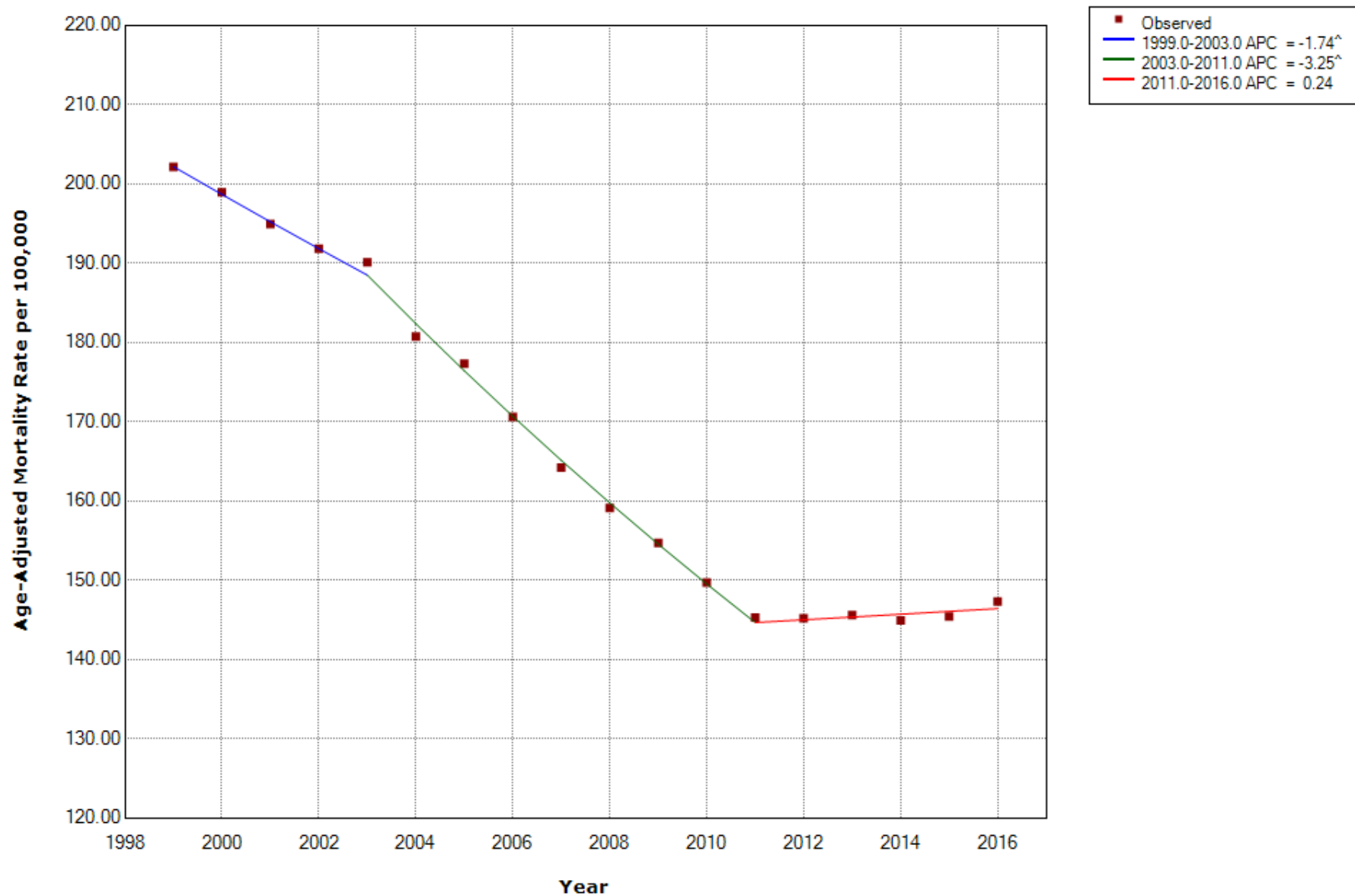
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

### Diseases of the circulatory system (I00-I99) / NH API: 1 Joinpoint



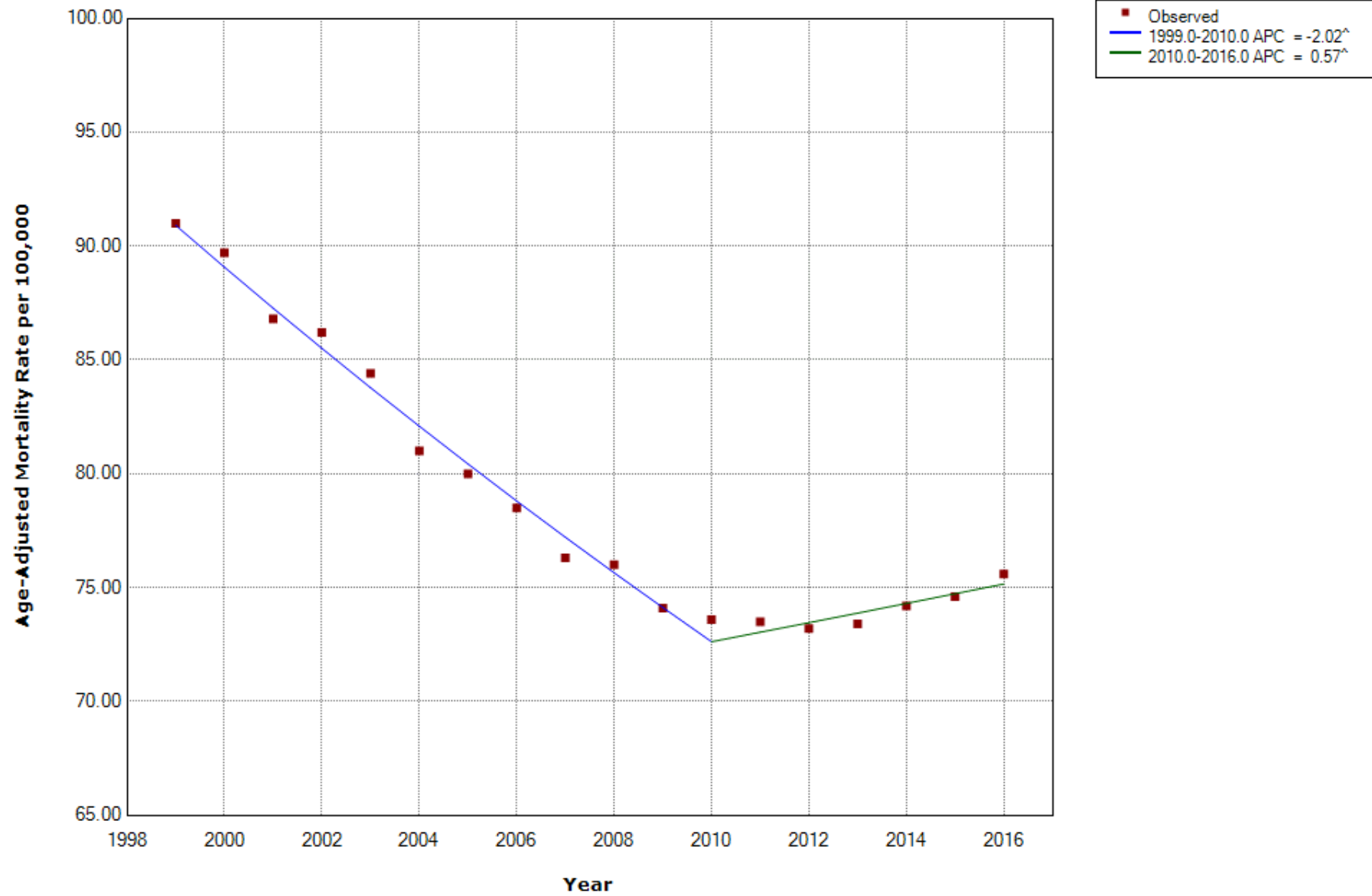
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

### Diseases of the circulatory system (I00-I99) / NH Blacks: 2 Joinpoints



<sup>^</sup> Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

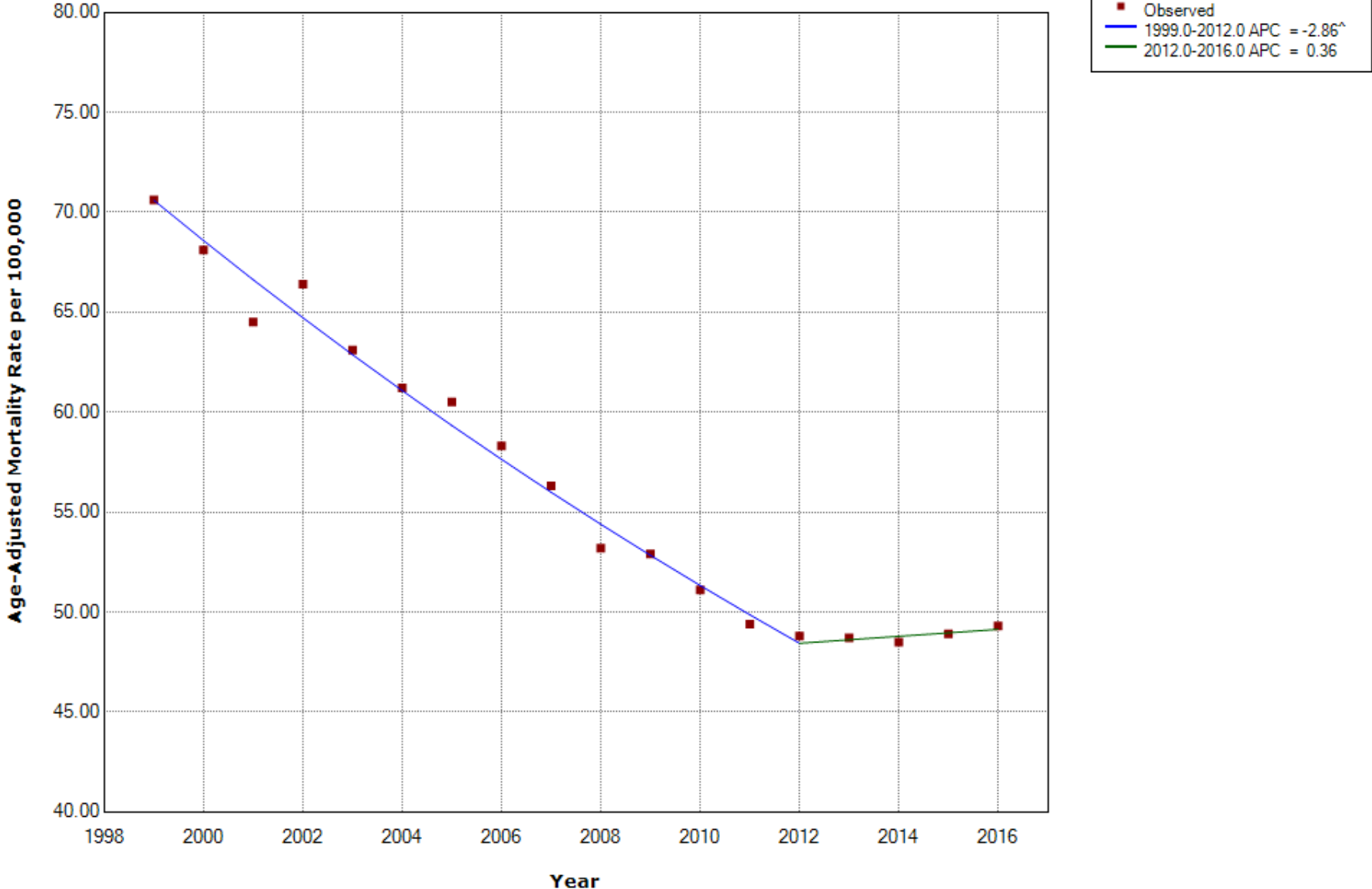
### Diseases of the circulatory system (I00-I99) / NH whites: 1 Joinpoint



<sup>^</sup> Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

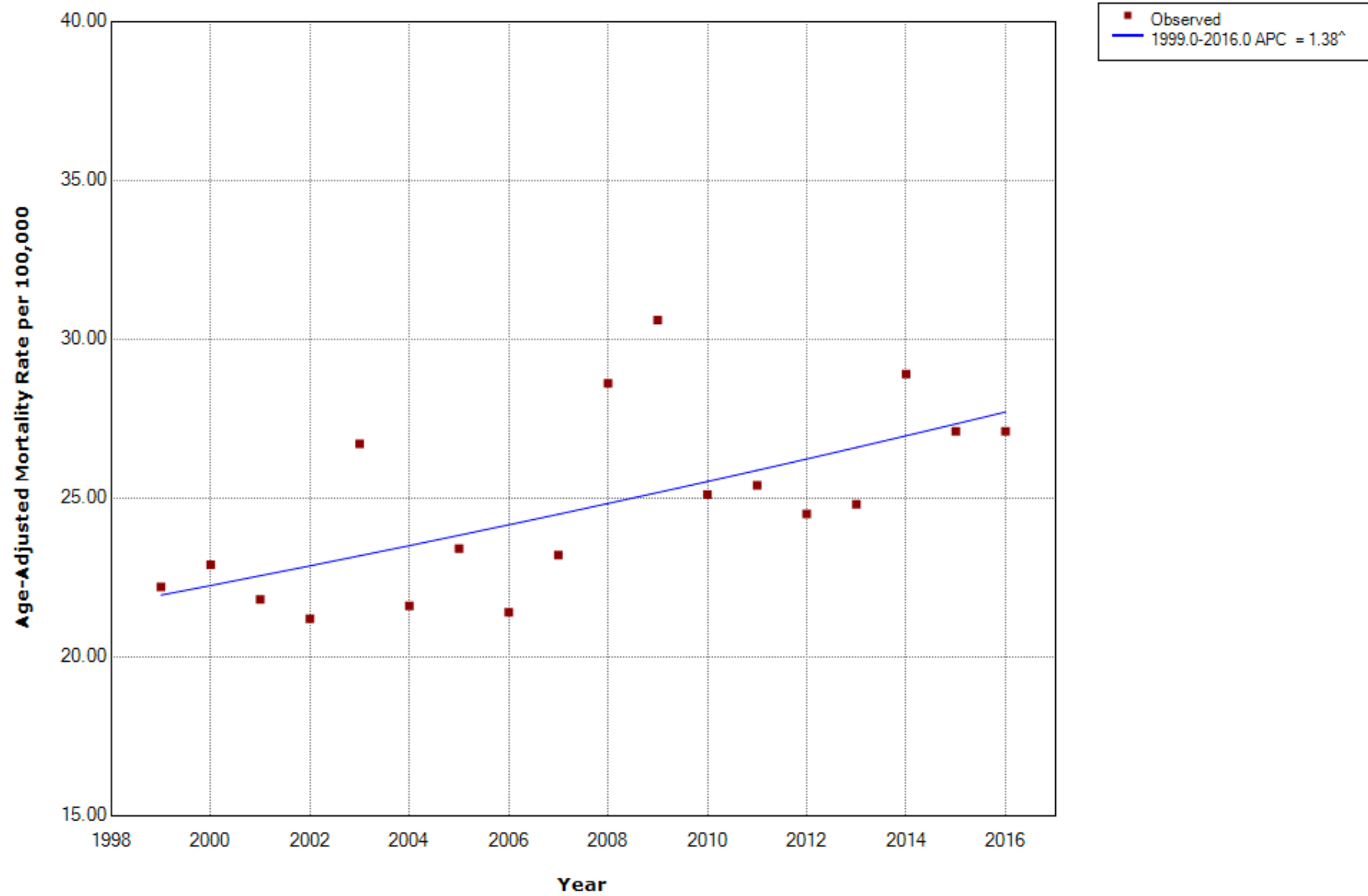


Diseases of the circulatory system (I00-I99) / Hispanics: 1 Joinpoint



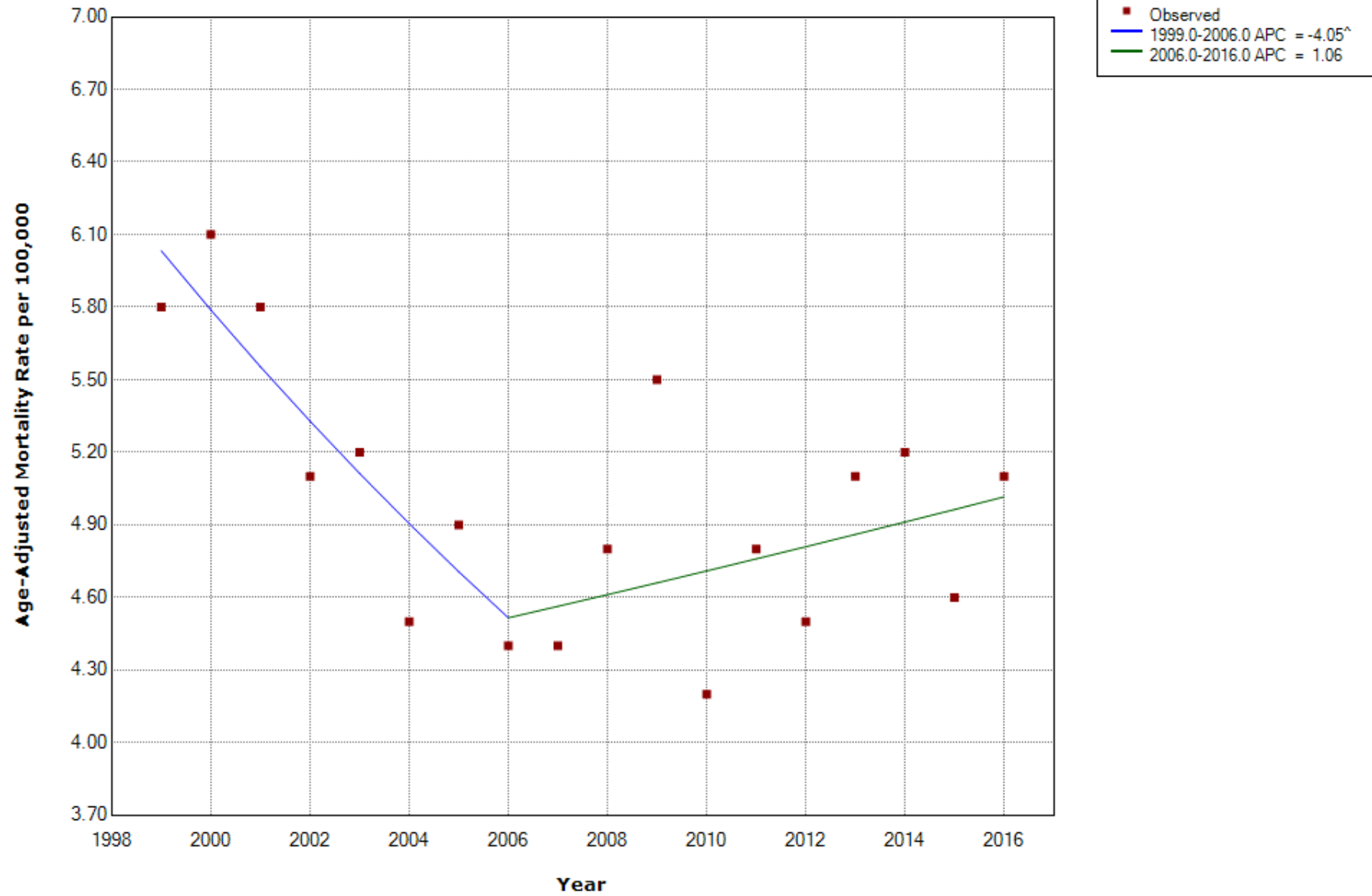
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

Diseases of the respiratory system (J00-J98) / NH AIAN: 0 Joinpoints



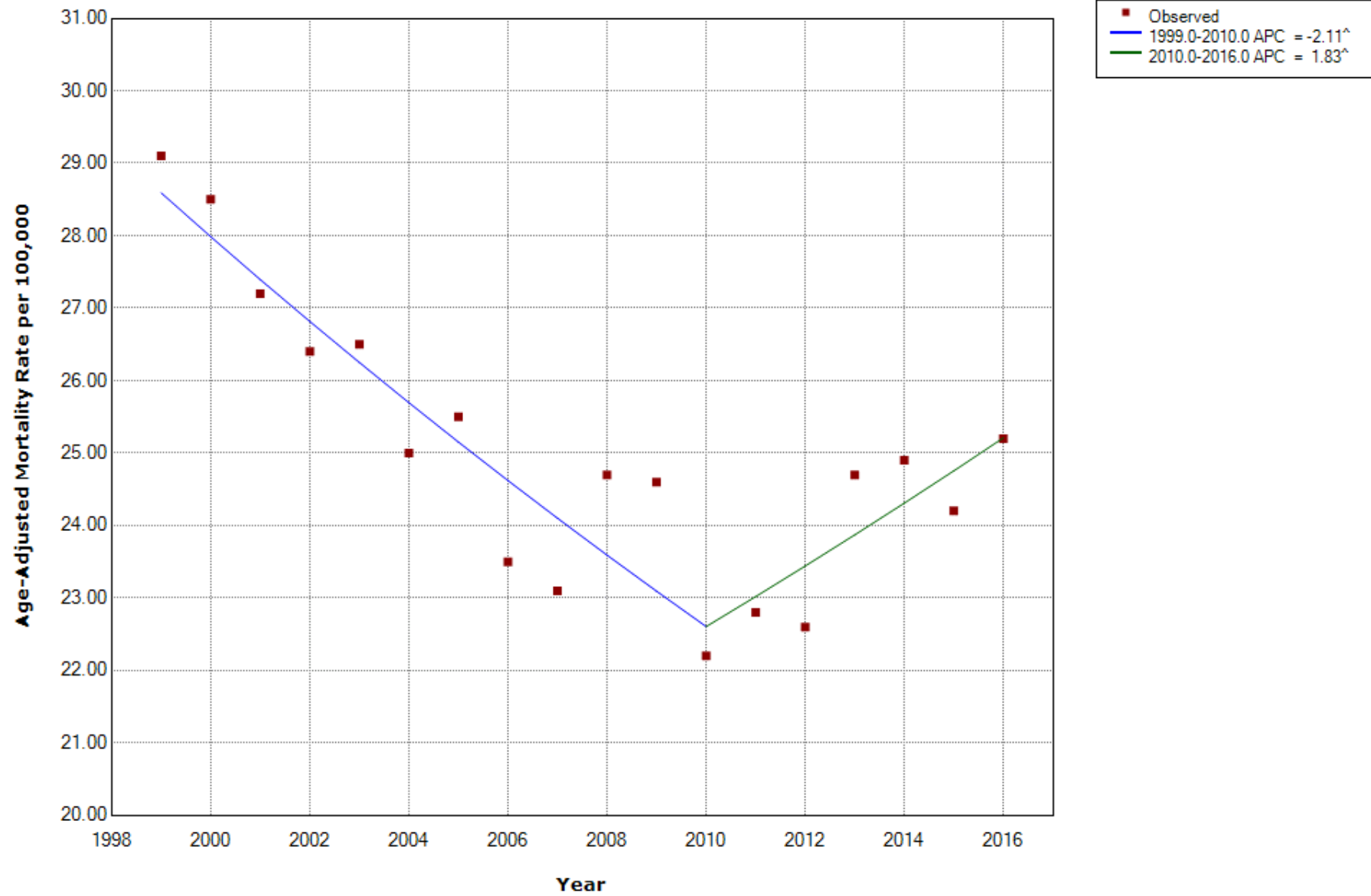
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

### Diseases of the respiratory system (J00-J98) / NH API: 1 Joinpoint



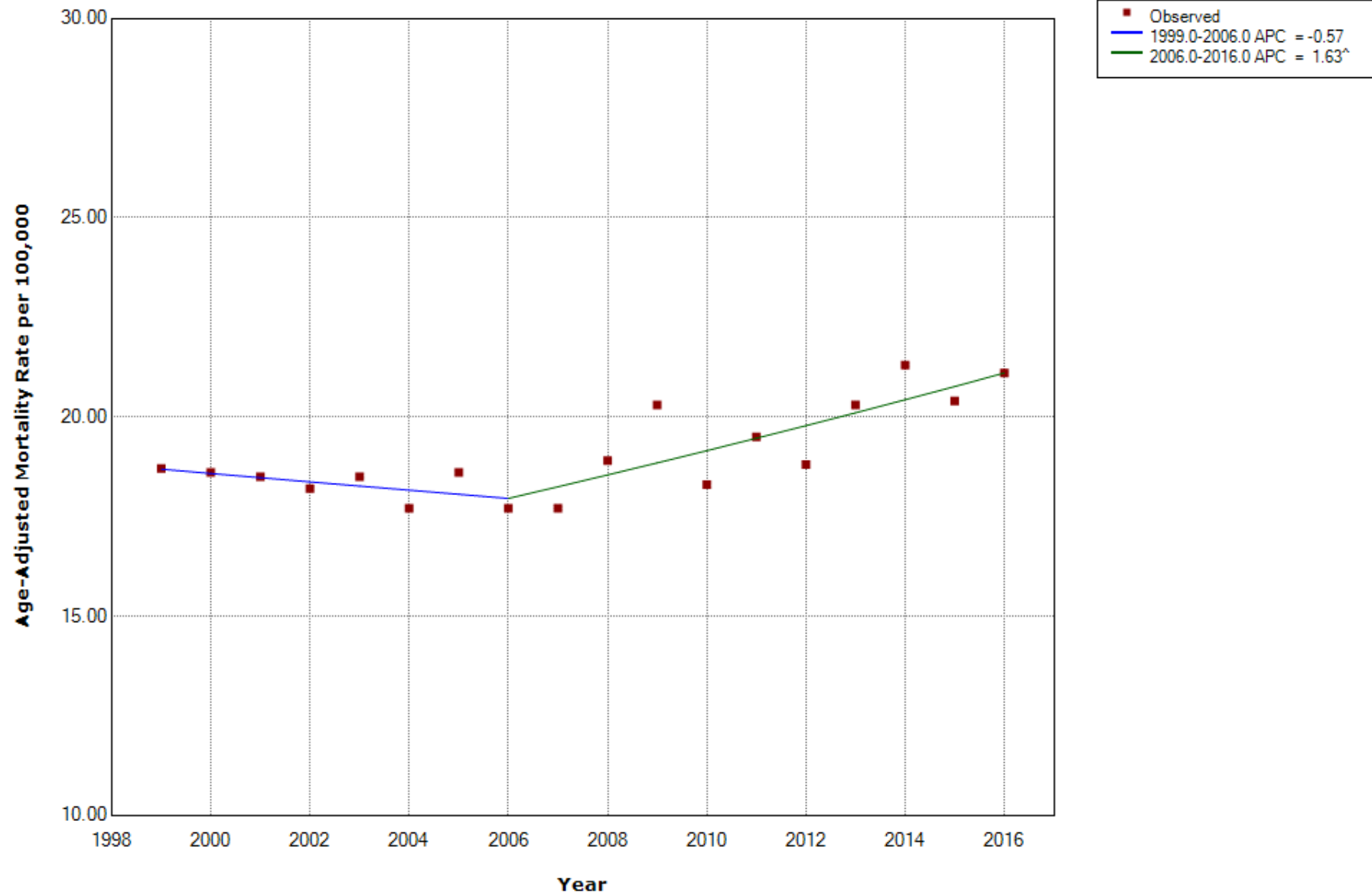
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

### Diseases of the respiratory system (J00-J98) / NH Blacks: 1 Joinpoint



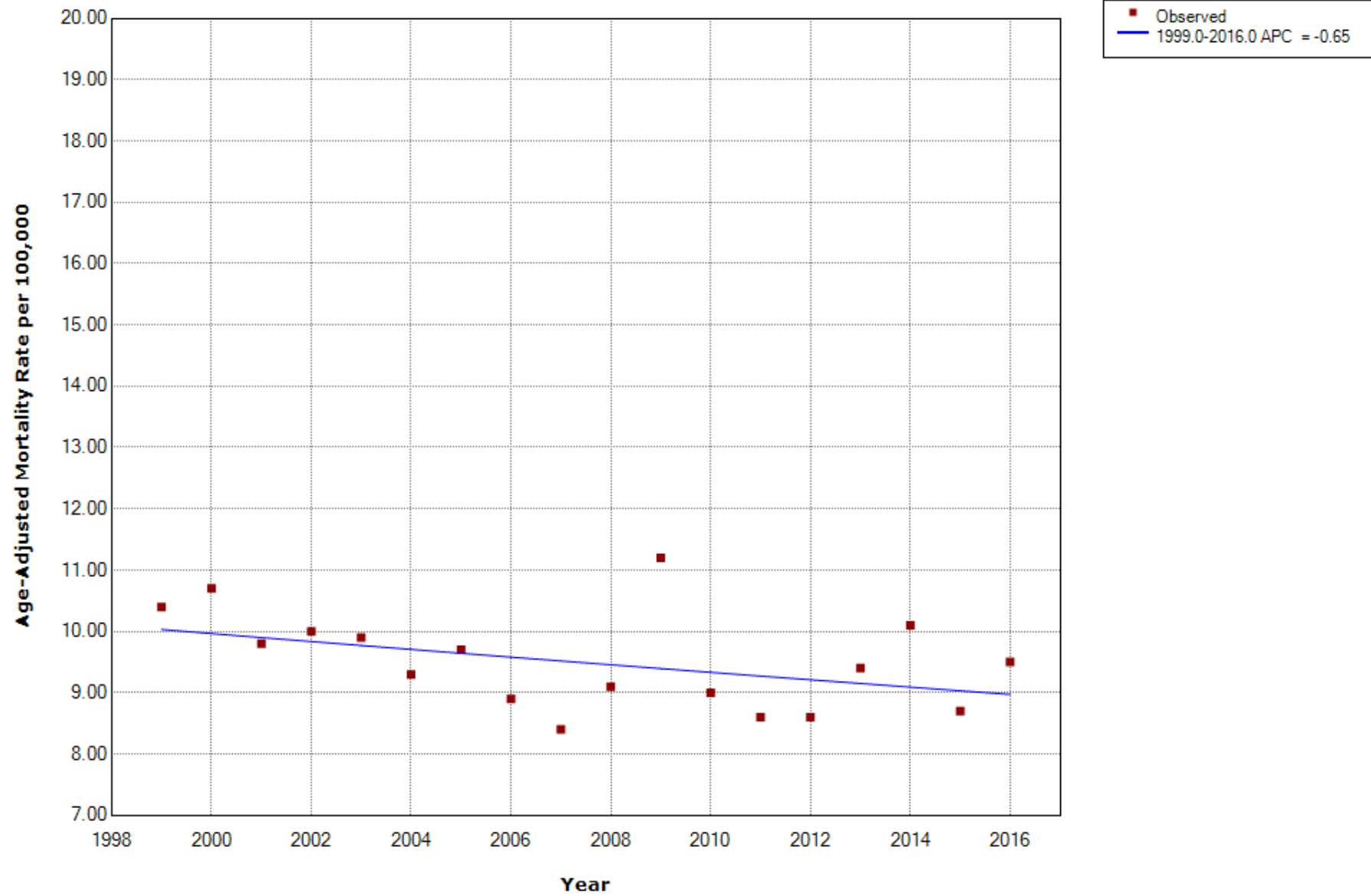
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

### Diseases of the respiratory system (J00-J98) / NH whites: 1 Joinpoint



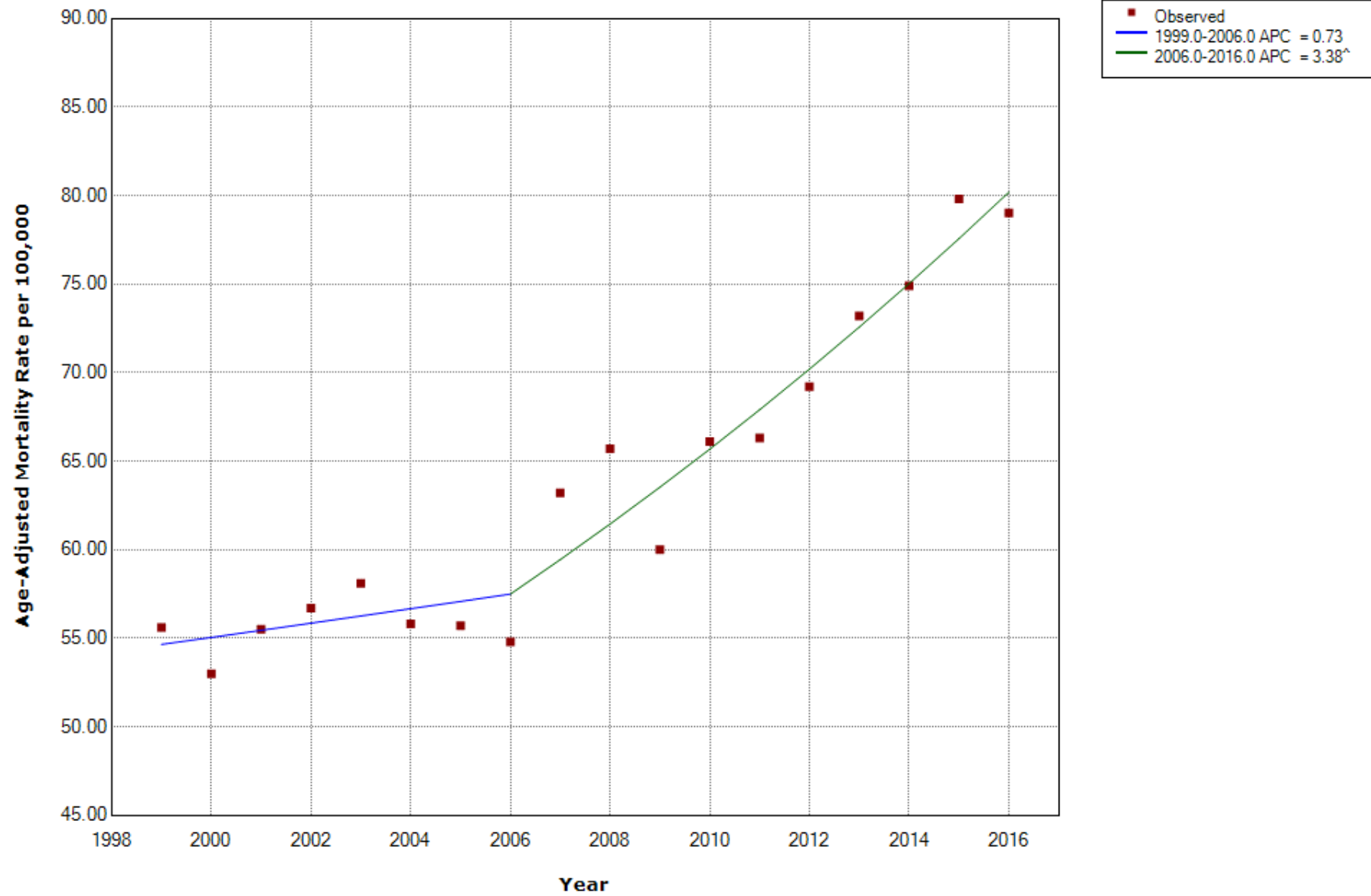
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

Diseases of the respiratory system (J00-J98) / Hispanics: 0 Joinpoints



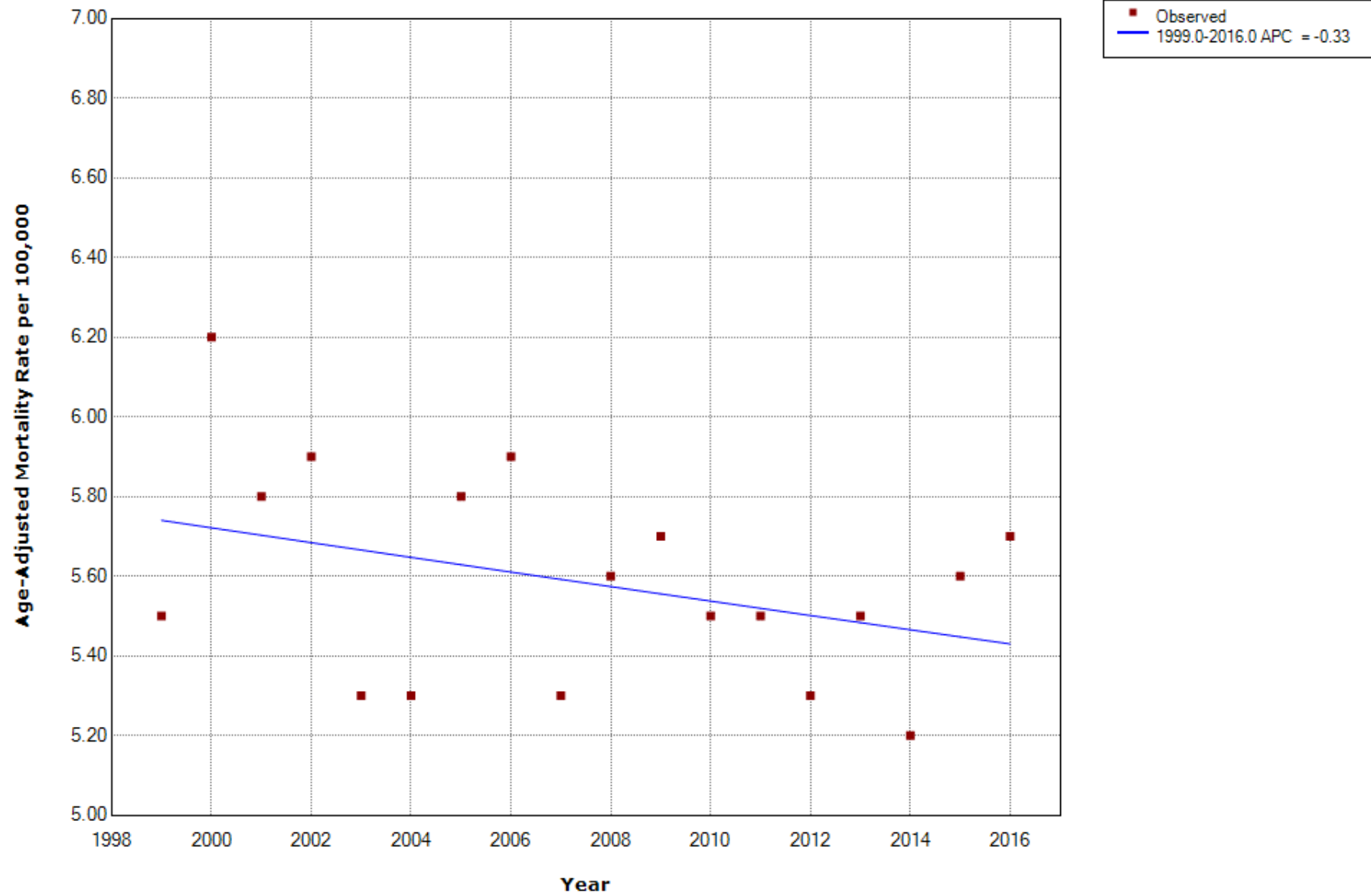
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

### Diseases of the digestive system (K00-K92) / NH AIAN: 1 Joinpoint



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

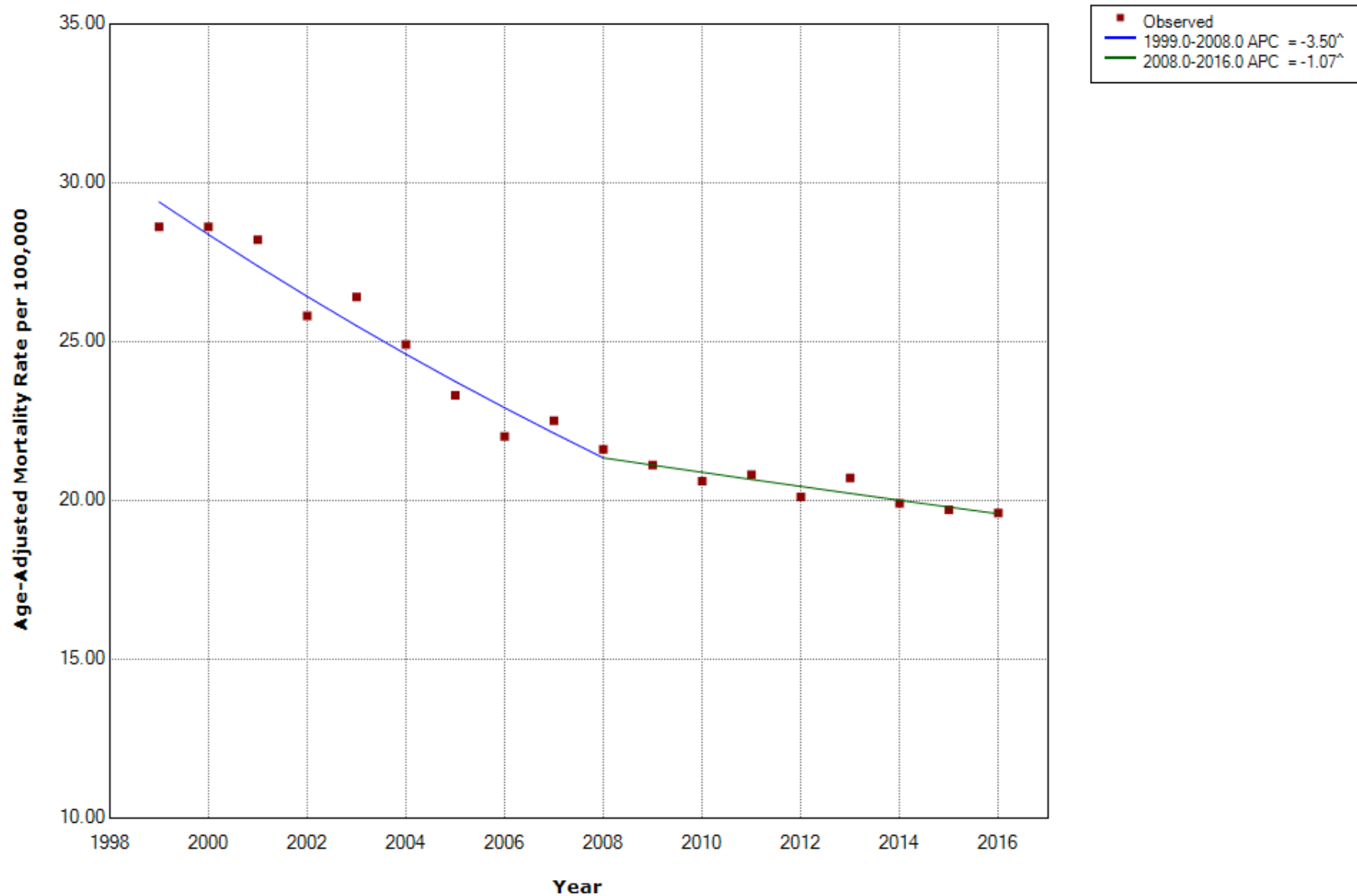
Diseases of the digestive system (K00-K92) / NH API: 0 Joinpoints



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

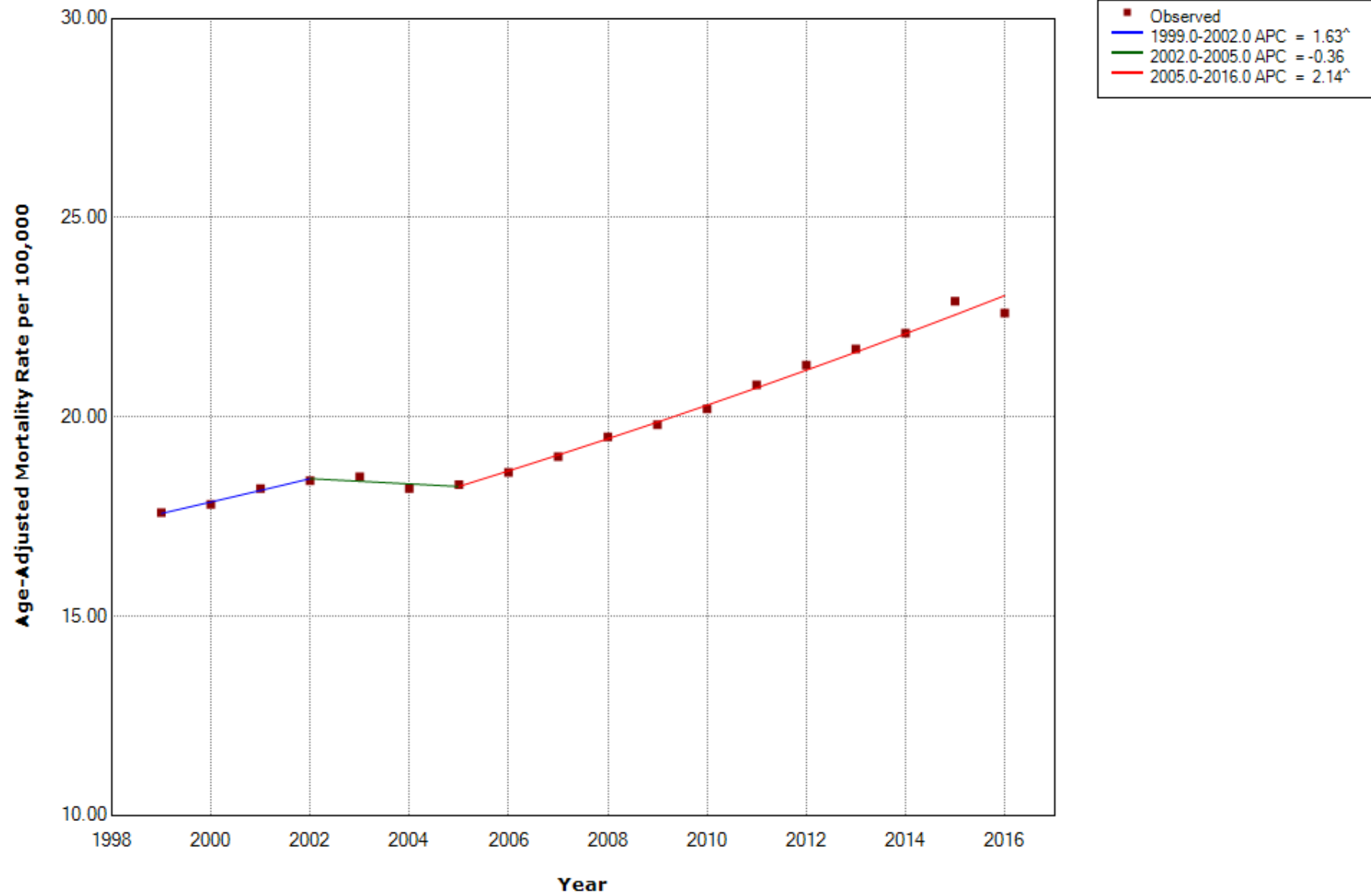


### Diseases of the digestive system (K00-K92) / NH Blacks: 1 Joinpoint



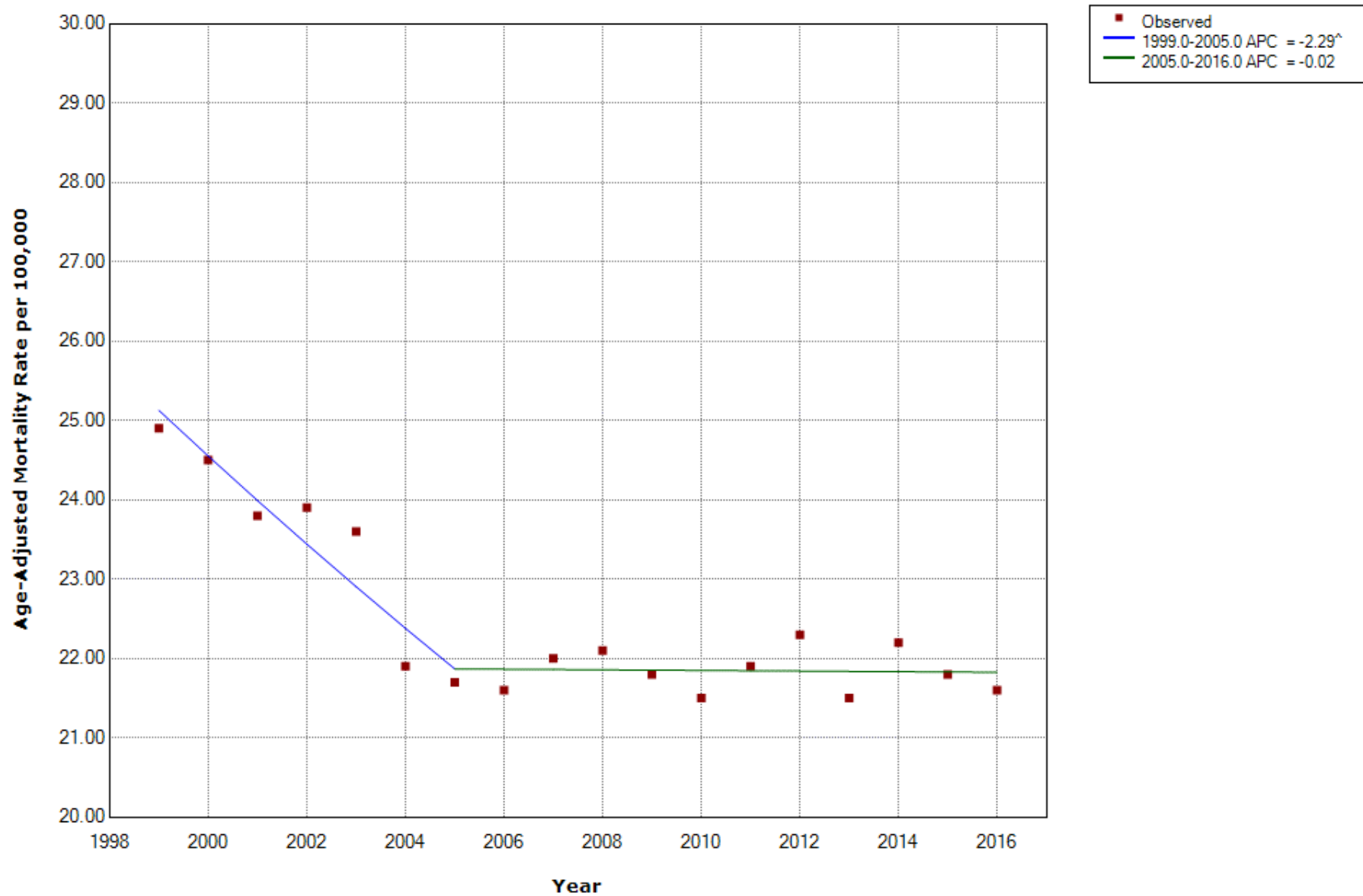
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

### Diseases of the digestive system (K00-K92) / NH whites: 2 Joinpoints



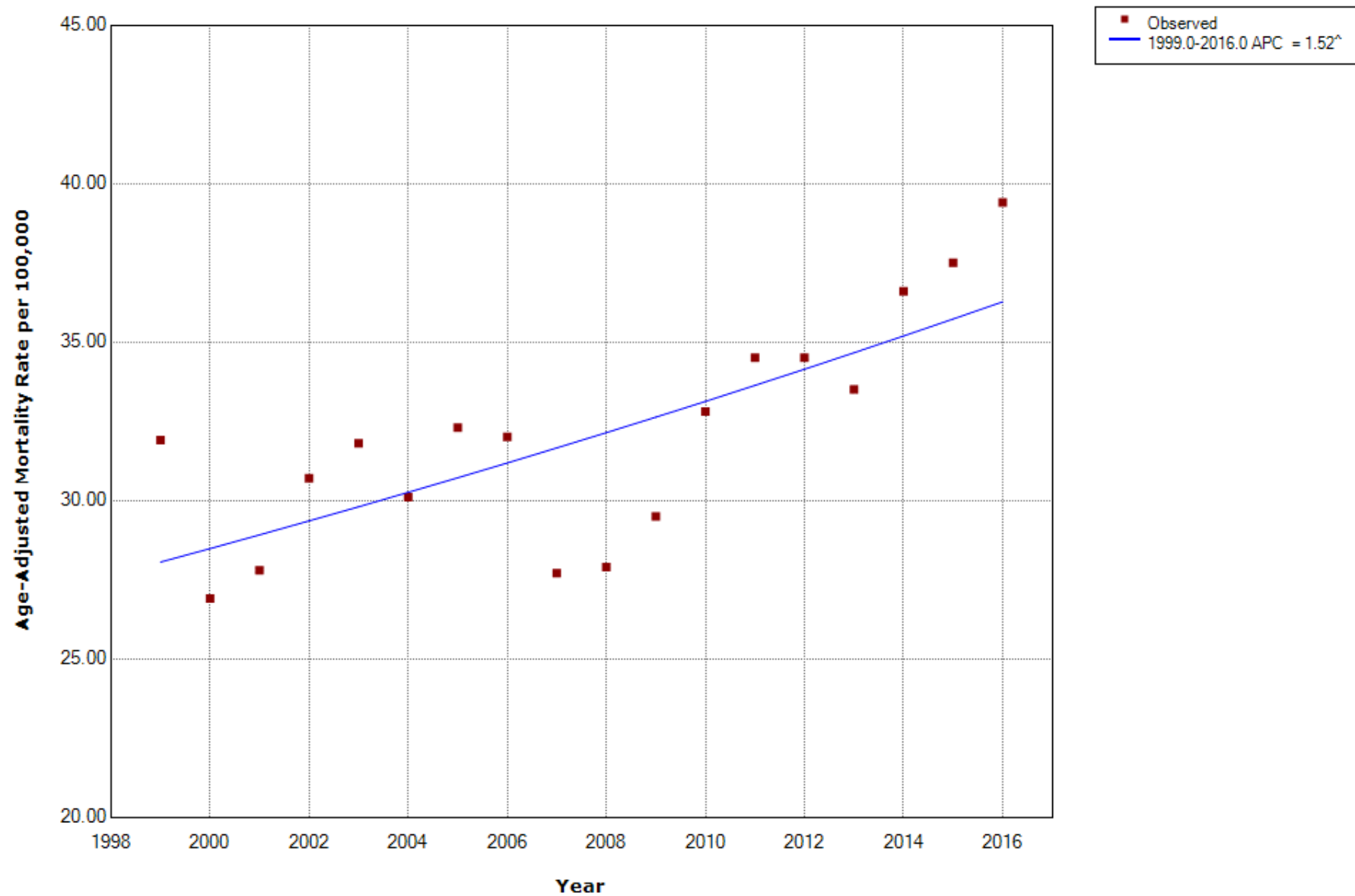
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

### Diseases of the digestive system (K00-K92) / Hispanics: 1 Joinpoint



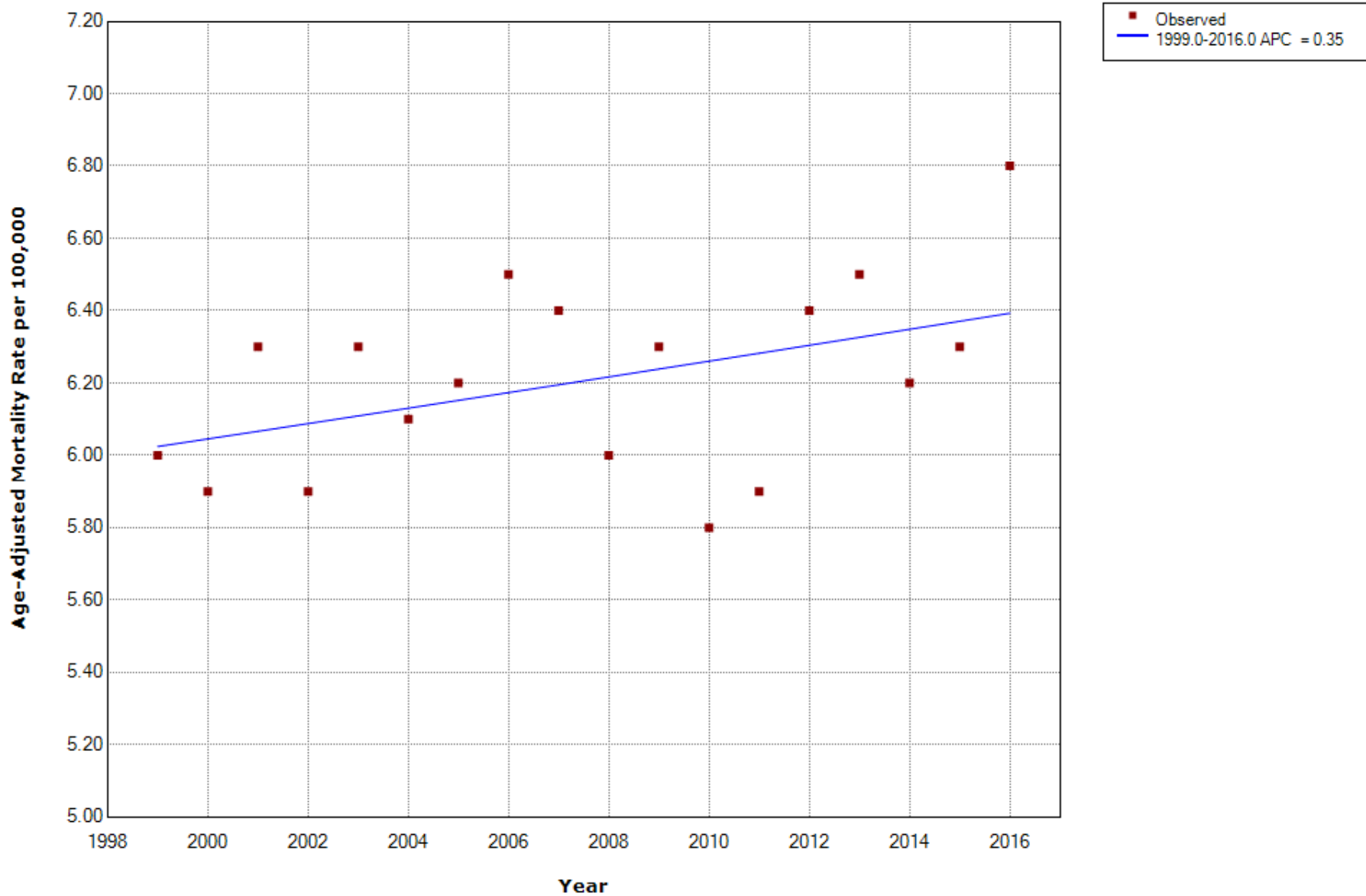
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

Endocrine, nutritional and metabolic diseases (E00-E88) / NH AIAN: 0 Joinpoints



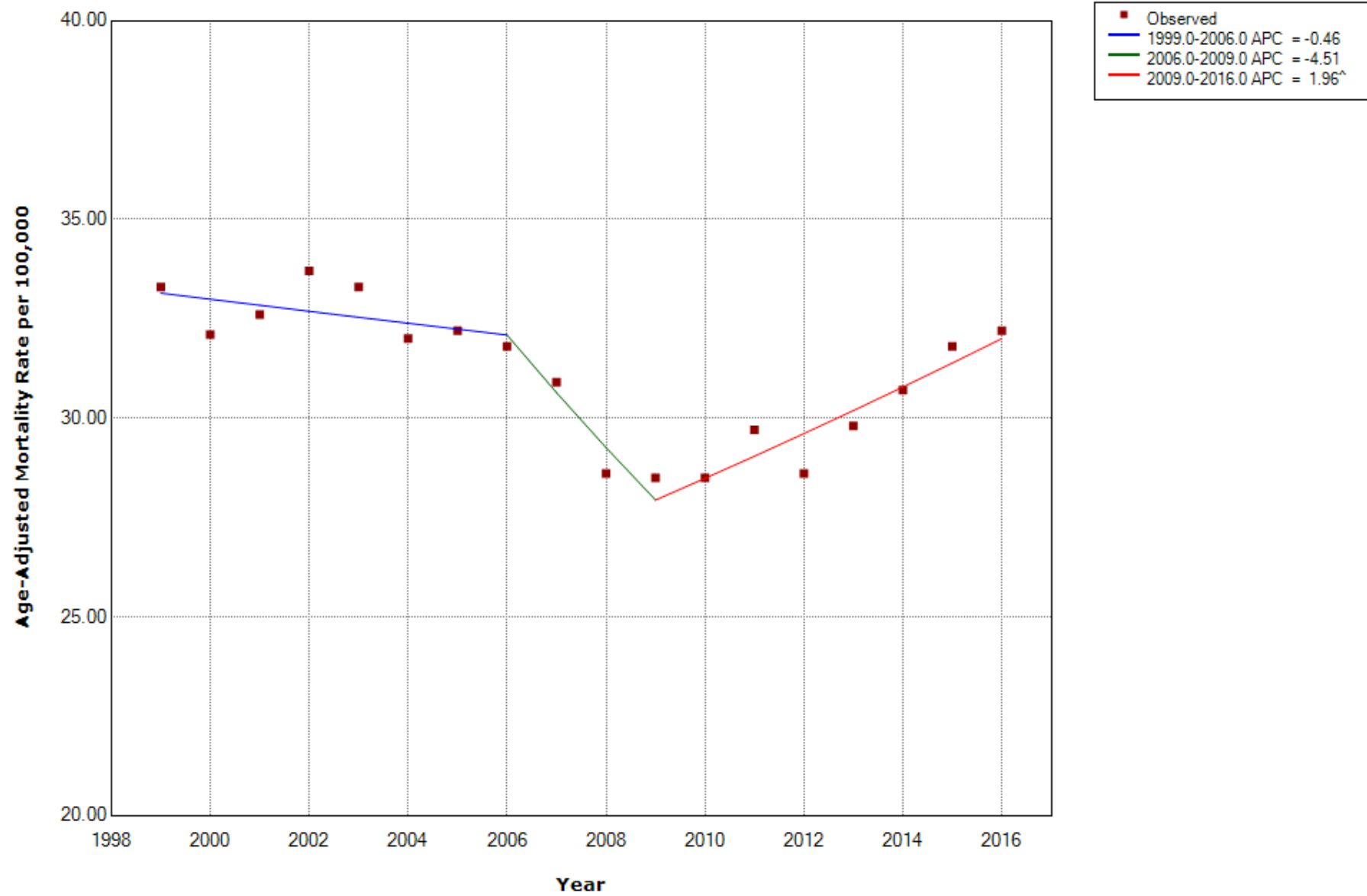
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

Endocrine, nutritional and metabolic diseases (E00-E88) / NH API: 0 Joinpoints



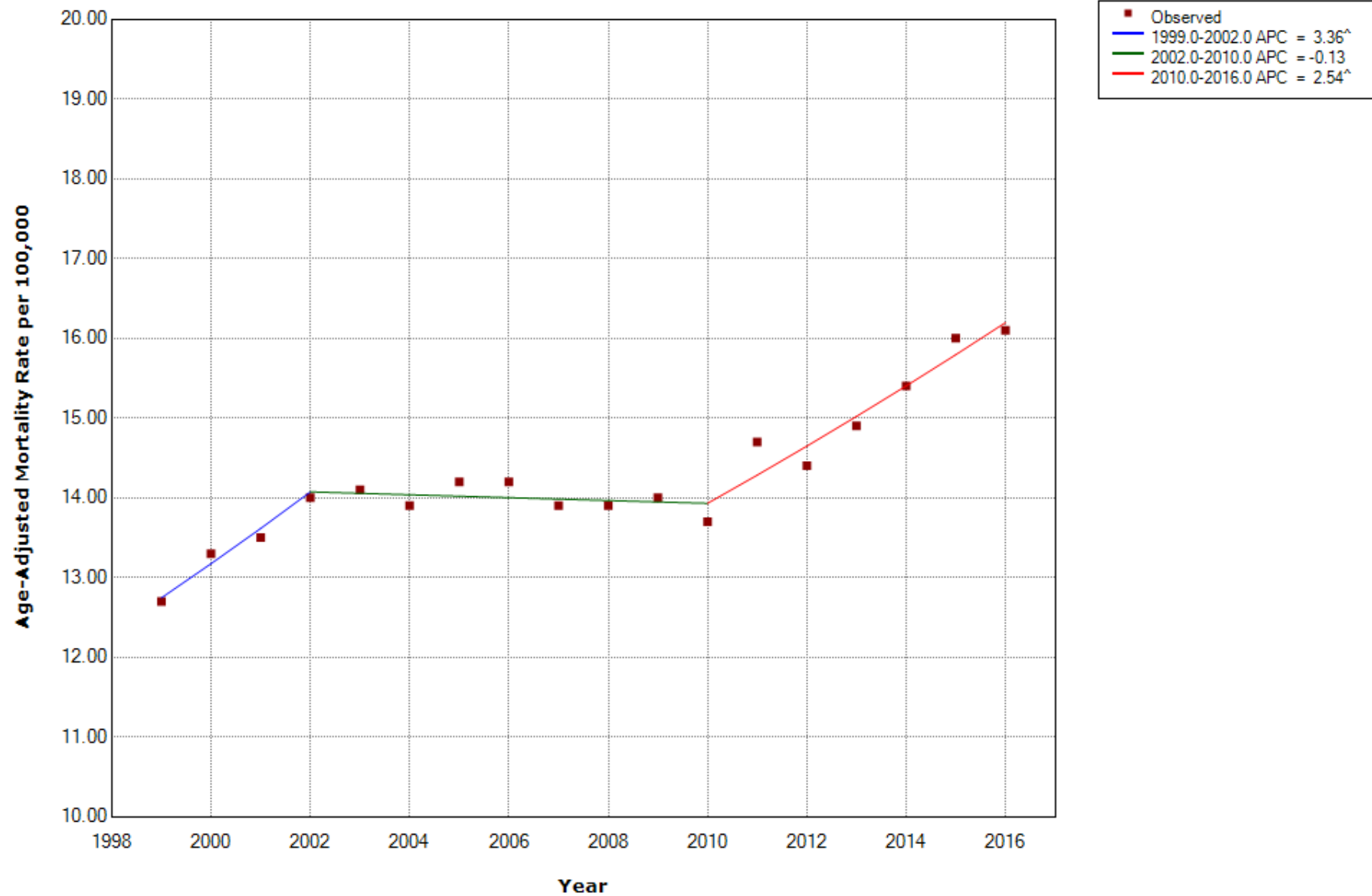
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

### Endocrine, nutritional and metabolic diseases (E00-E88) / NH Blacks: 2 Joinpoints



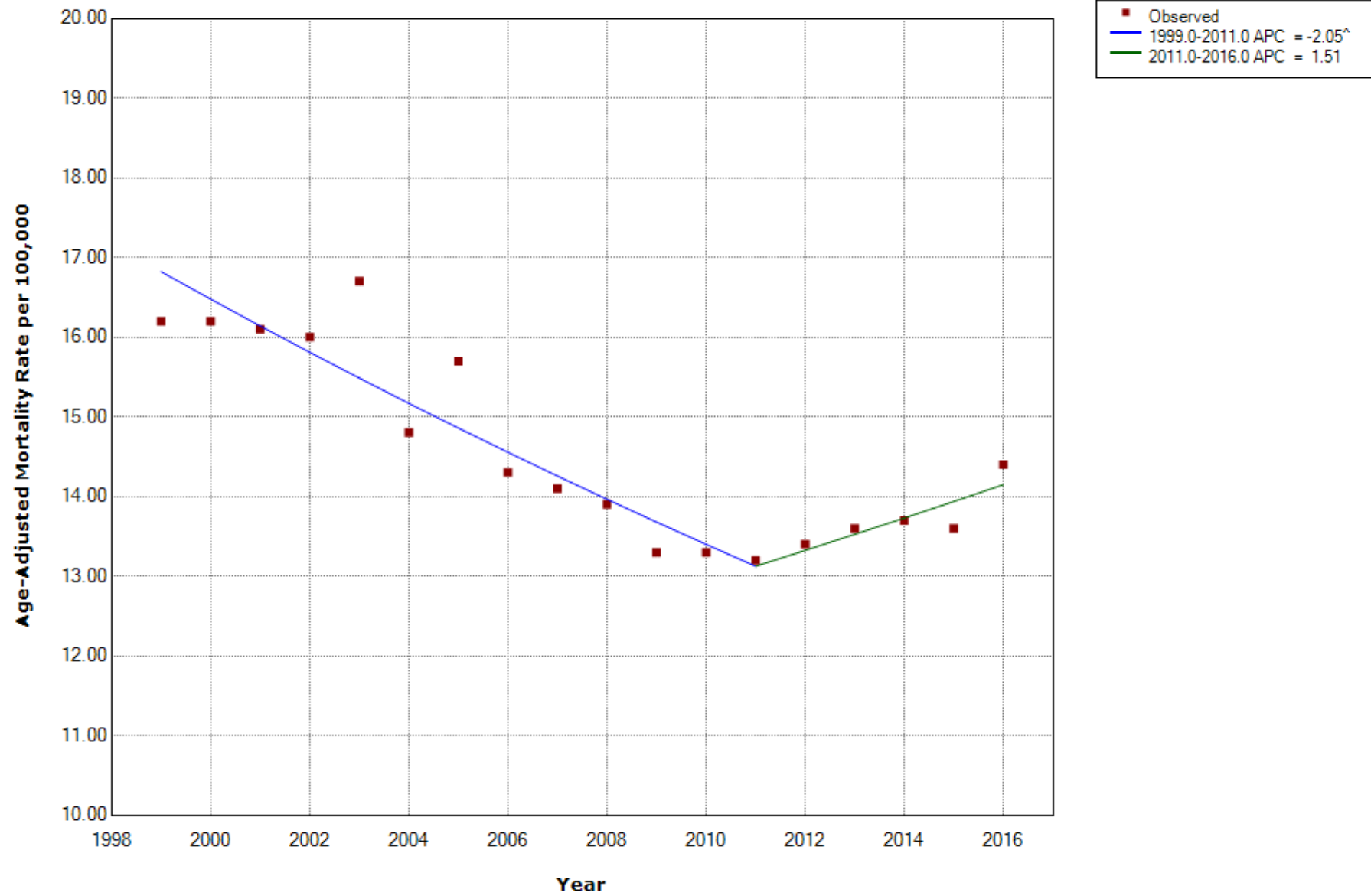
<sup>^</sup> Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

### Endocrine, nutritional and metabolic diseases (E00-E88) / NH whites: 2 Joinpoints



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

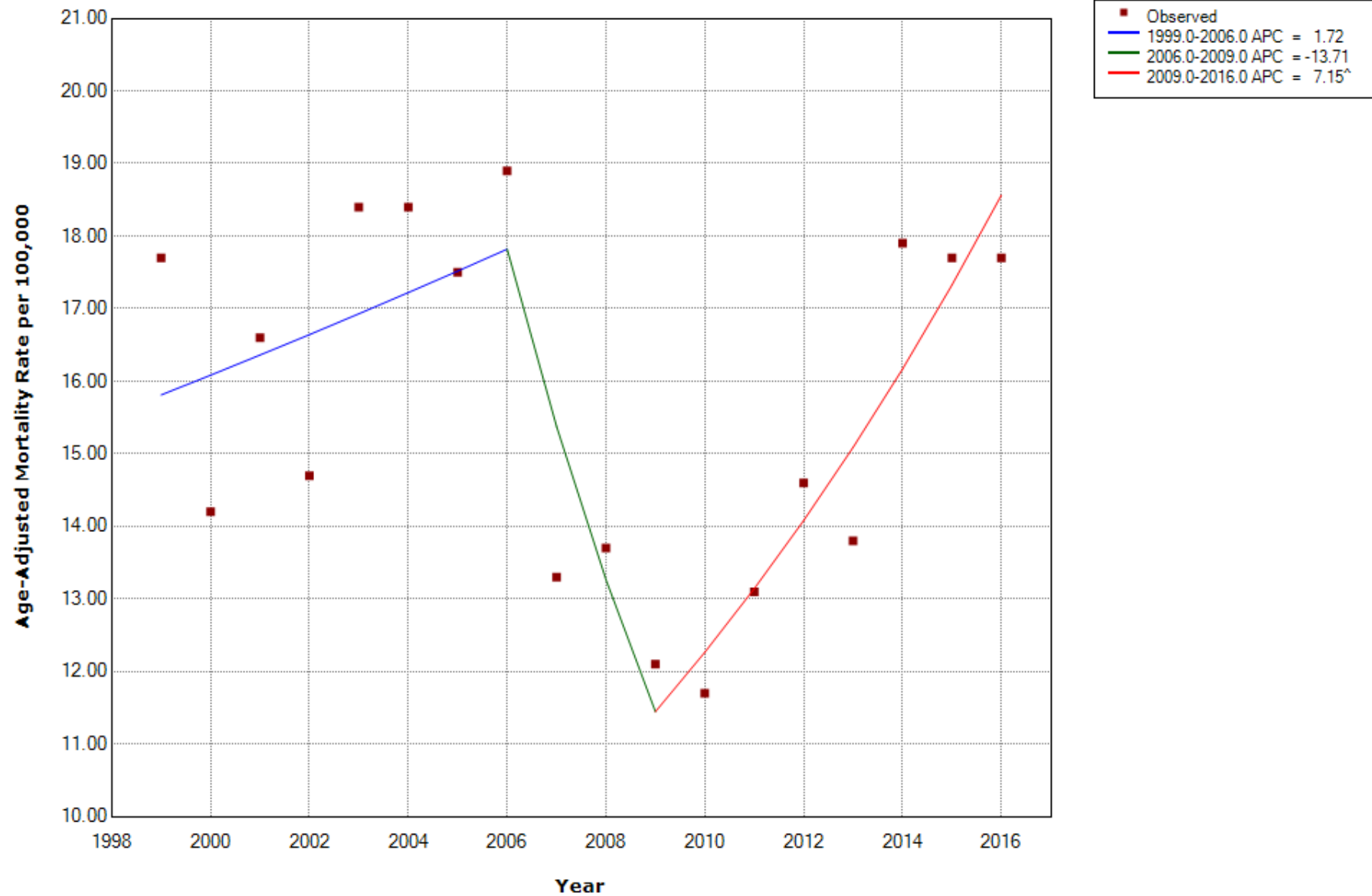
### Endocrine, nutritional and metabolic diseases (E00-E88) / Hispanics: 1 Joinpoint



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

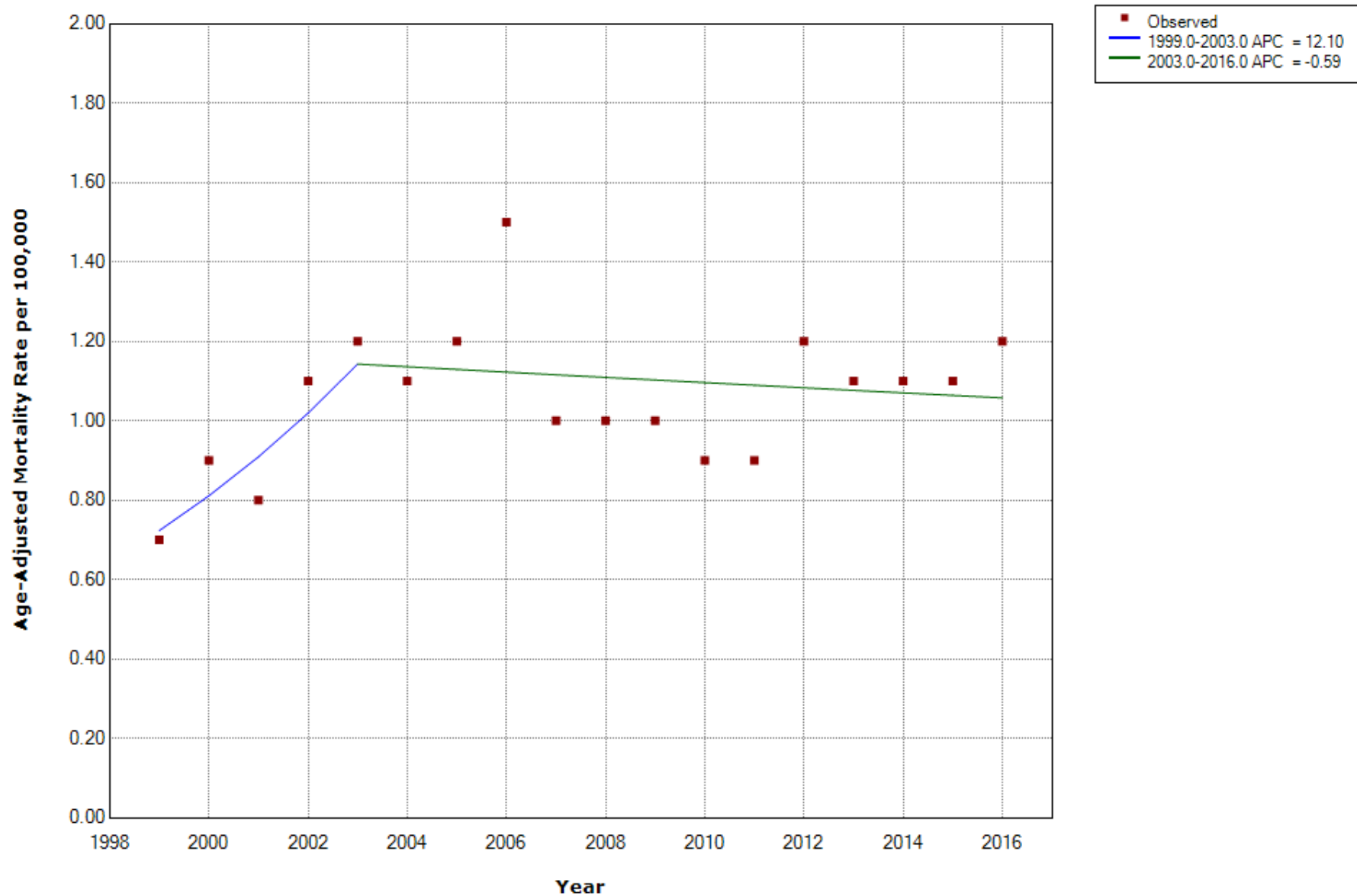


### Mental and behavioral disorders (F01-F99) / NH AIAN: 2 Joinpoints



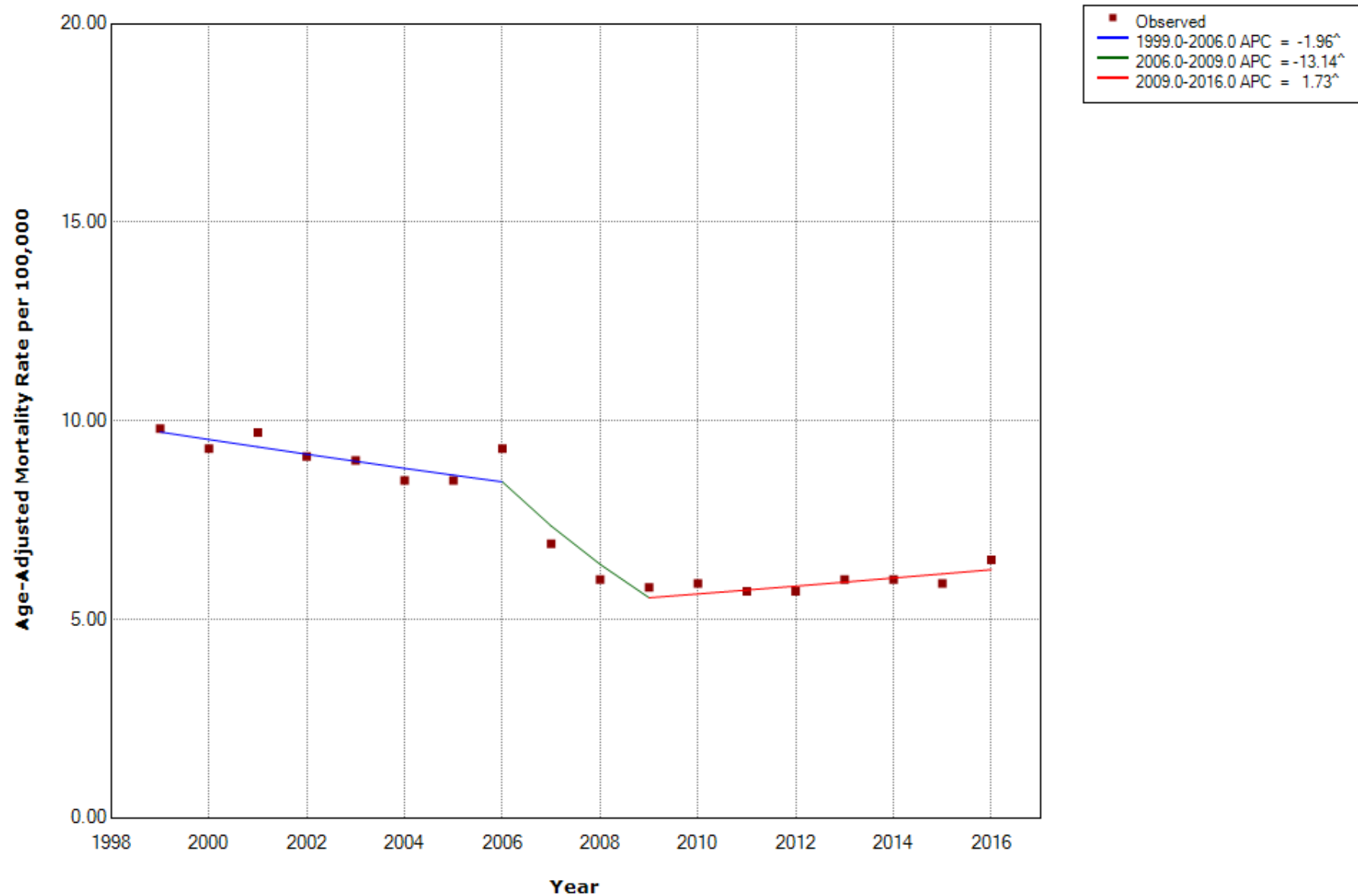
<sup>^</sup> Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

### Mental and behavioral disorders (F01-F99) / NH API: 1 Joinpoint



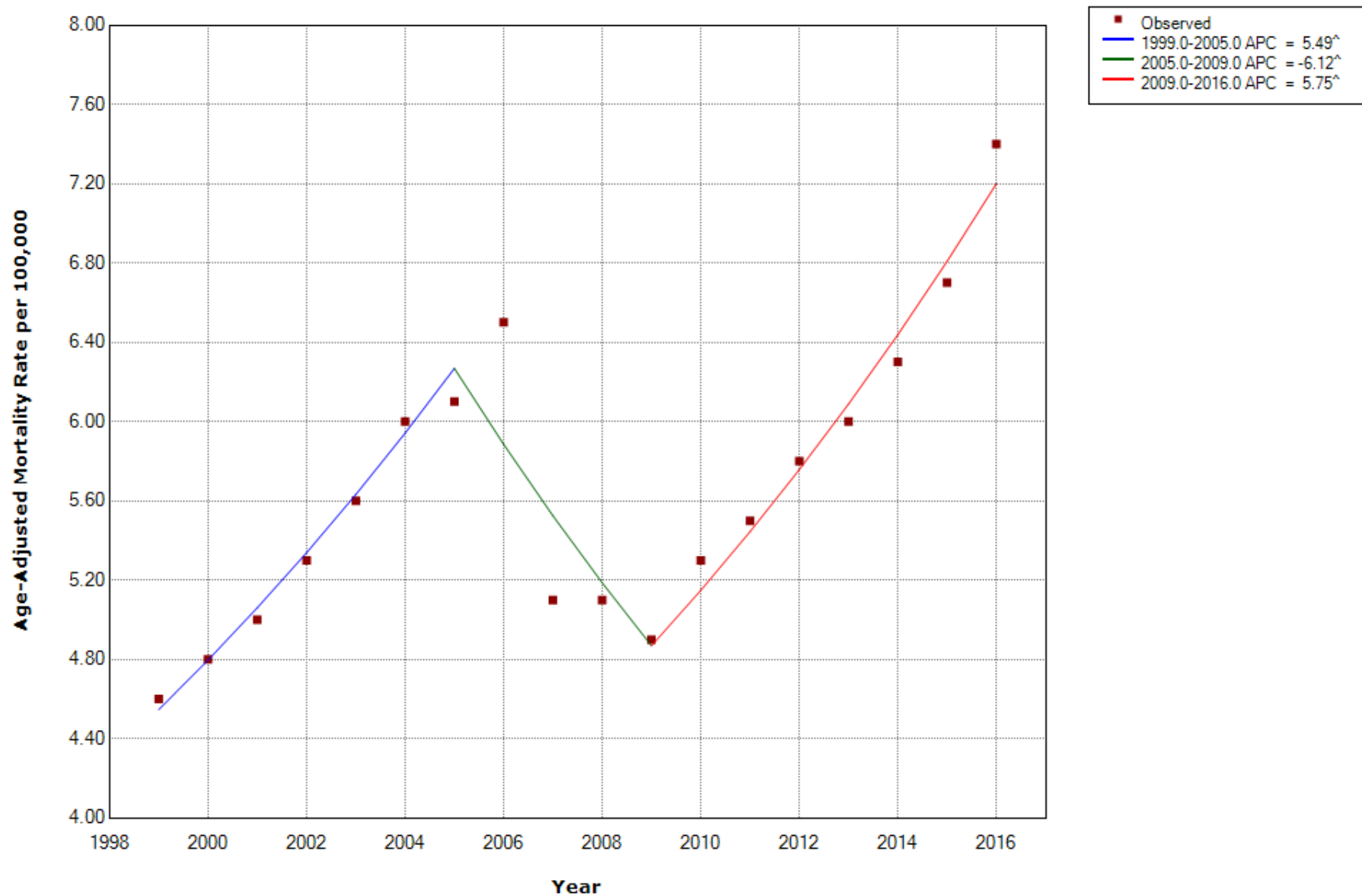
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

### Mental and behavioral disorders (F01-F99) / NH Blacks: 2 Joinpoints



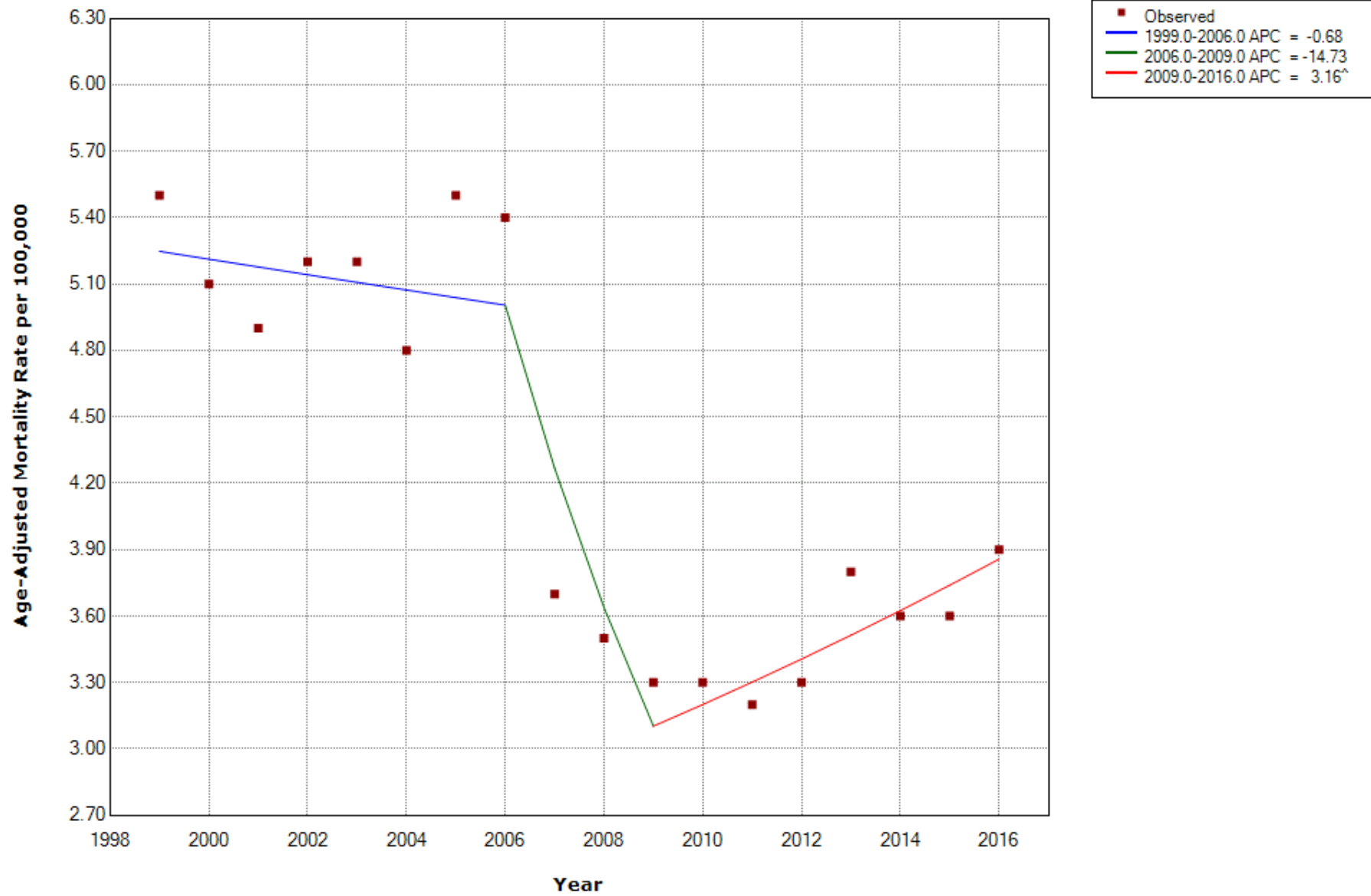
<sup>^</sup> Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

### Mental and behavioral disorders (F01-F99) / NH whites: 2 Joinpoints



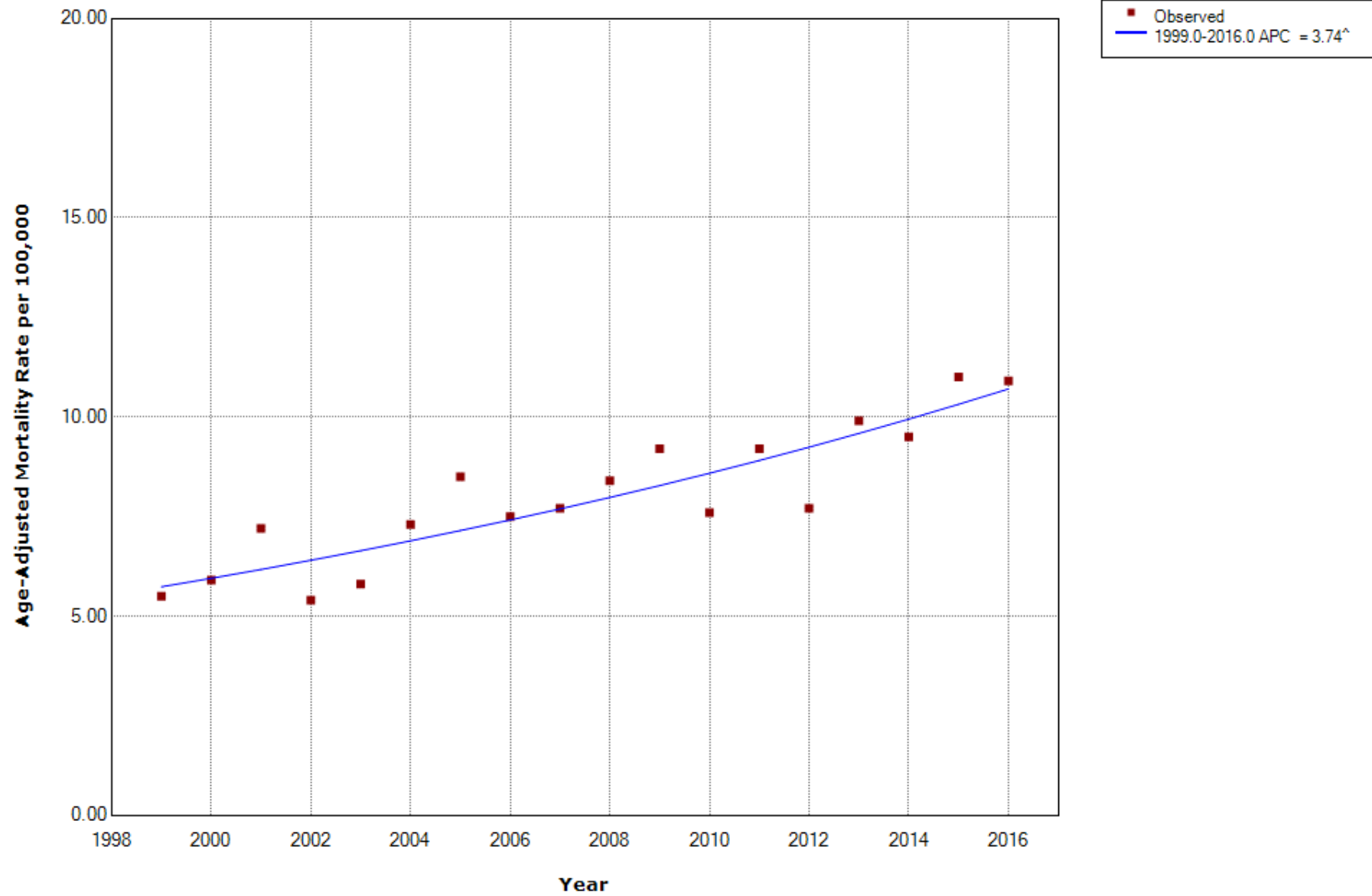
<sup>^</sup> Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

### Mental and behavioral disorders (F01-F99) / Hispanics: 2 Joinpoints



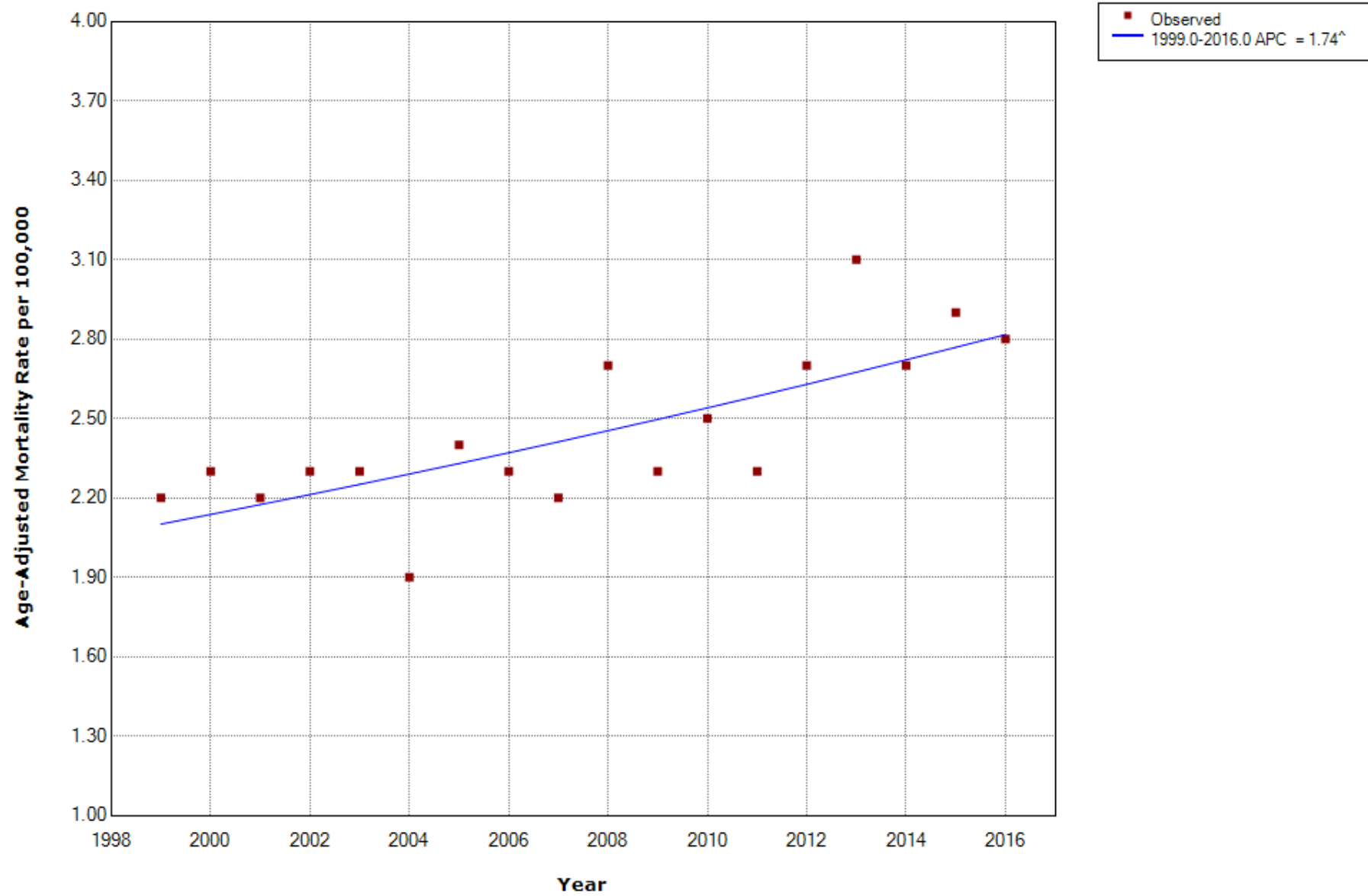
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

Diseases of the nervous system (G00-G98) / NH AIAN: 0 Joinpoints



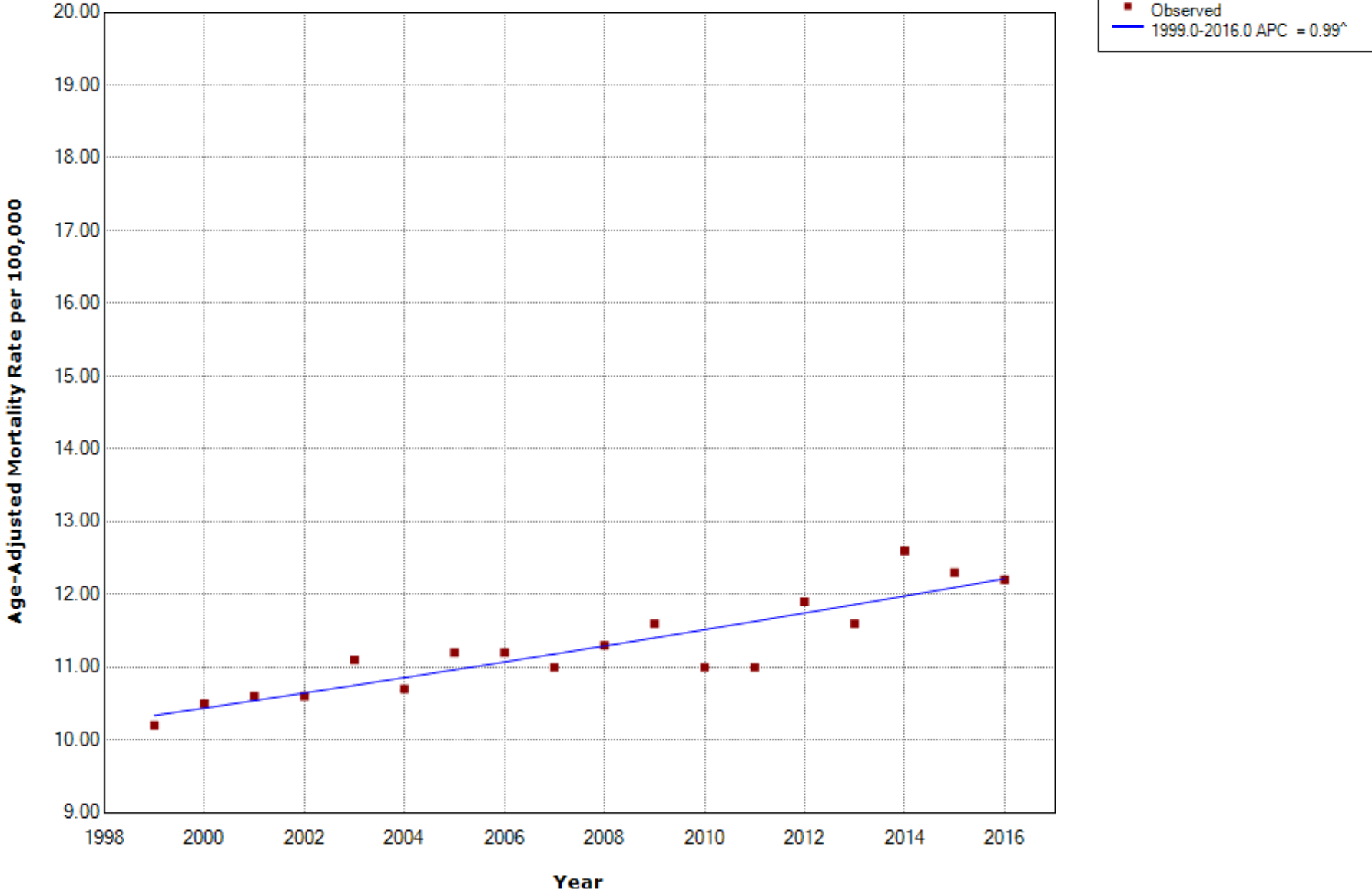
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

Diseases of the nervous system (G00-G98) / NH API: 0 Joinpoints



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

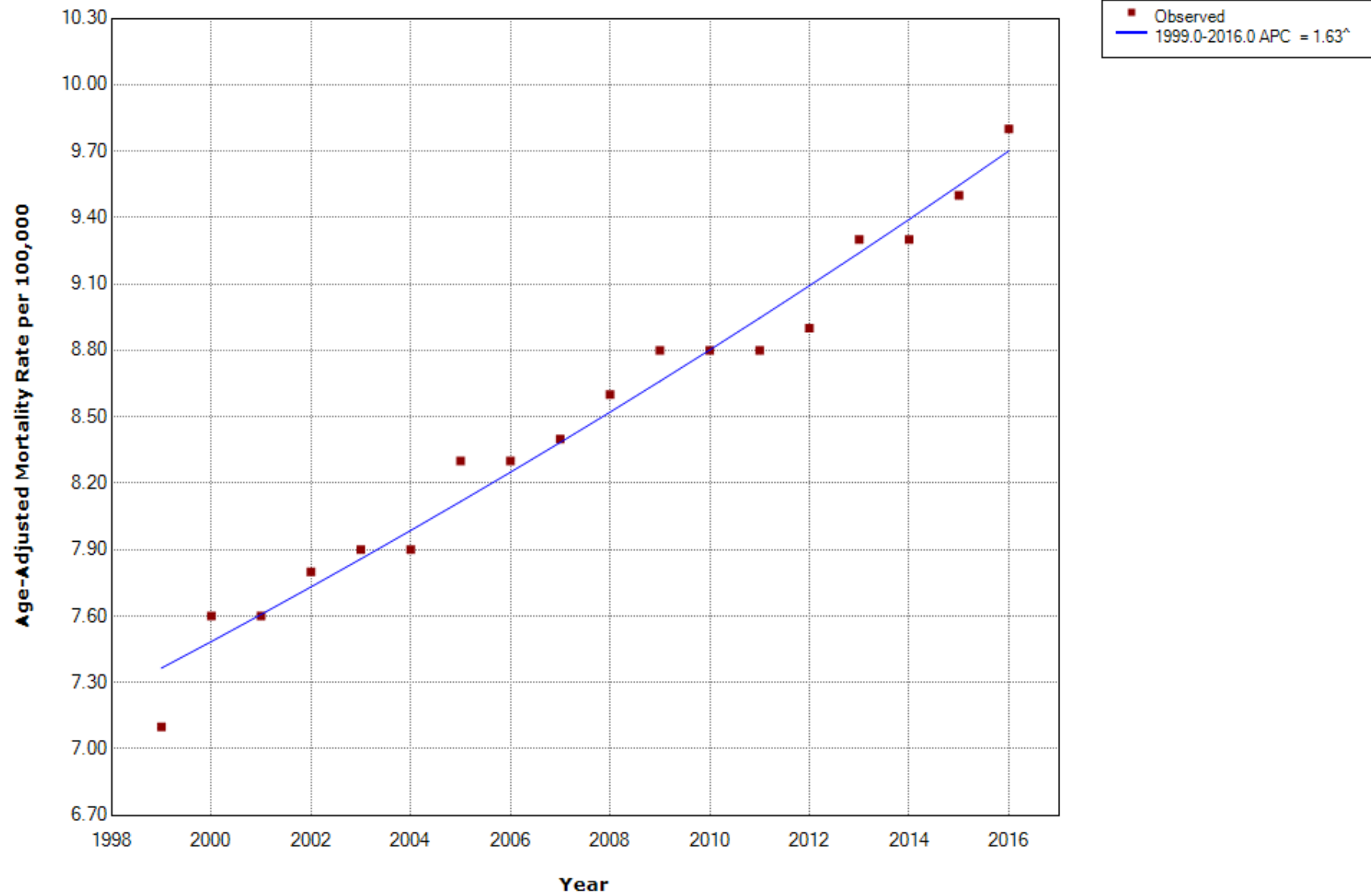
Diseases of the nervous system (G00-G98) / NH Blacks: 0 Joinpoints



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

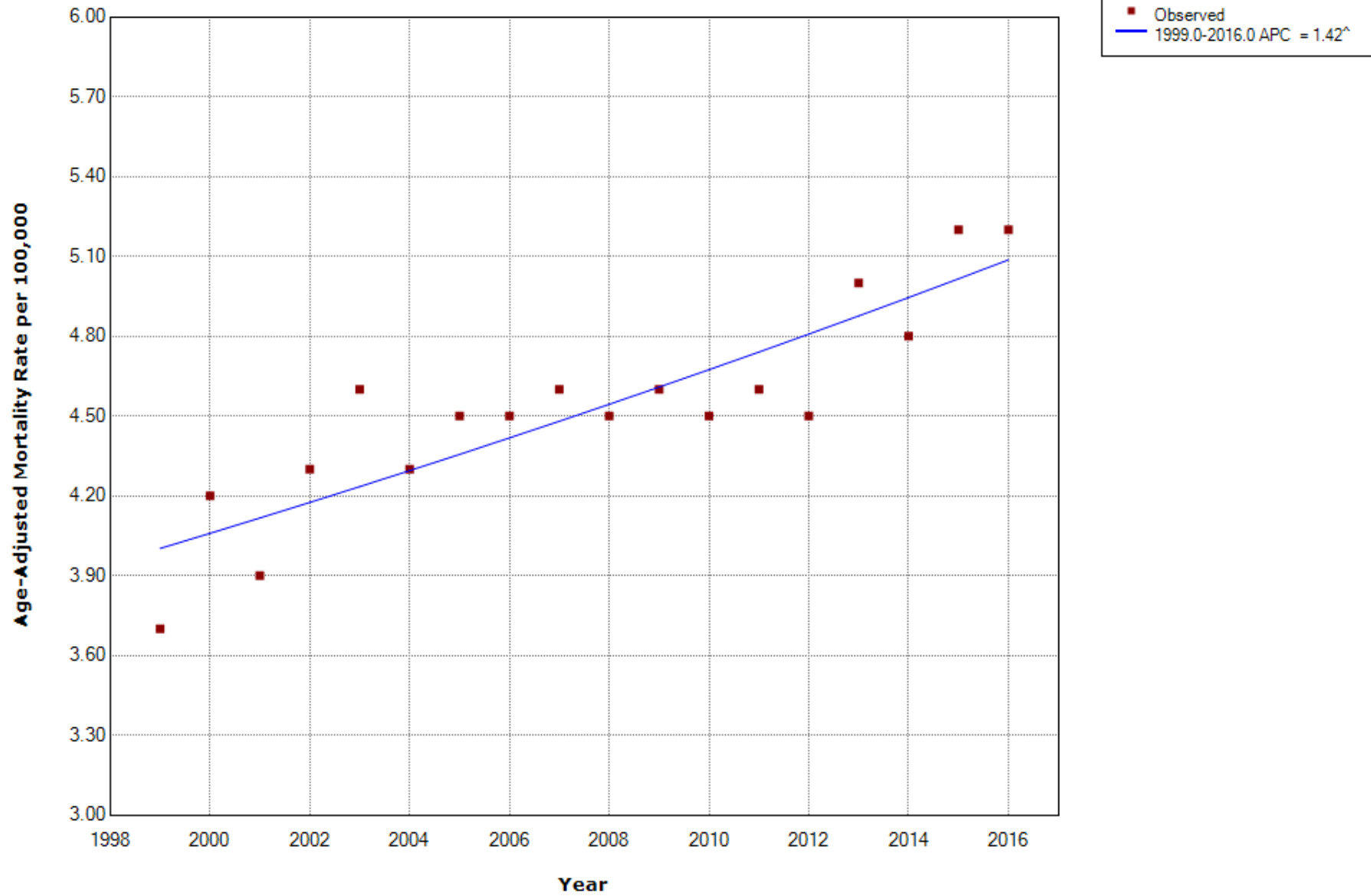


Diseases of the nervous system (G00-G98) / NH whites: 0 Joinpoints



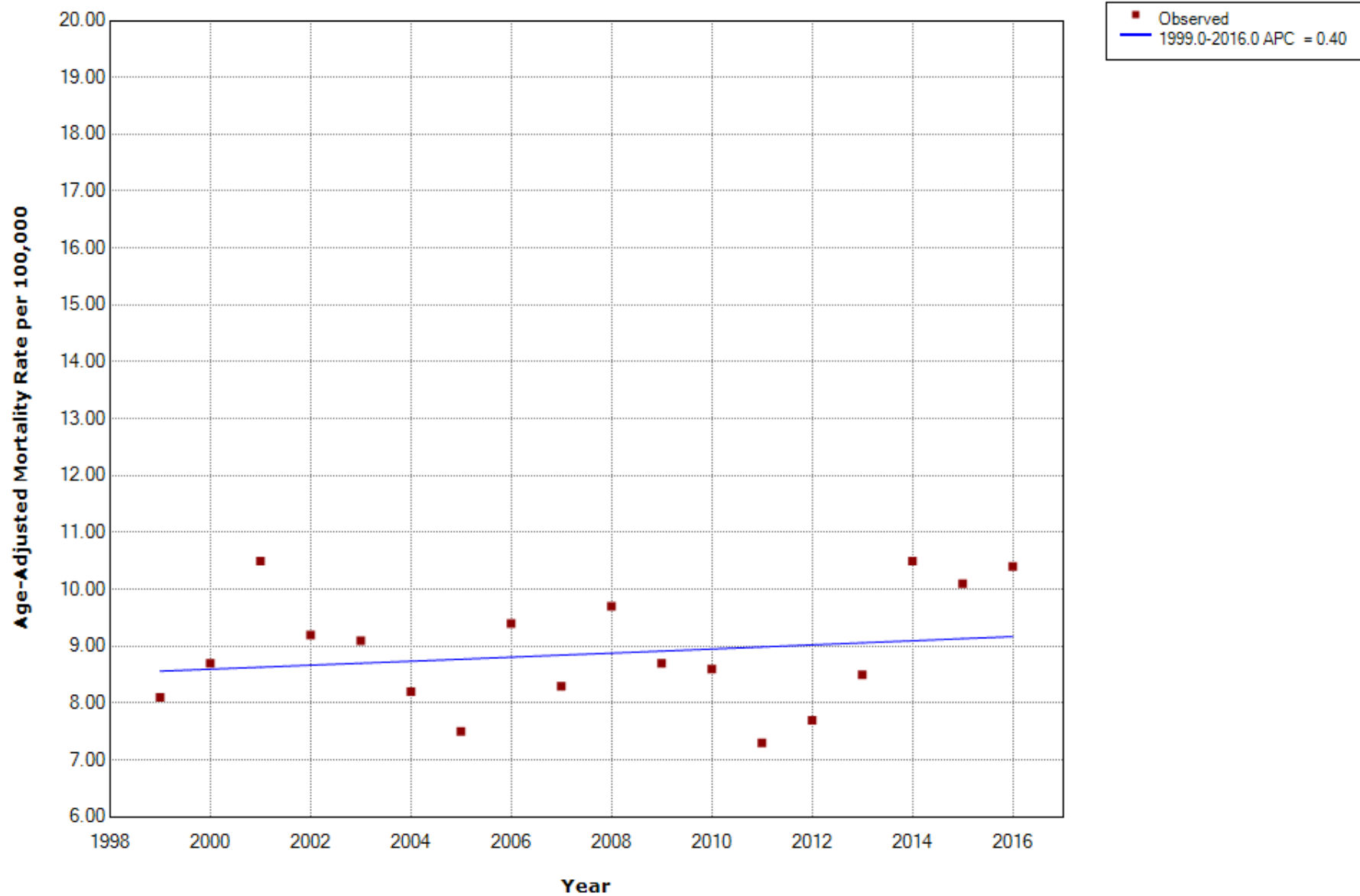
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

Diseases of the nervous system (G00-G98) / Hispanics: 0 Joinpoints



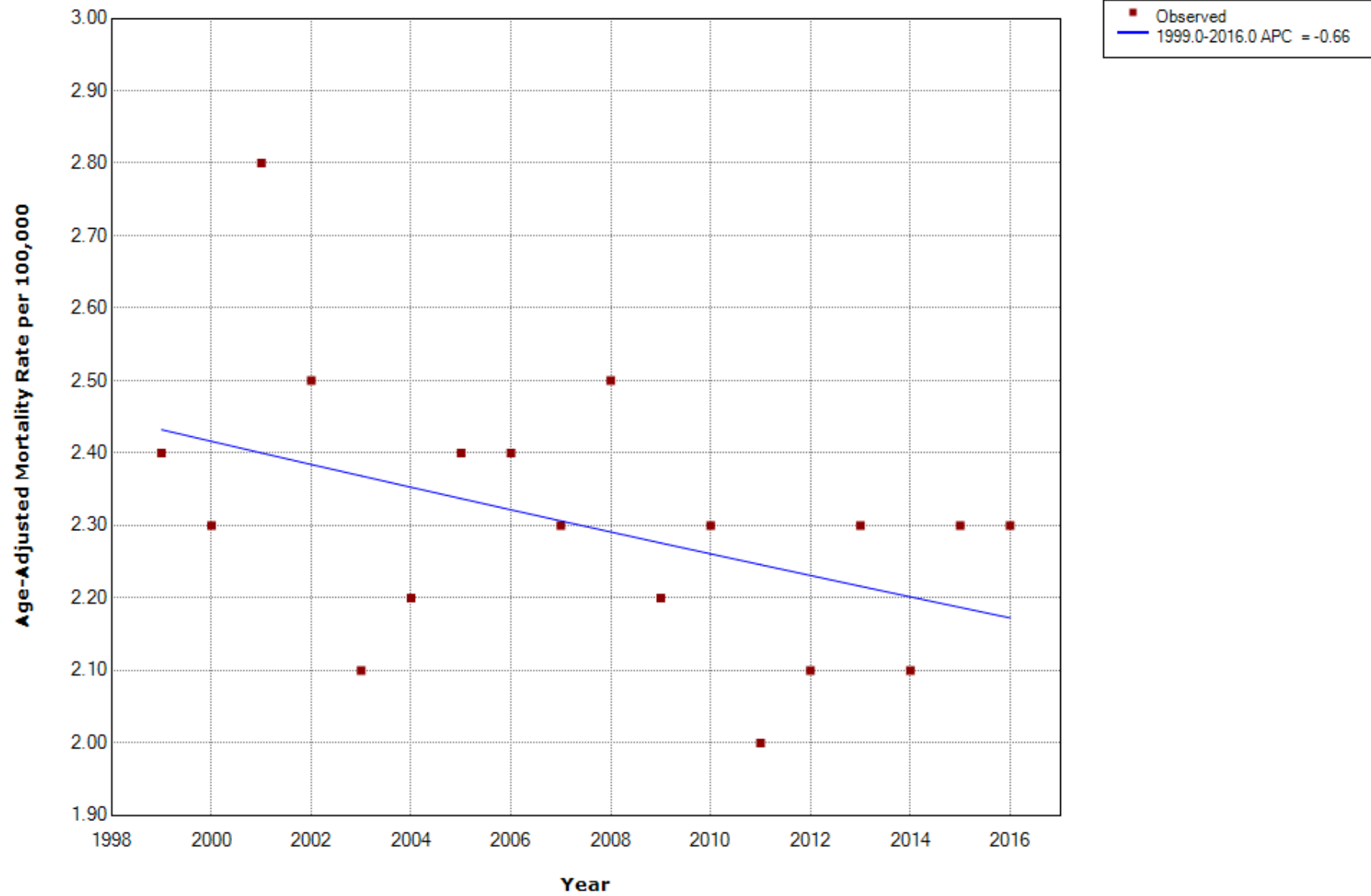
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

Diseases of the genitourinary system (N00-N98) / NH AIAN: 0 Joinpoints



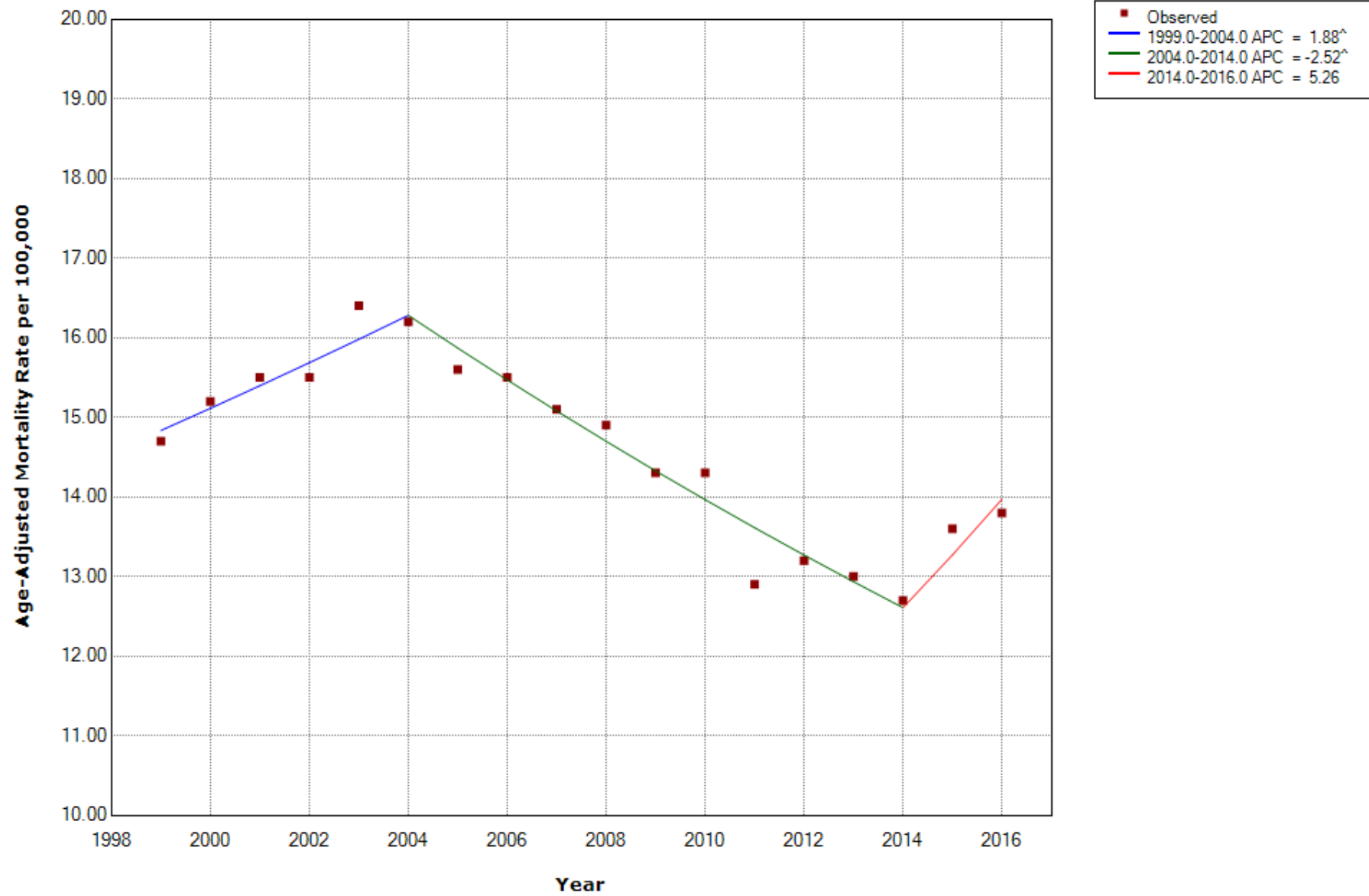
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

### Diseases of the genitourinary system (N00-N98) / NH API: 0 Joinpoints



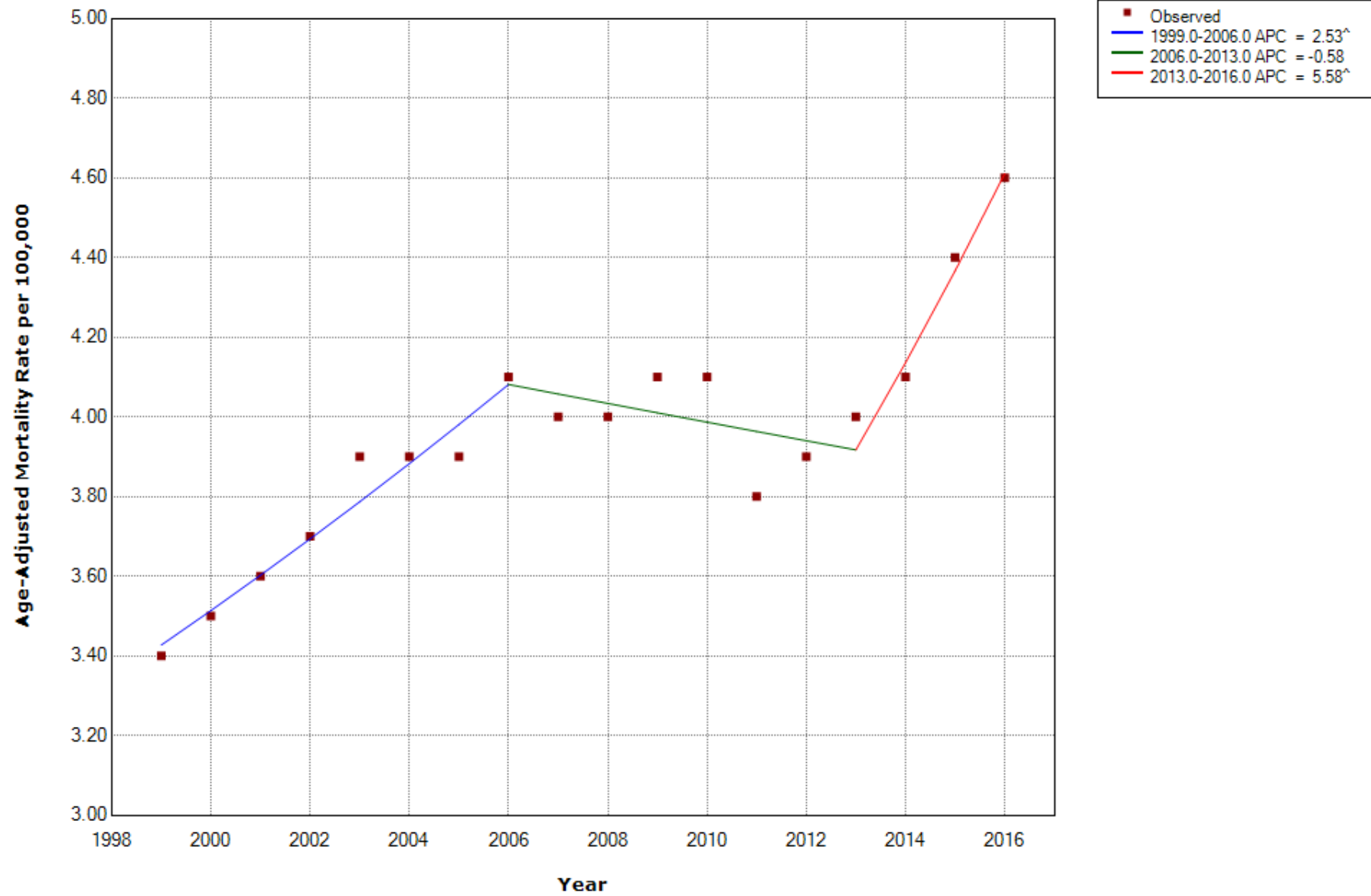
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

### Diseases of the genitourinary system (N00-N98) / NH Blacks: 2 Joinpoints



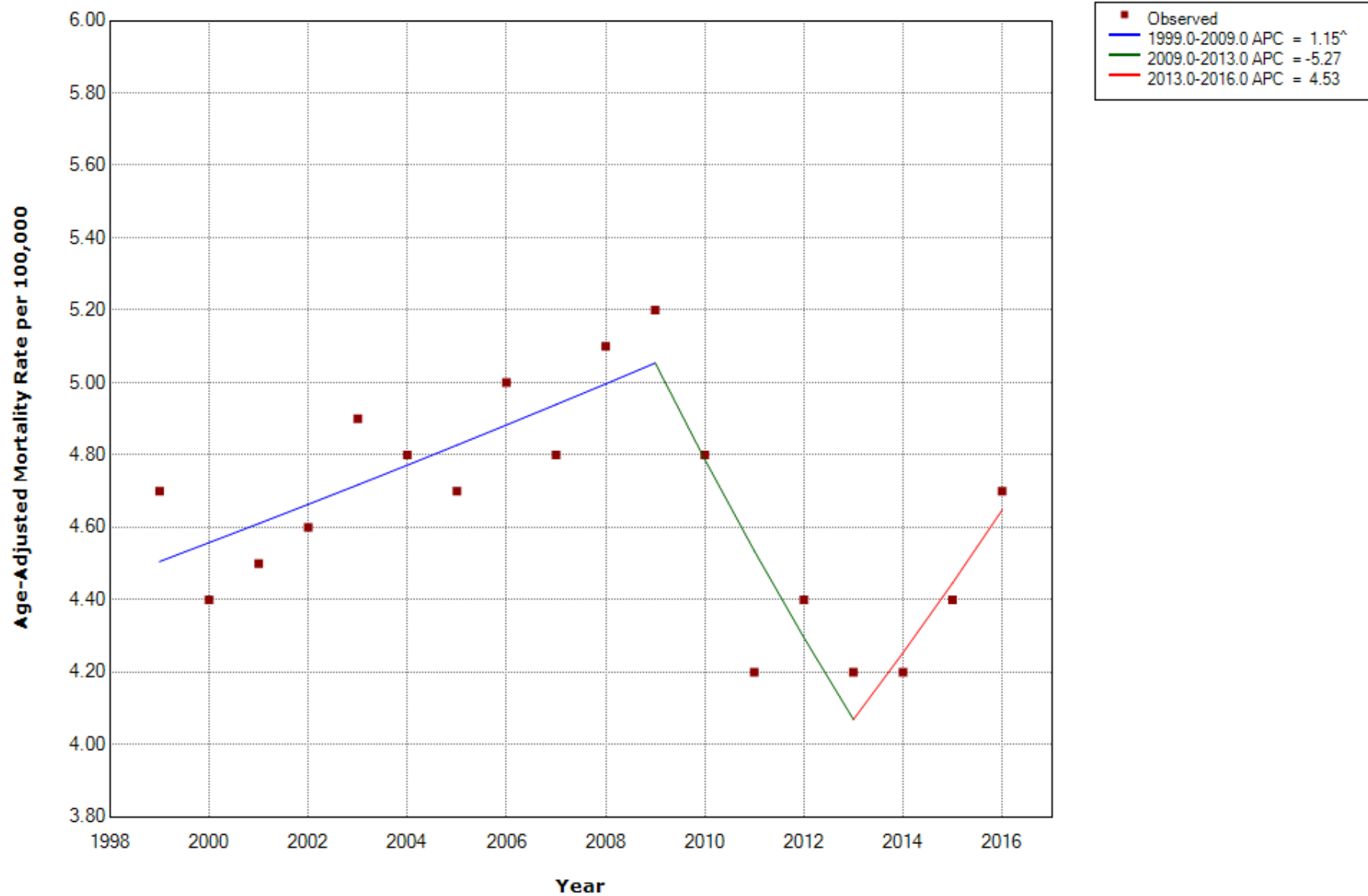
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

### Diseases of the genitourinary system (N00-N98) / NH whites: 2 Joinpoints



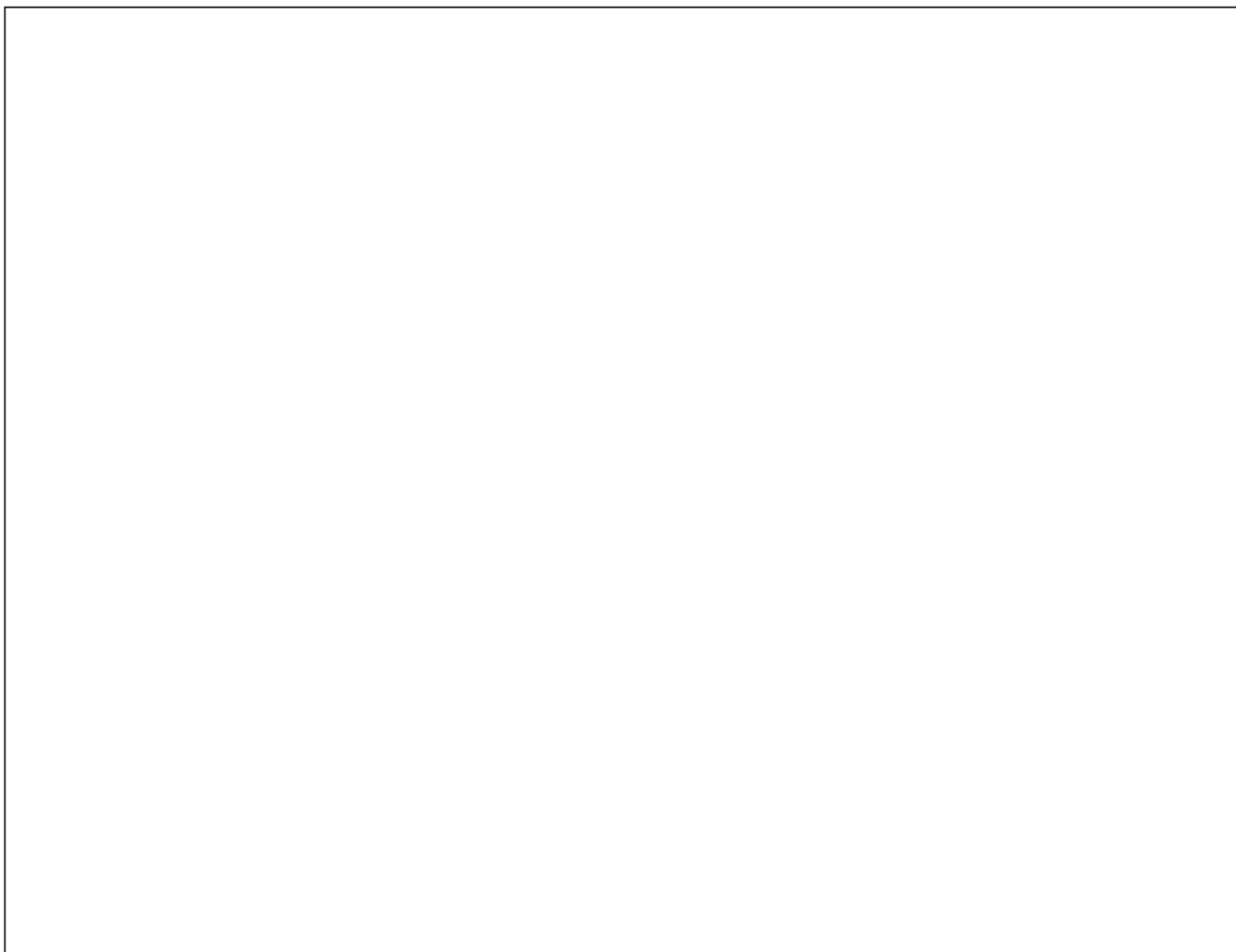
<sup>^</sup> Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

### Diseases of the genitourinary system (N00-N98) / Hispanics: 2 Joinspoints



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinspoints.

Pregnancy, childbirth and the puerperium (O00-O99) / NH AIAN: Observed



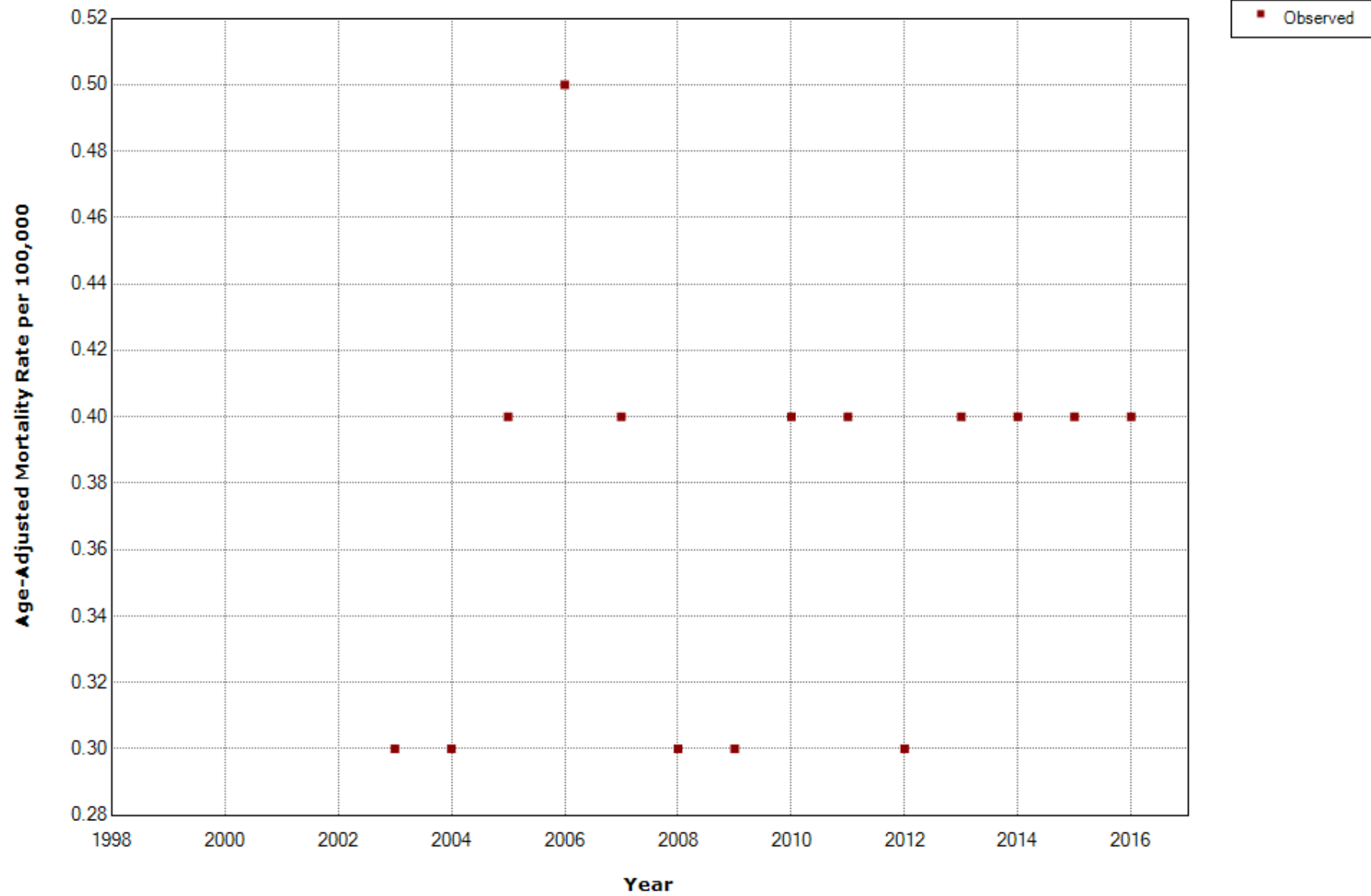
■ Observed

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

\*\* Joinpoint cannot process records with missing dependent variable values. Joinpoint will not analyze by-groups that have this error. (Row = 810, Col = 1)



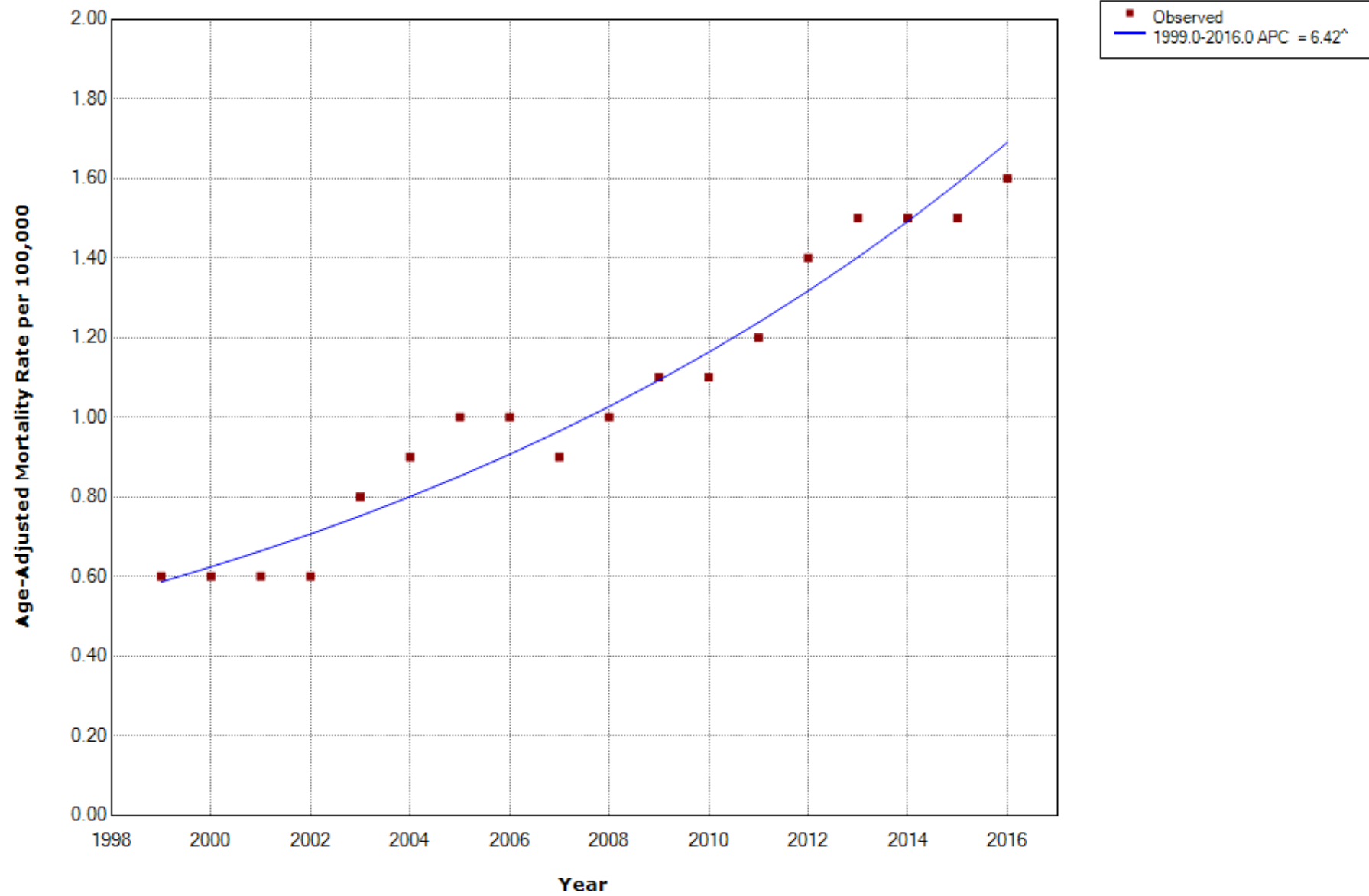
### Pregnancy, childbirth and the puerperium (O00-O99) / NH API: Observed



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

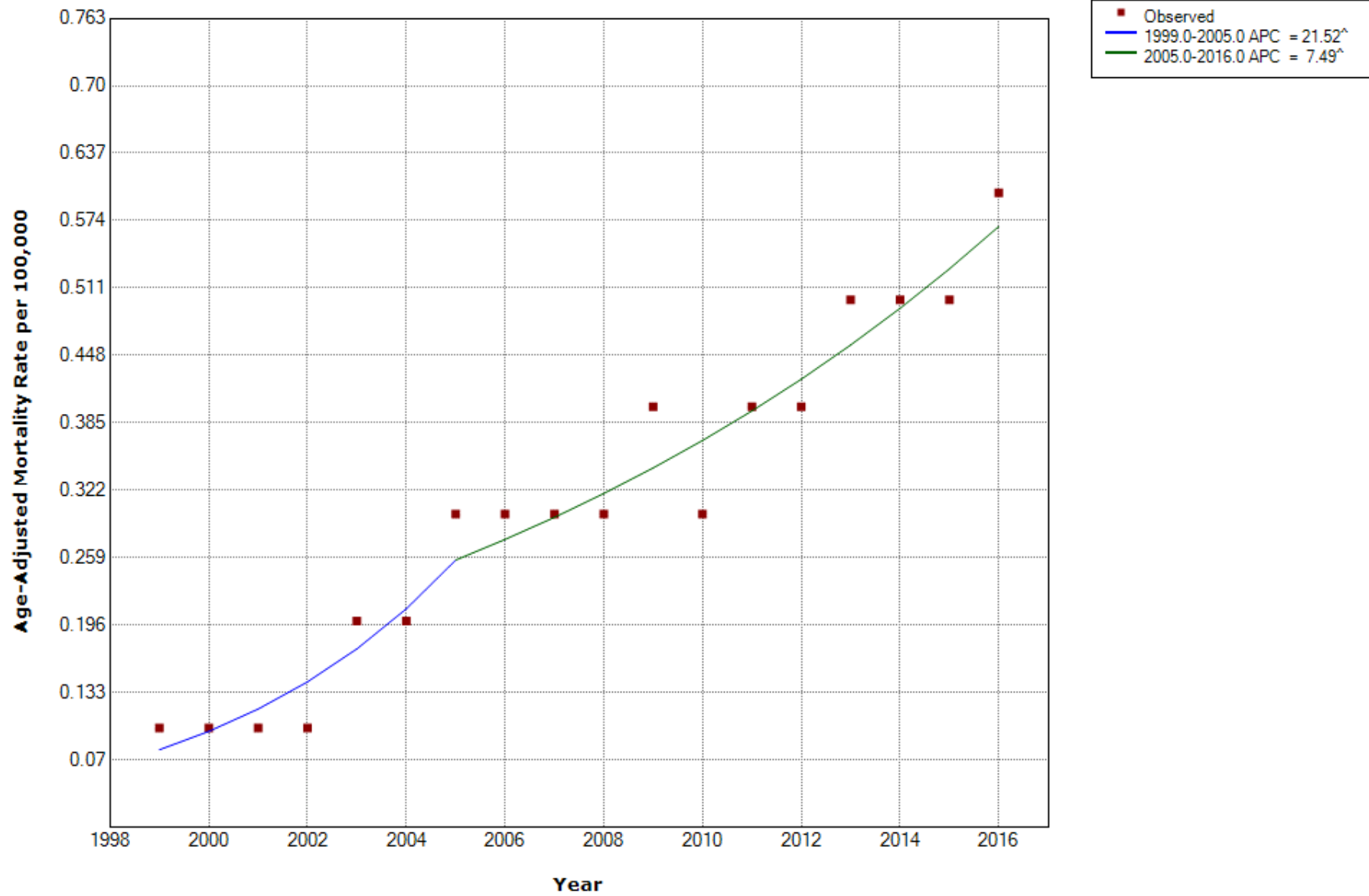
\* Joinpoint cannot process records with missing dependent variable values. Joinpoint will not analyze by-groups that have this error. (Row = 828, Col = 1)

Pregnancy, childbirth and the puerperium (O00-O99) / NH Blacks: 0 Joinpoints



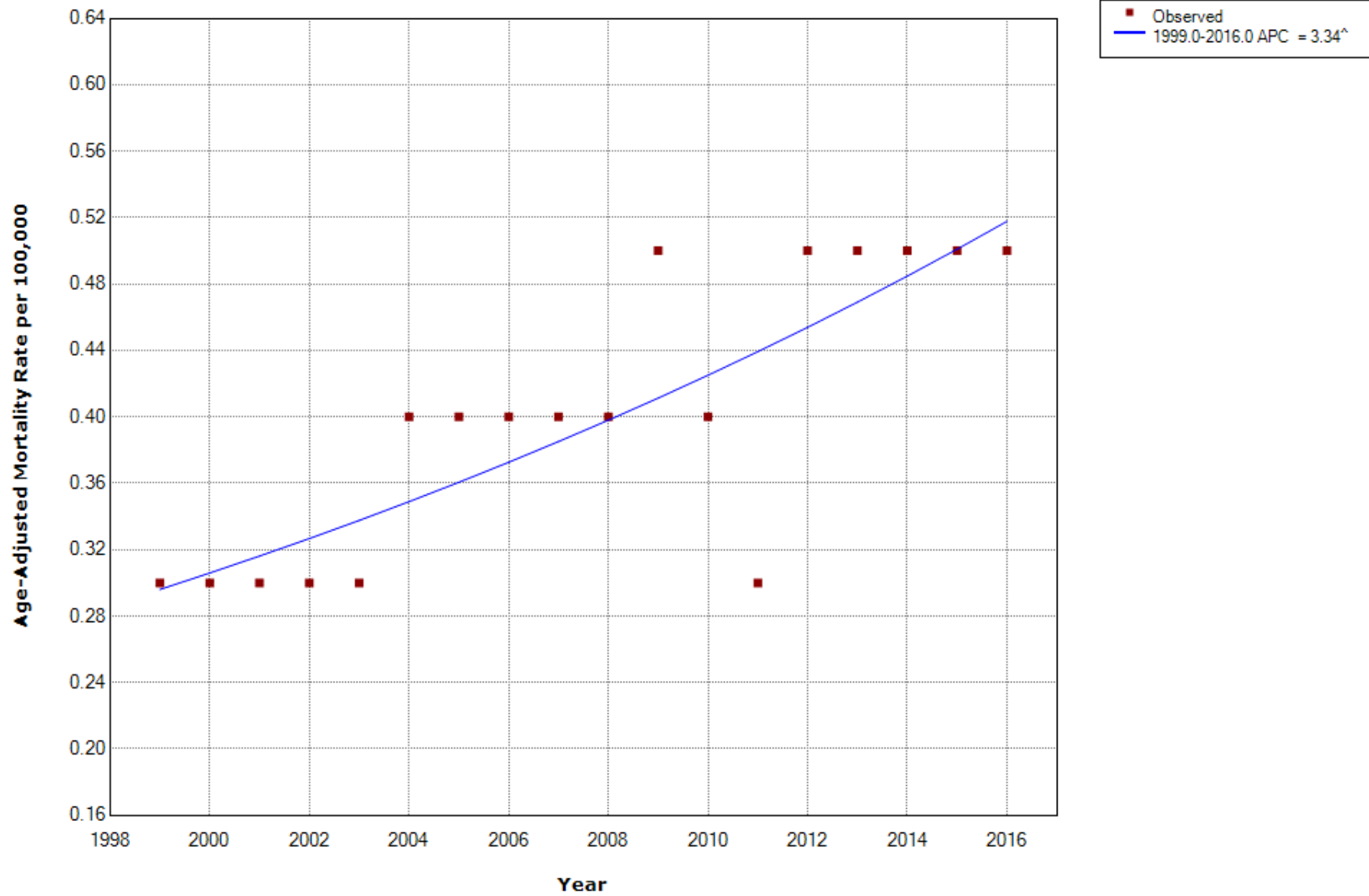
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

### Pregnancy, childbirth and the puerperium (O00-O99) / NH whites: 1 Joinpoint



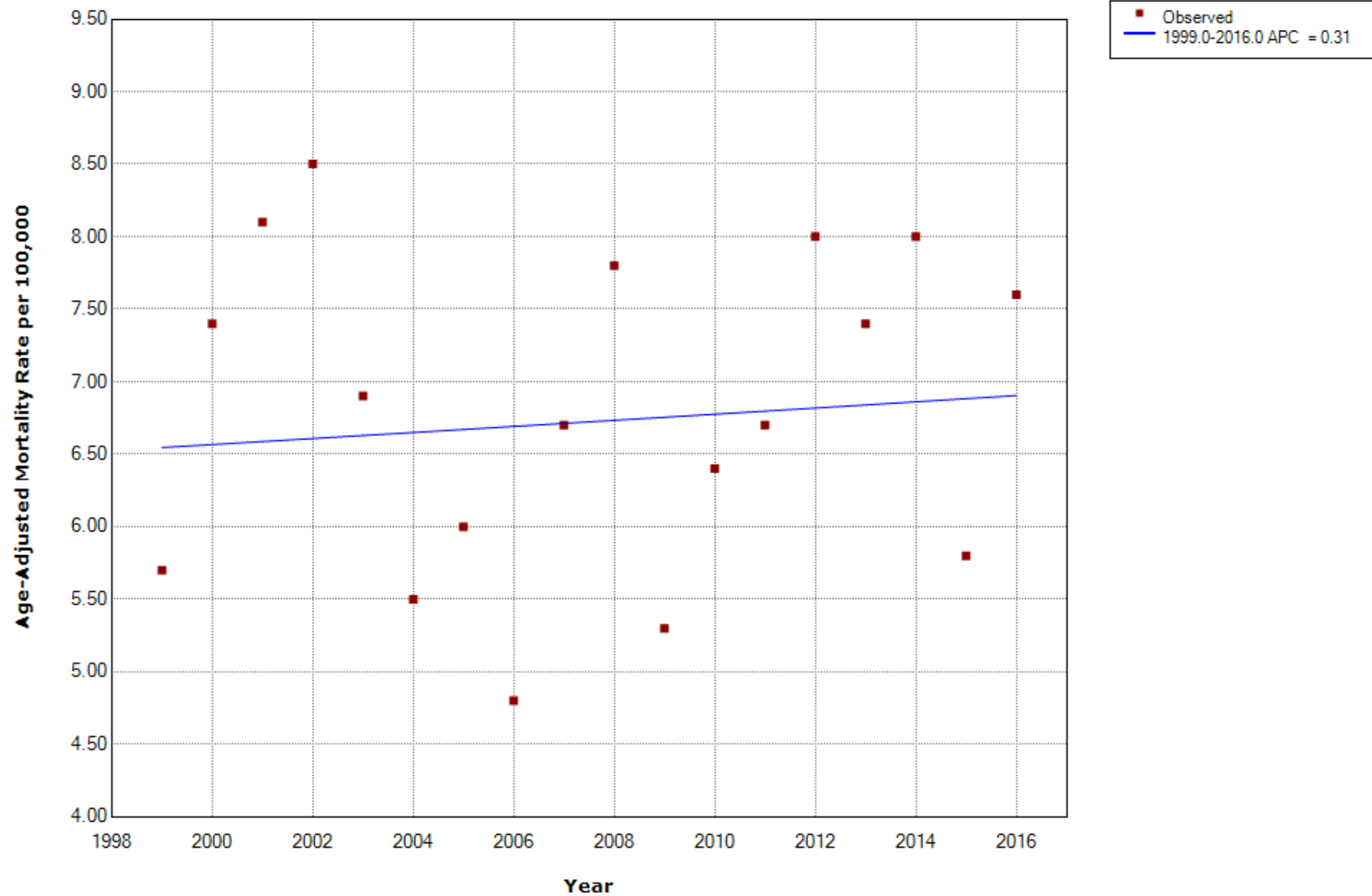
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

Pregnancy, childbirth and the puerperium (O00-O99) / Hispanics: 0 Joinpoints



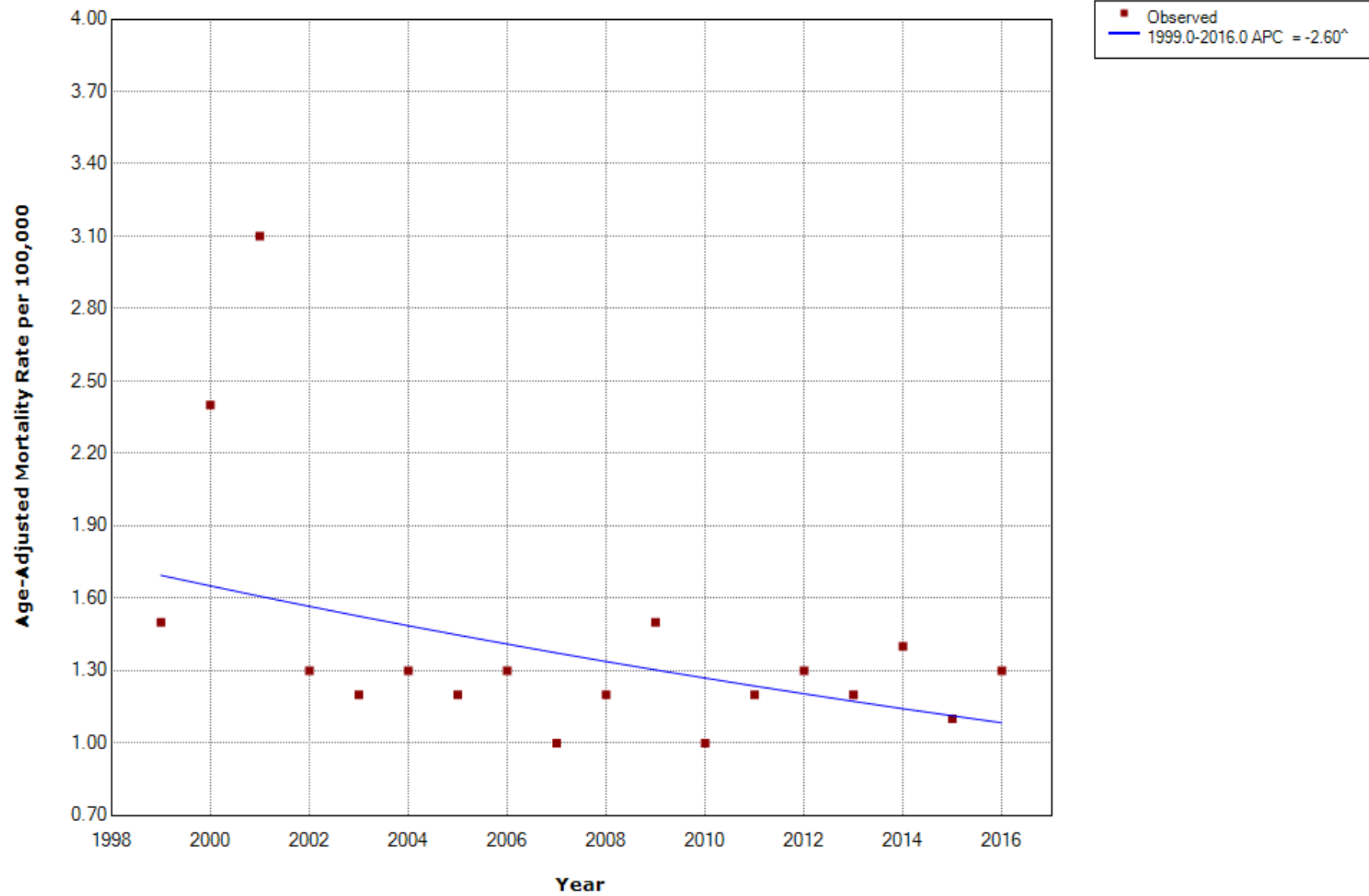
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99) / NH AIAN: 0 Joinpoints



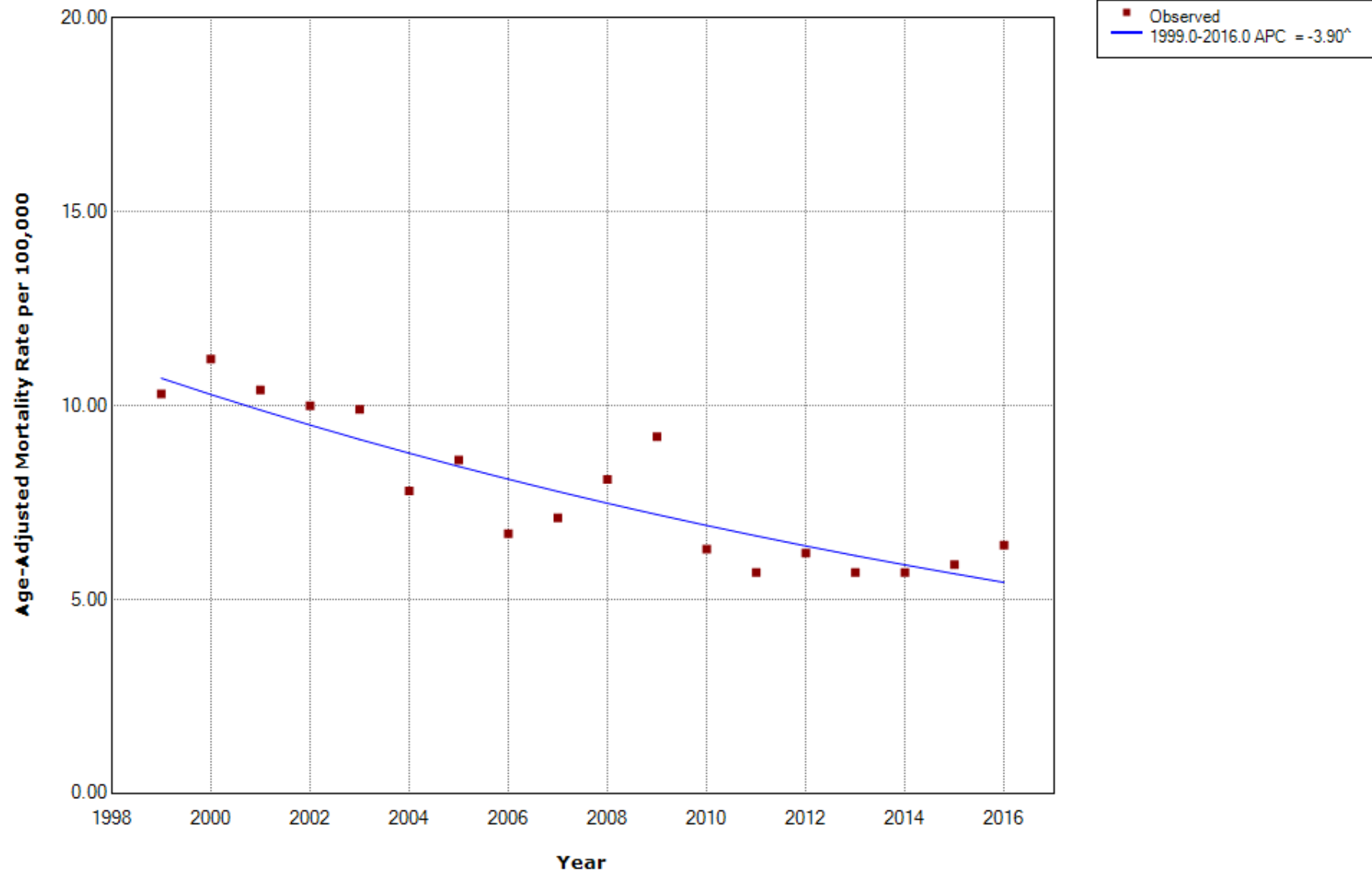
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99) / NH API: 0 Joinpoints



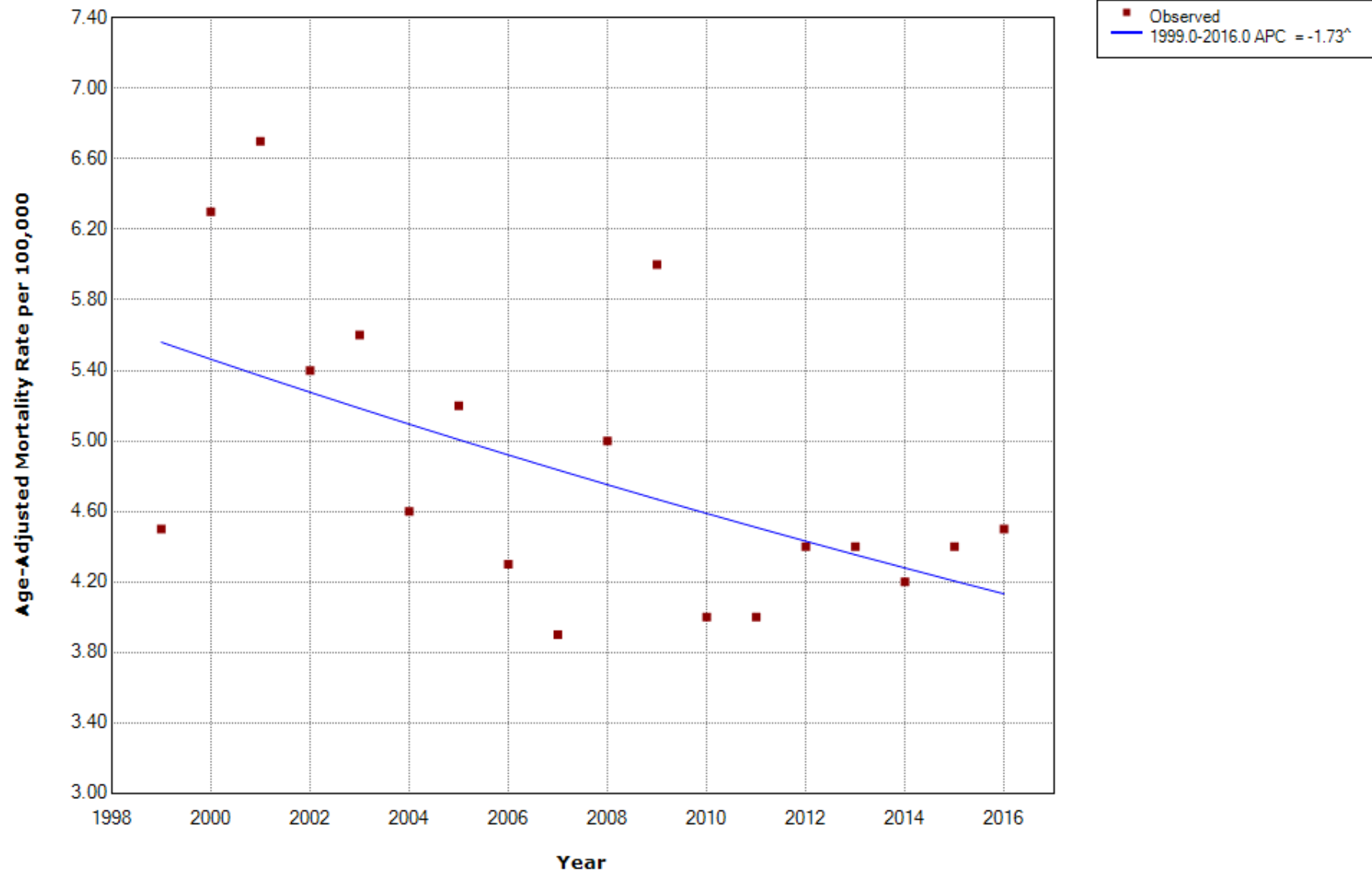
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99) / NH Blacks: 0 Joinpoints



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

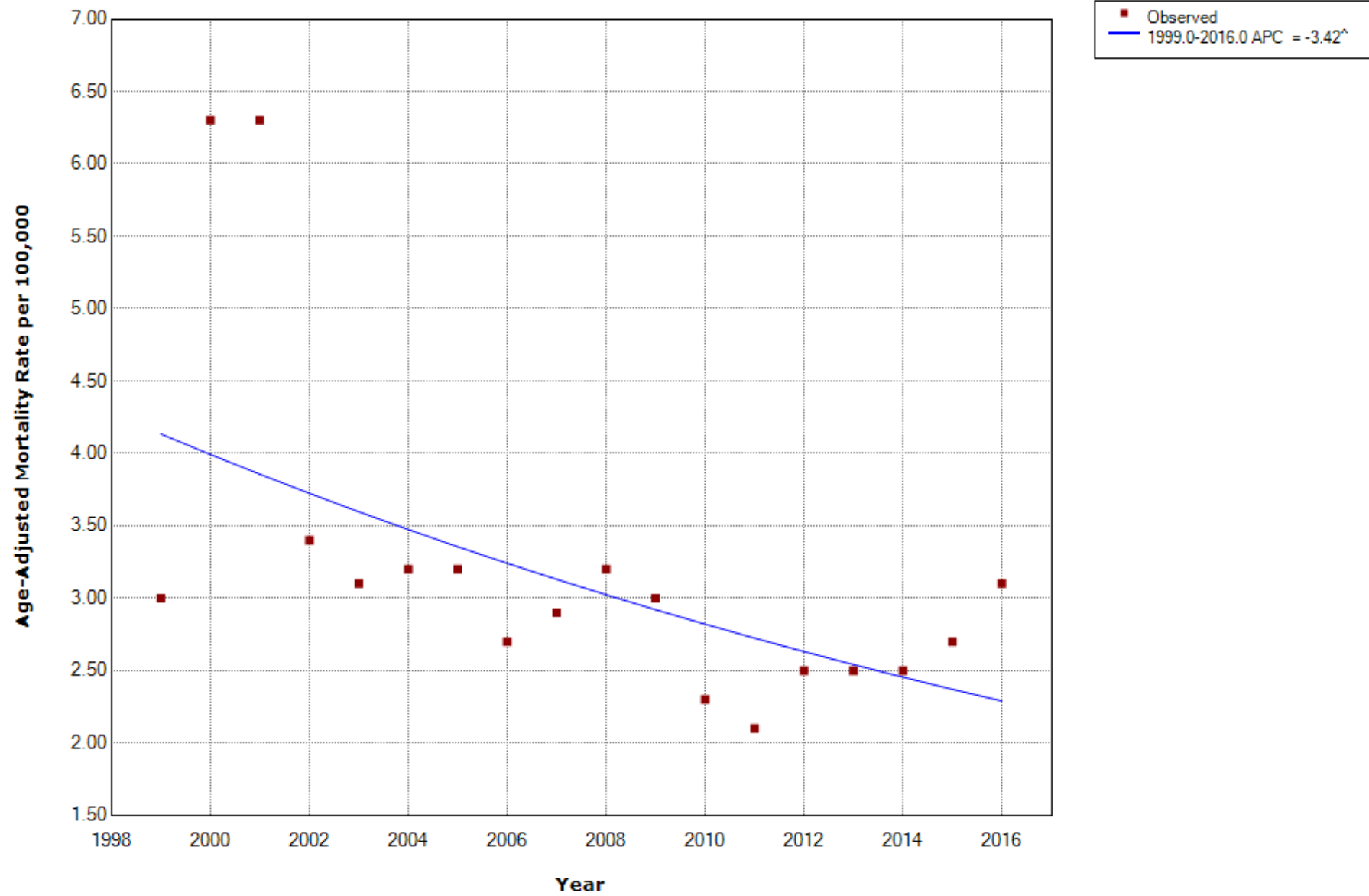
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99) / NH whites: 0 Joinpoints



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

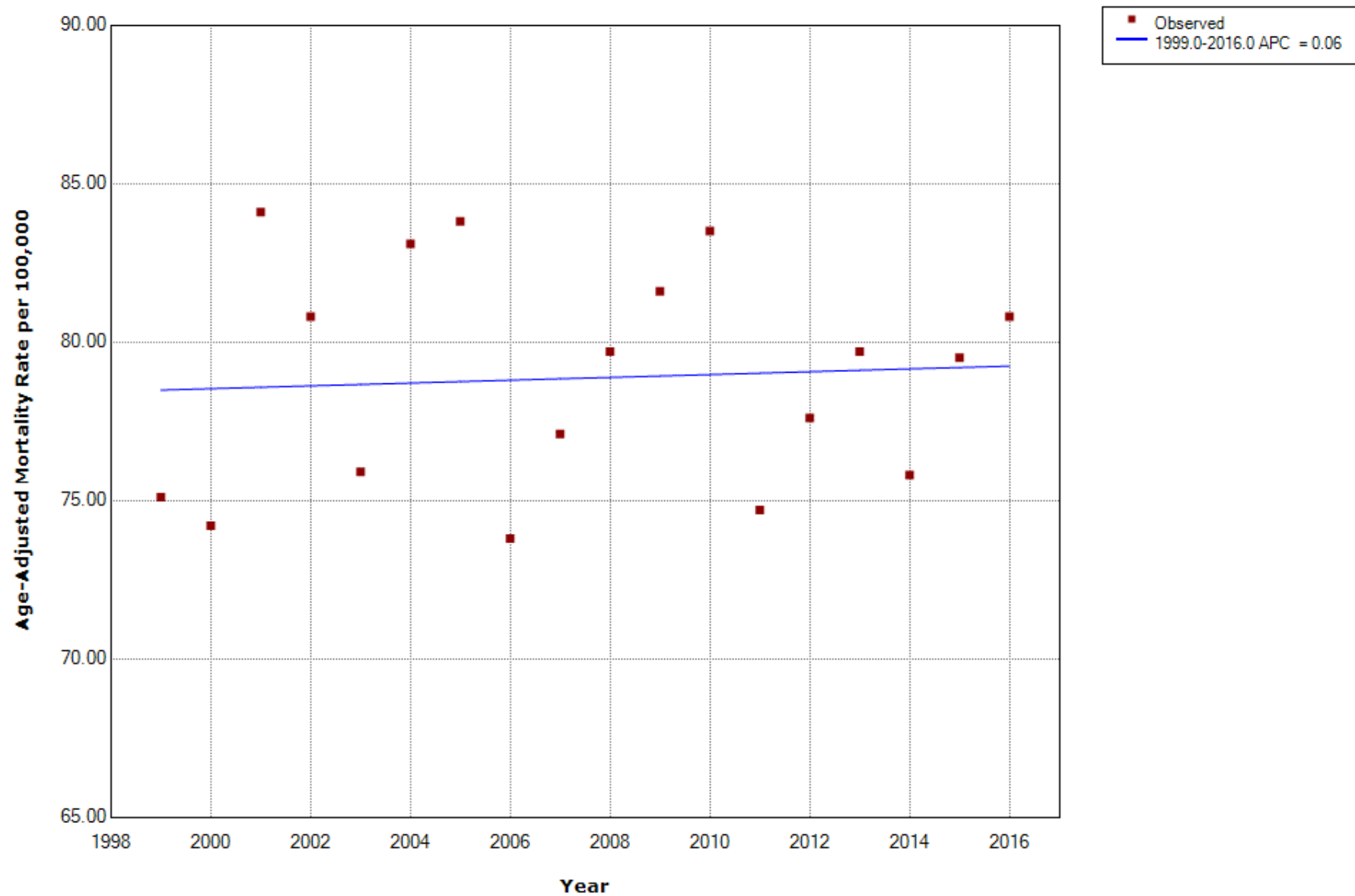


Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99) / Hispanics: 0 Joinpoints



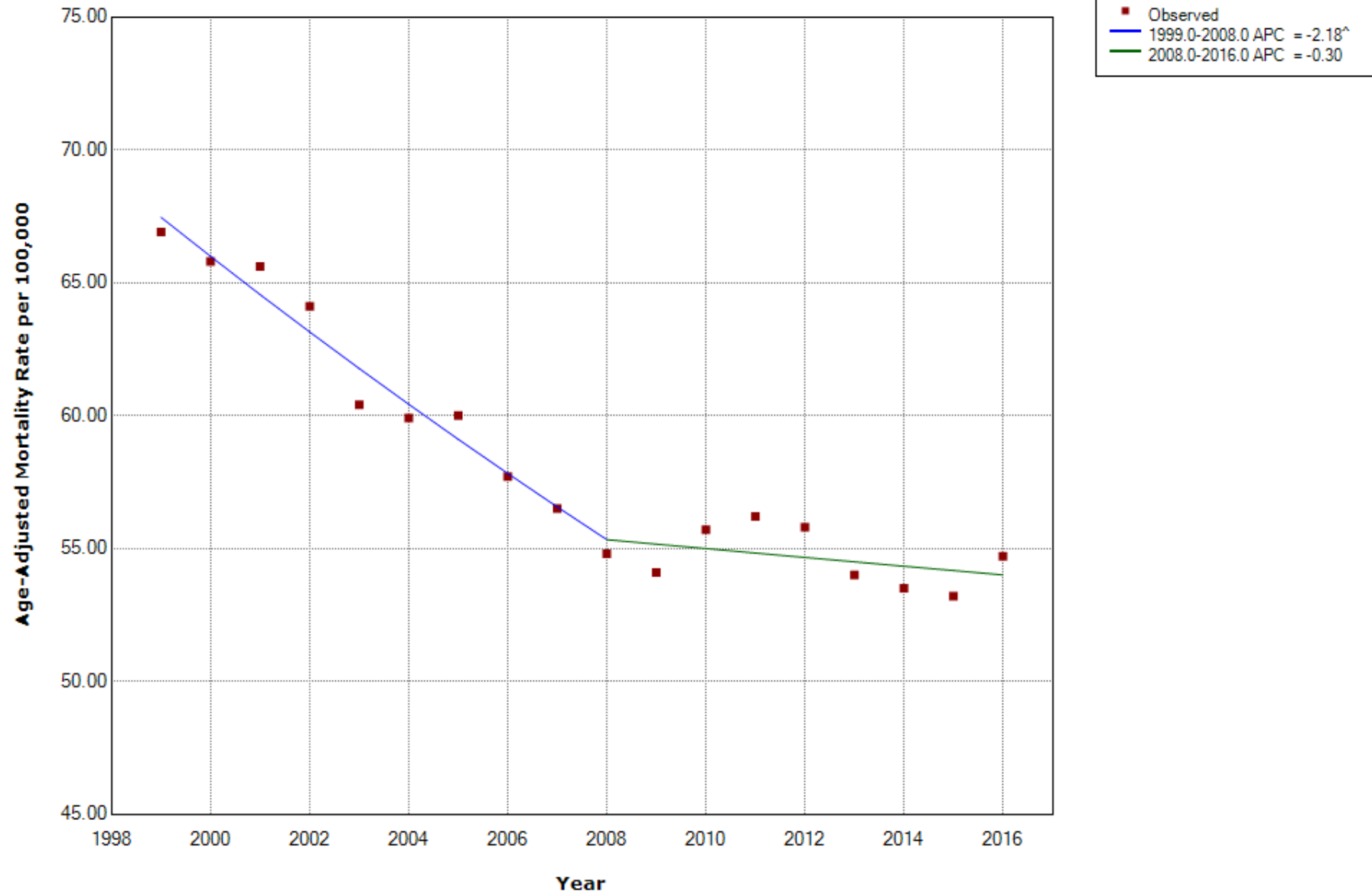
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

C00-D48 (Neoplasms) / NH AIAN: 0 Joinpoints



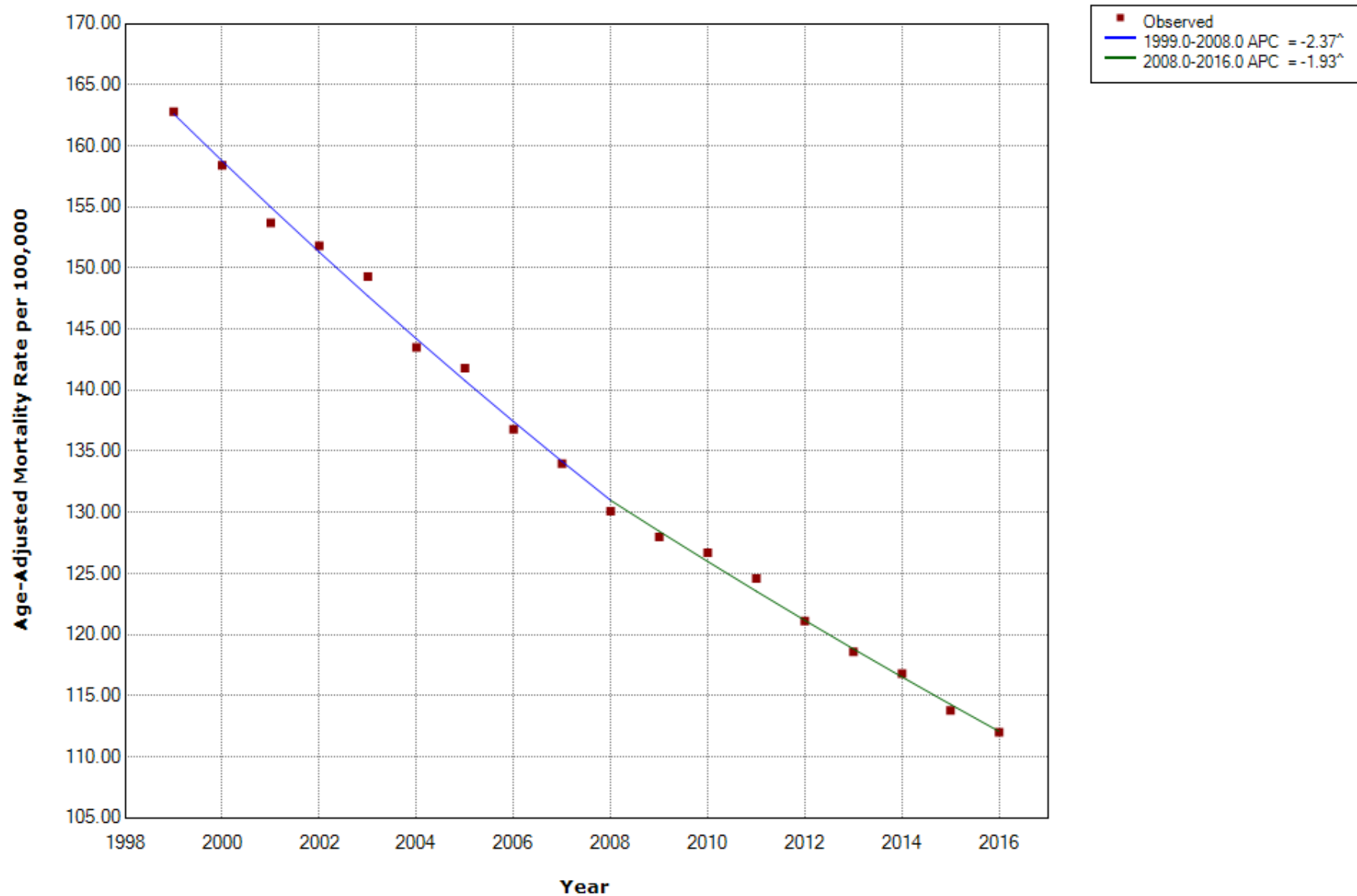
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

### C00-D48 (Neoplasms) / NH API: 1 Joinpoint



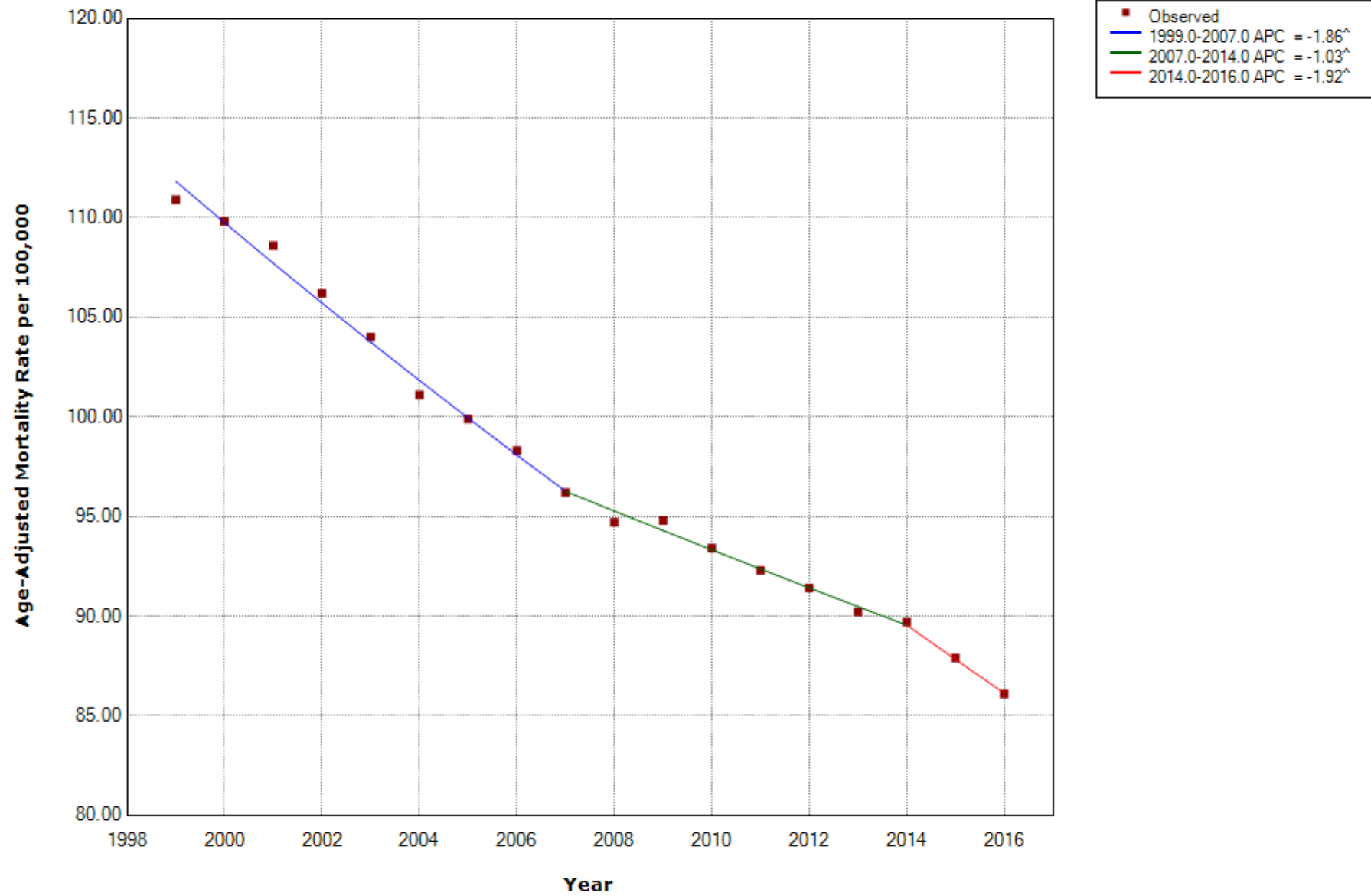
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

### C00-D48 (Neoplasms) / NH Blacks: 1 Joinpoint



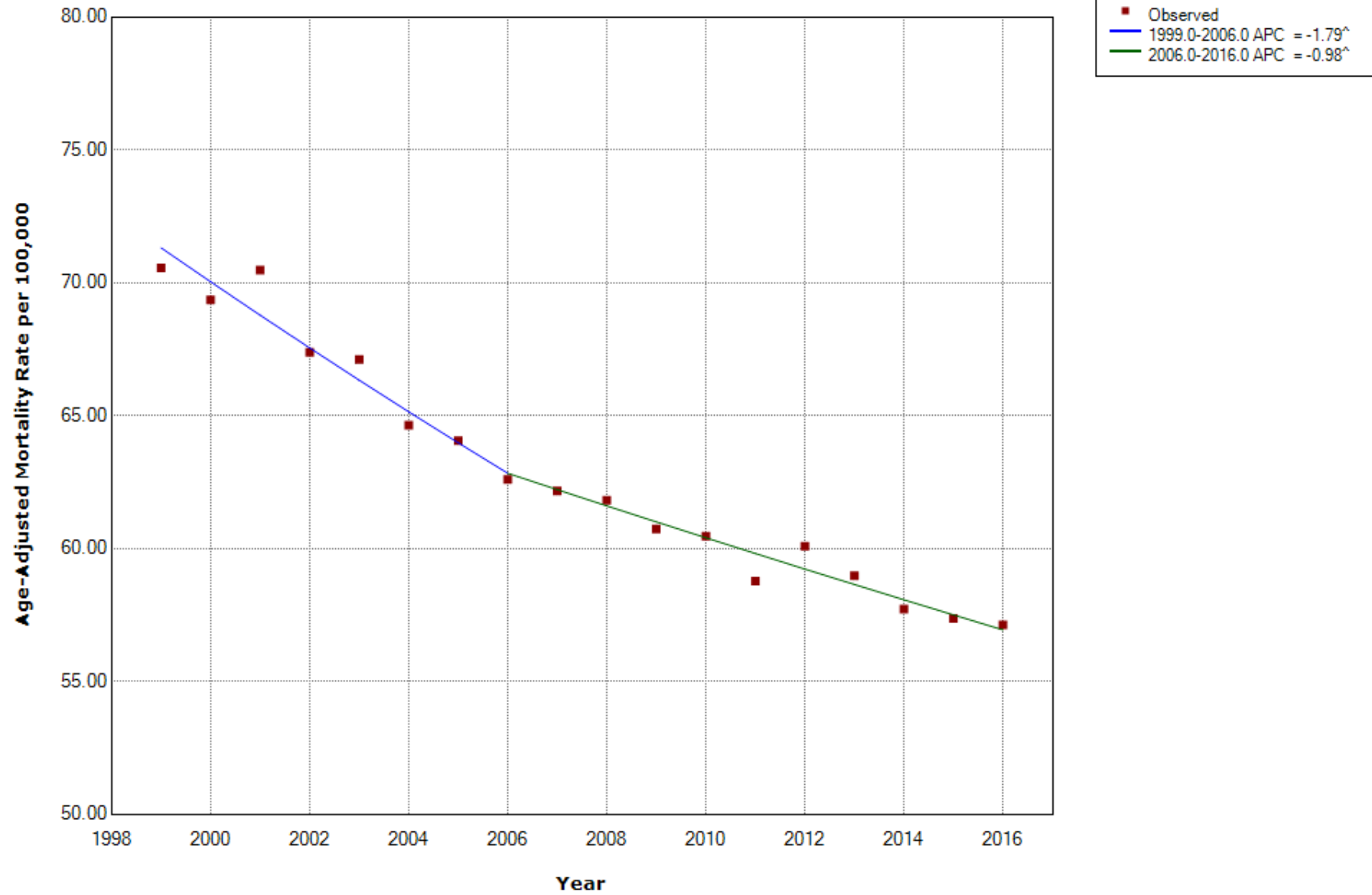
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

### C00-D48 (Neoplasms) / NH whites: 2 Joinpoints



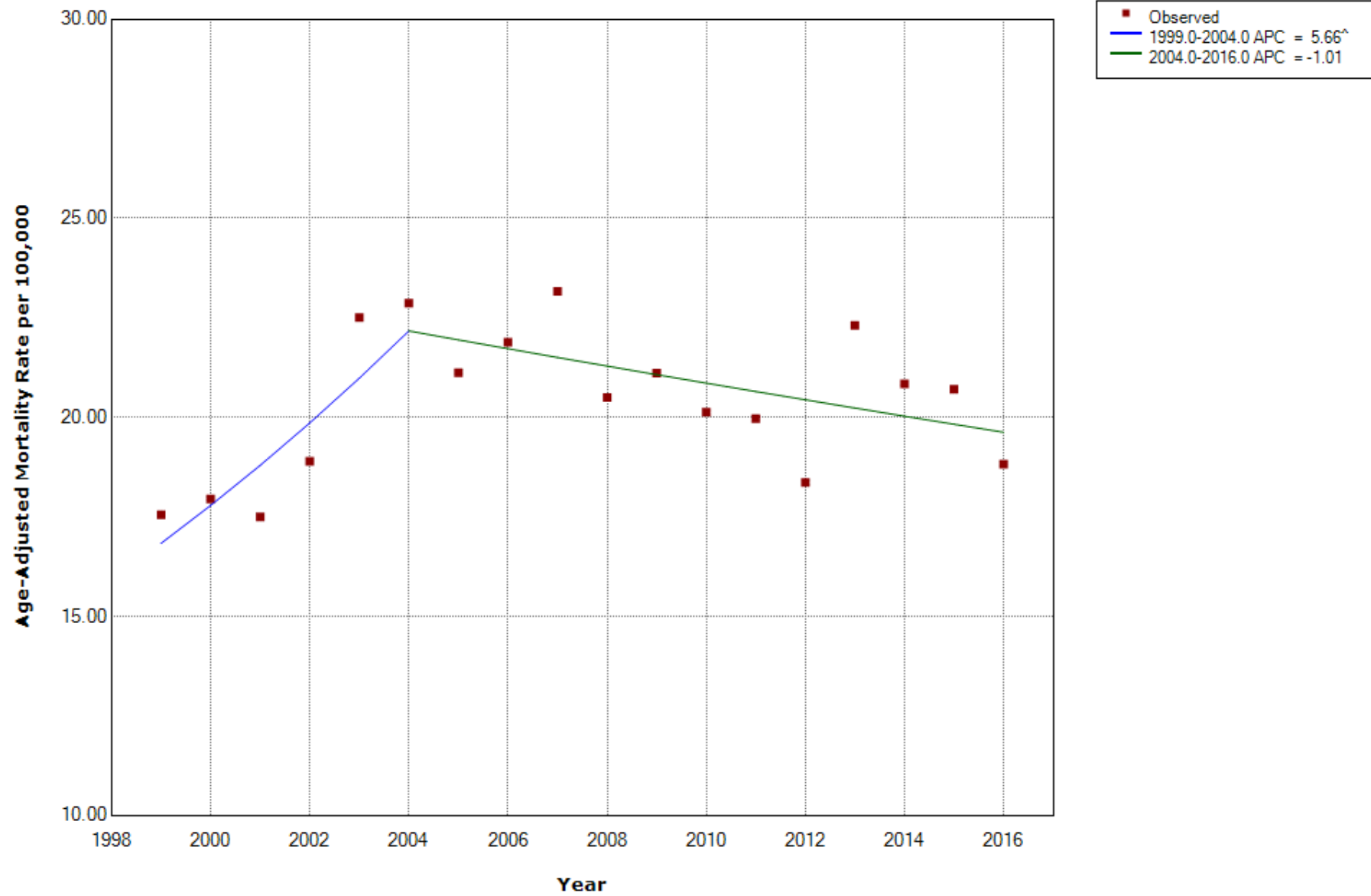
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

### C00-D48 (Neoplasms) / Hispanics: 1 Joinpoint



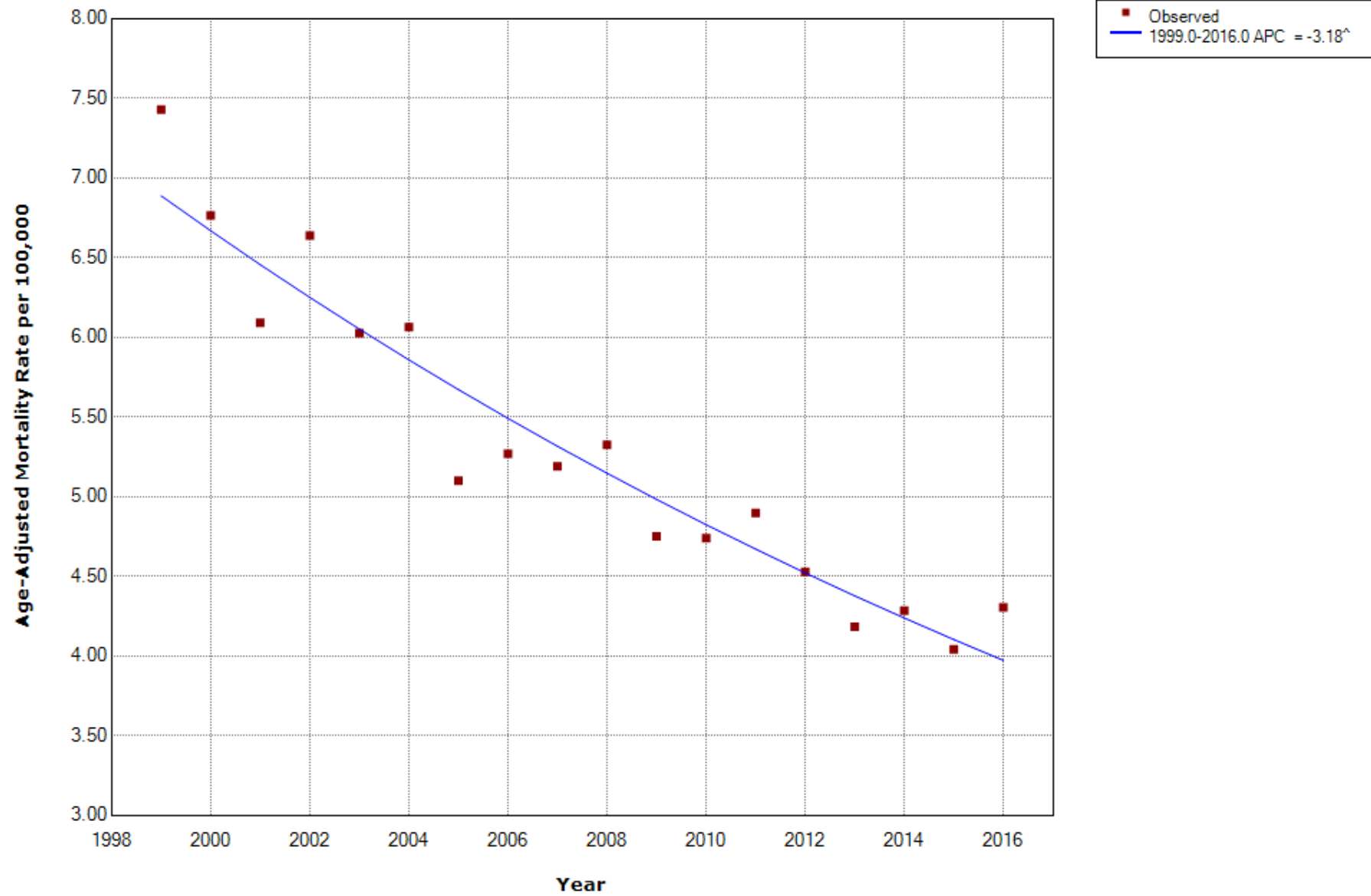
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

A00-B99 (Certain infectious and parasitic diseases) / NH AIAN: 1 Joinpoint



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

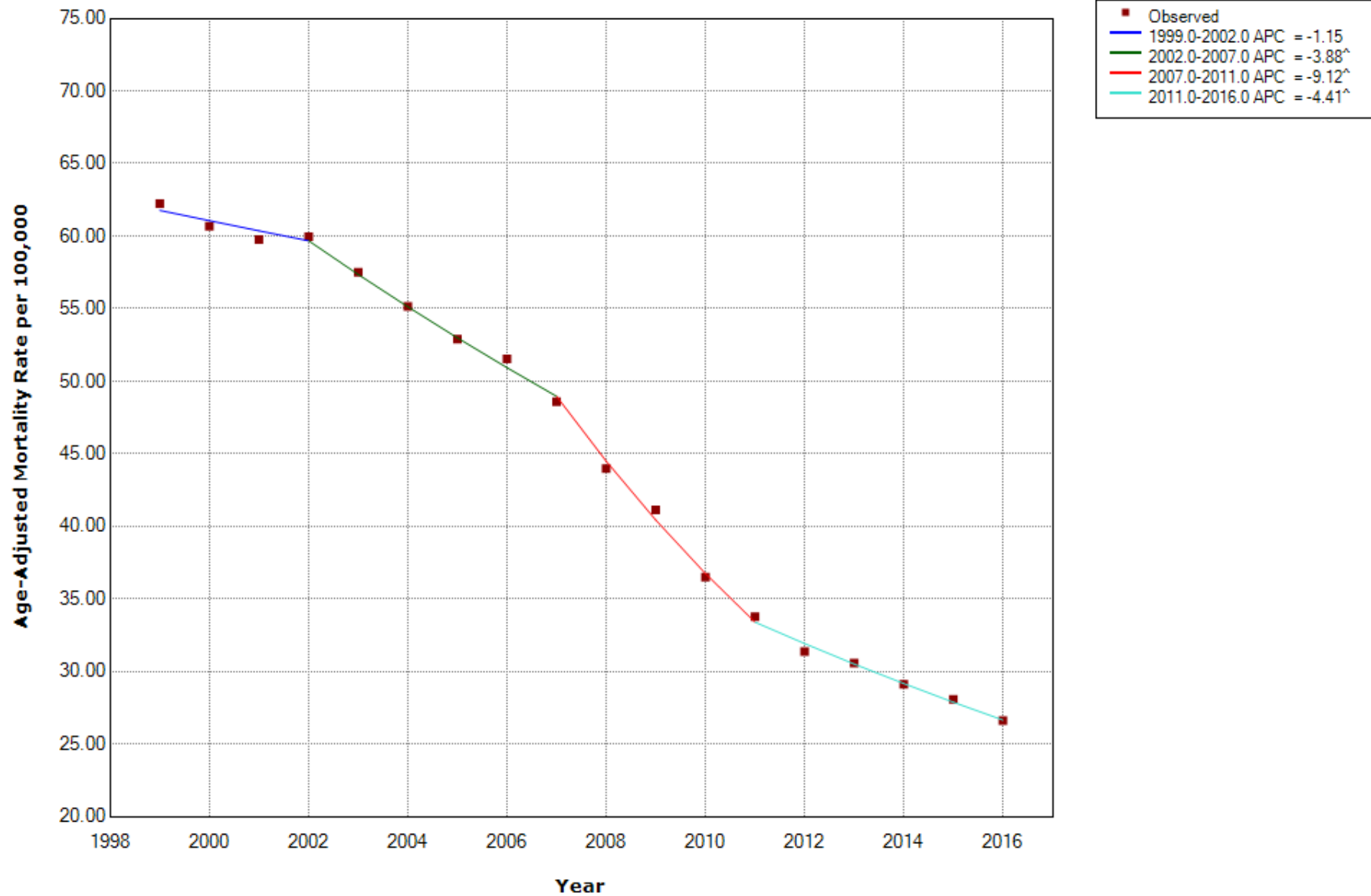
A00-B99 (Certain infectious and parasitic diseases) / NH API: 0 Joinpoints



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

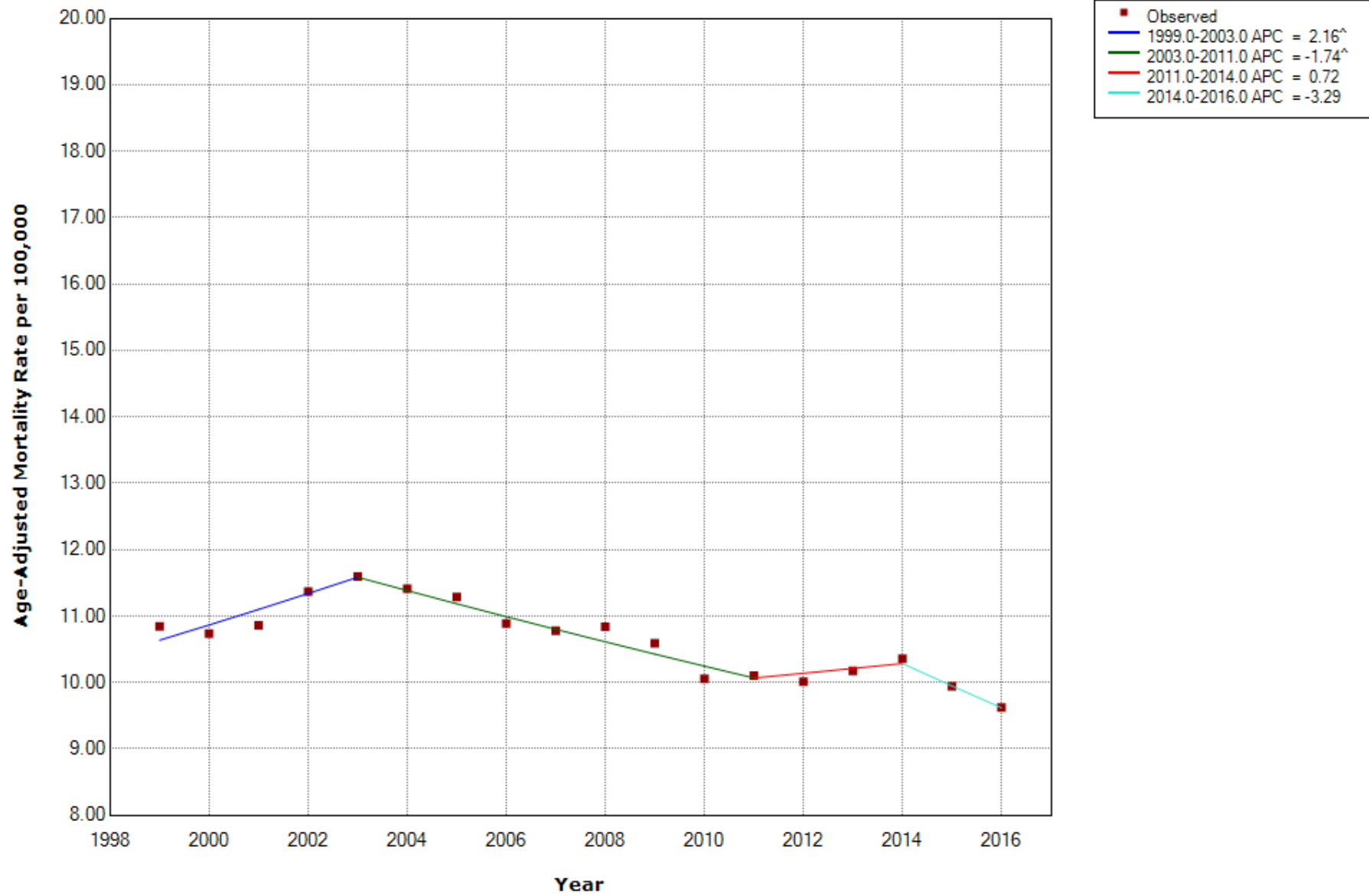


A00-B99 (Certain infectious and parasitic diseases) / NH Blacks: 3 Joinpoints



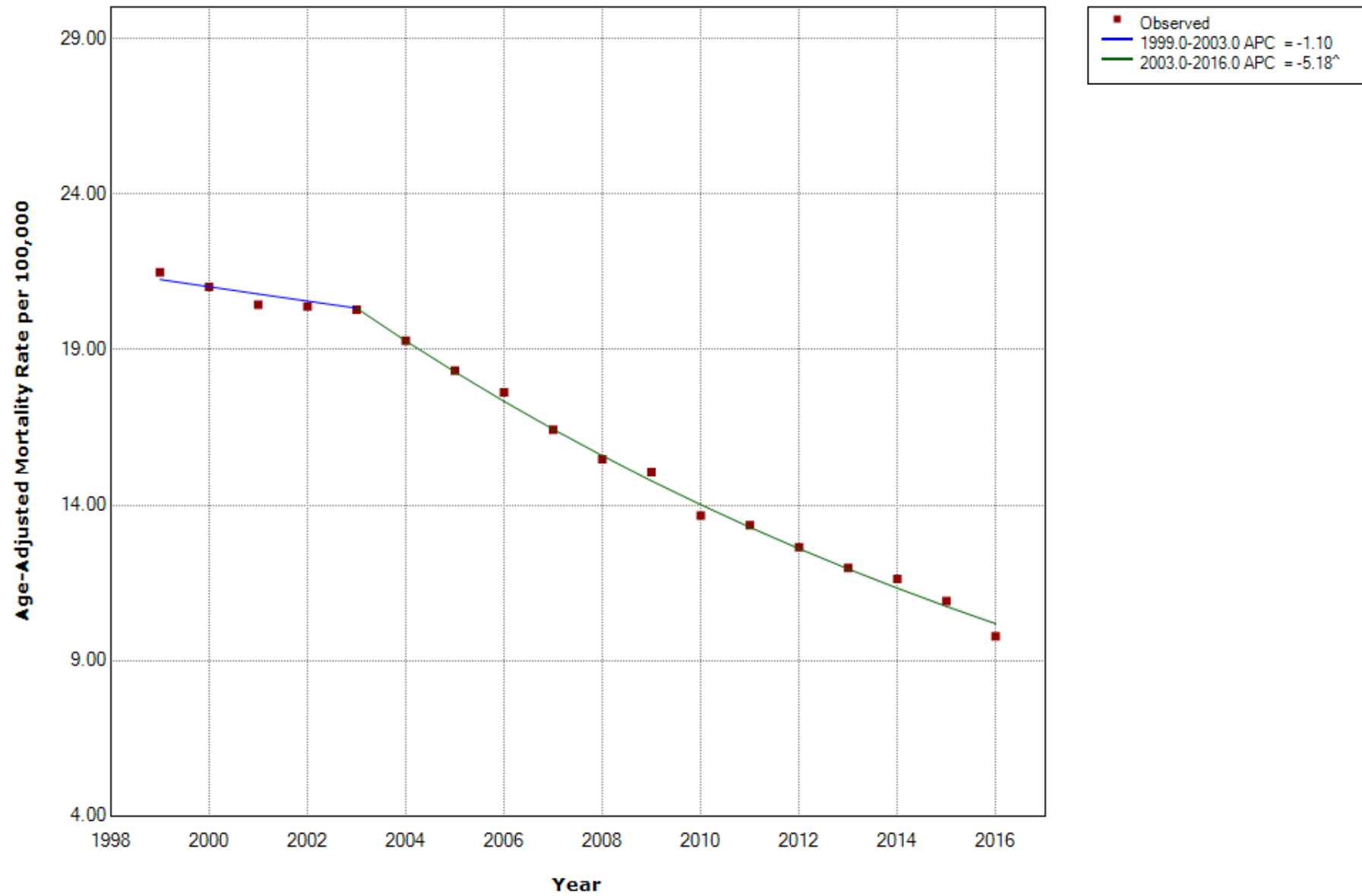
<sup>^</sup> Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 3 Joinpoints.

A00-B99 (Certain infectious and parasitic diseases) / NH whites: 3 Joinpoints



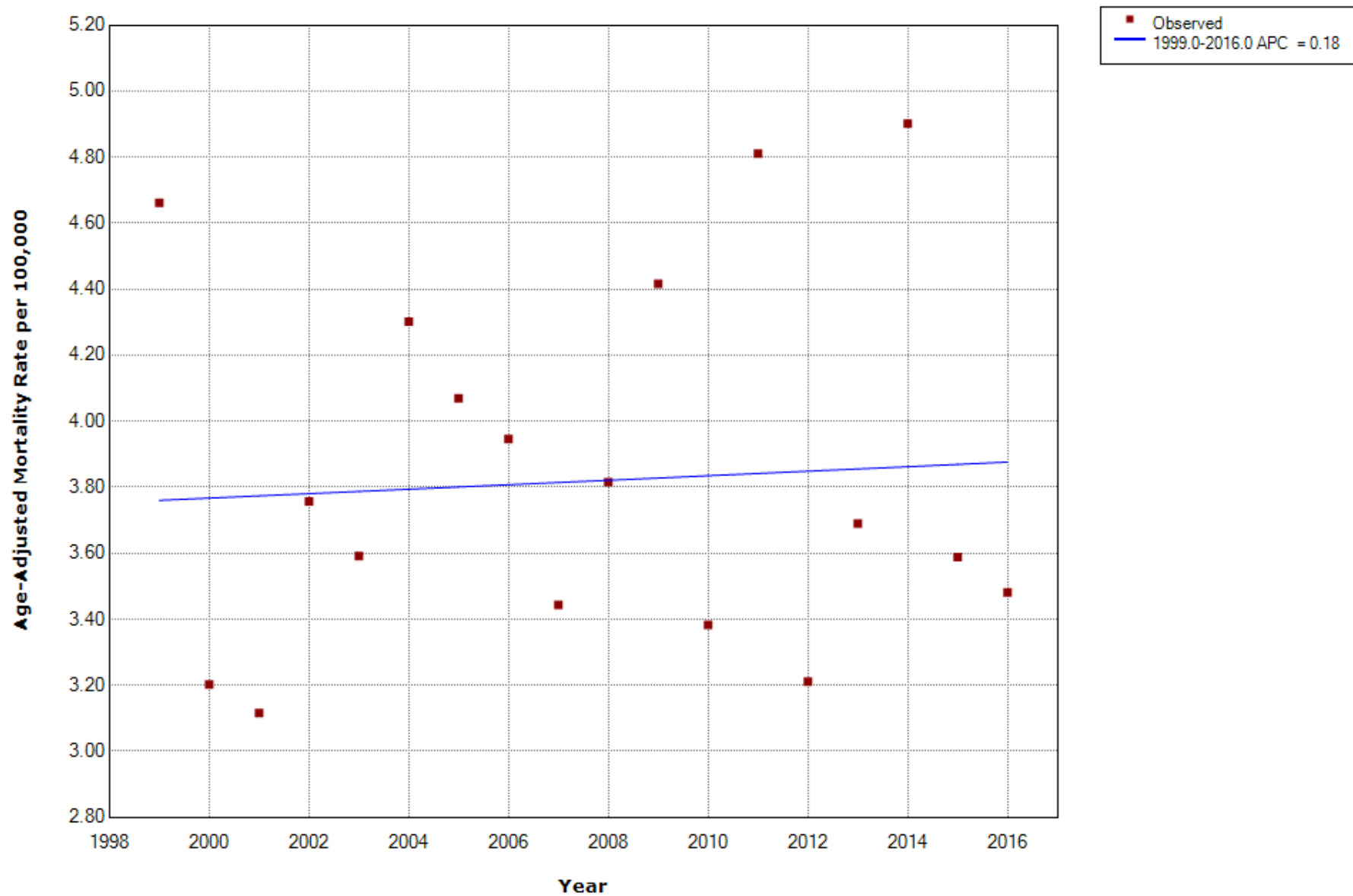
<sup>^</sup> Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 3 Joinpoints.

A00-B99 (Certain infectious and parasitic diseases) / Hispanics: 1 Joinpoint



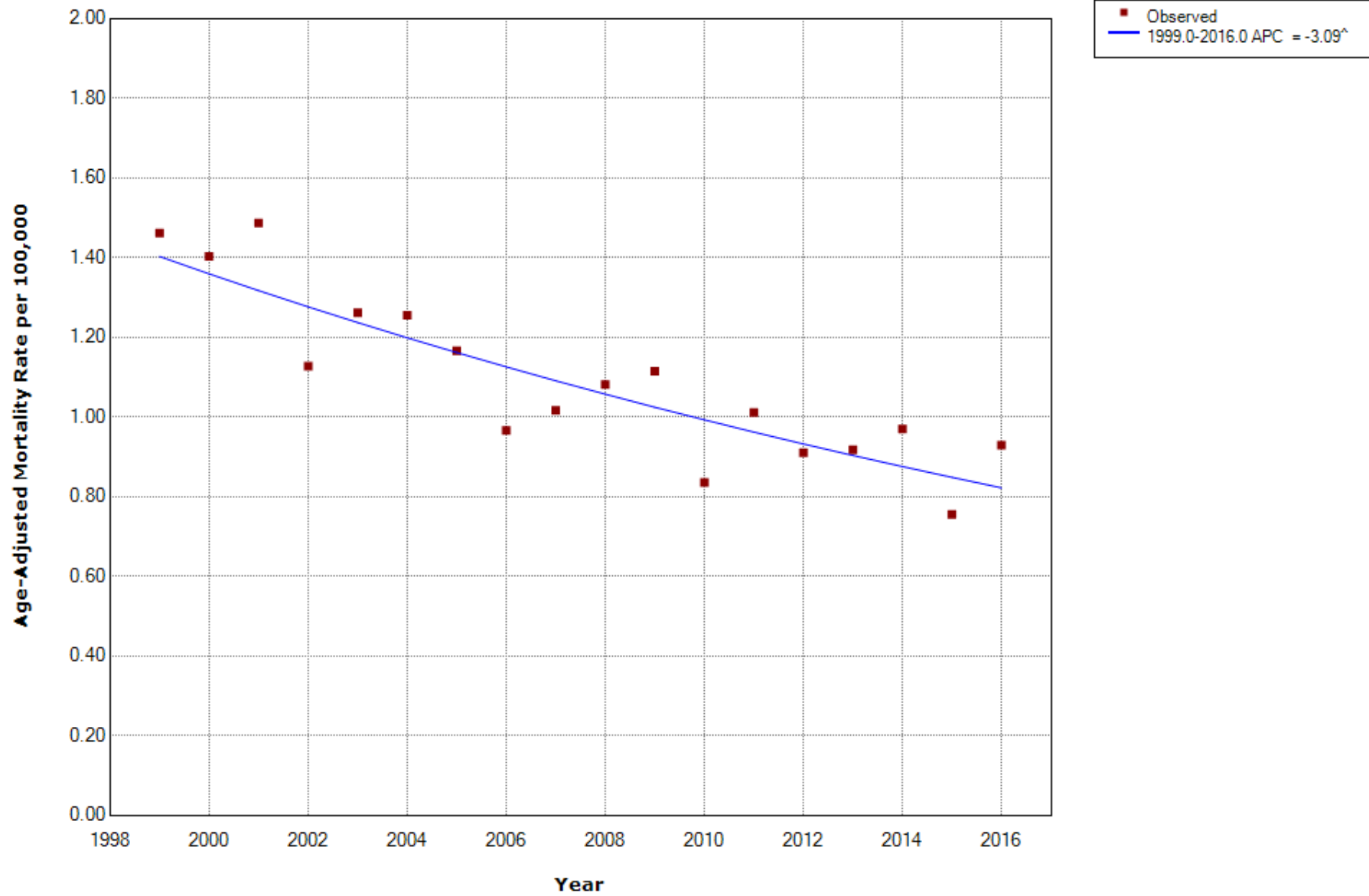
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

M00-M99 (Diseases of the musculoskeletal system and connective tissue) / NH AIAN: 0 Joinpoints



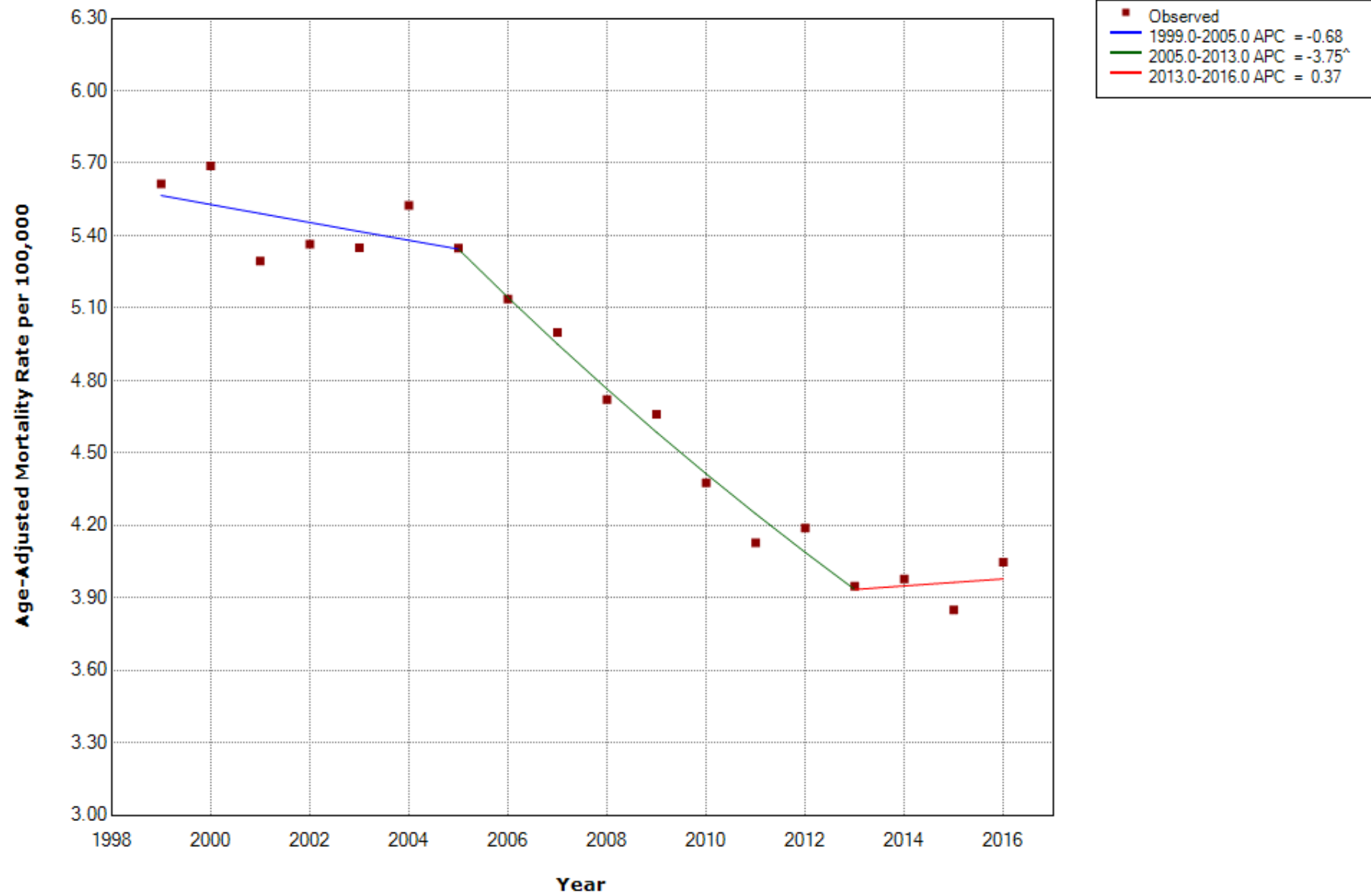
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

M00-M99 (Diseases of the musculoskeletal system and connective tissue) / NH API: 0 Joinpoints



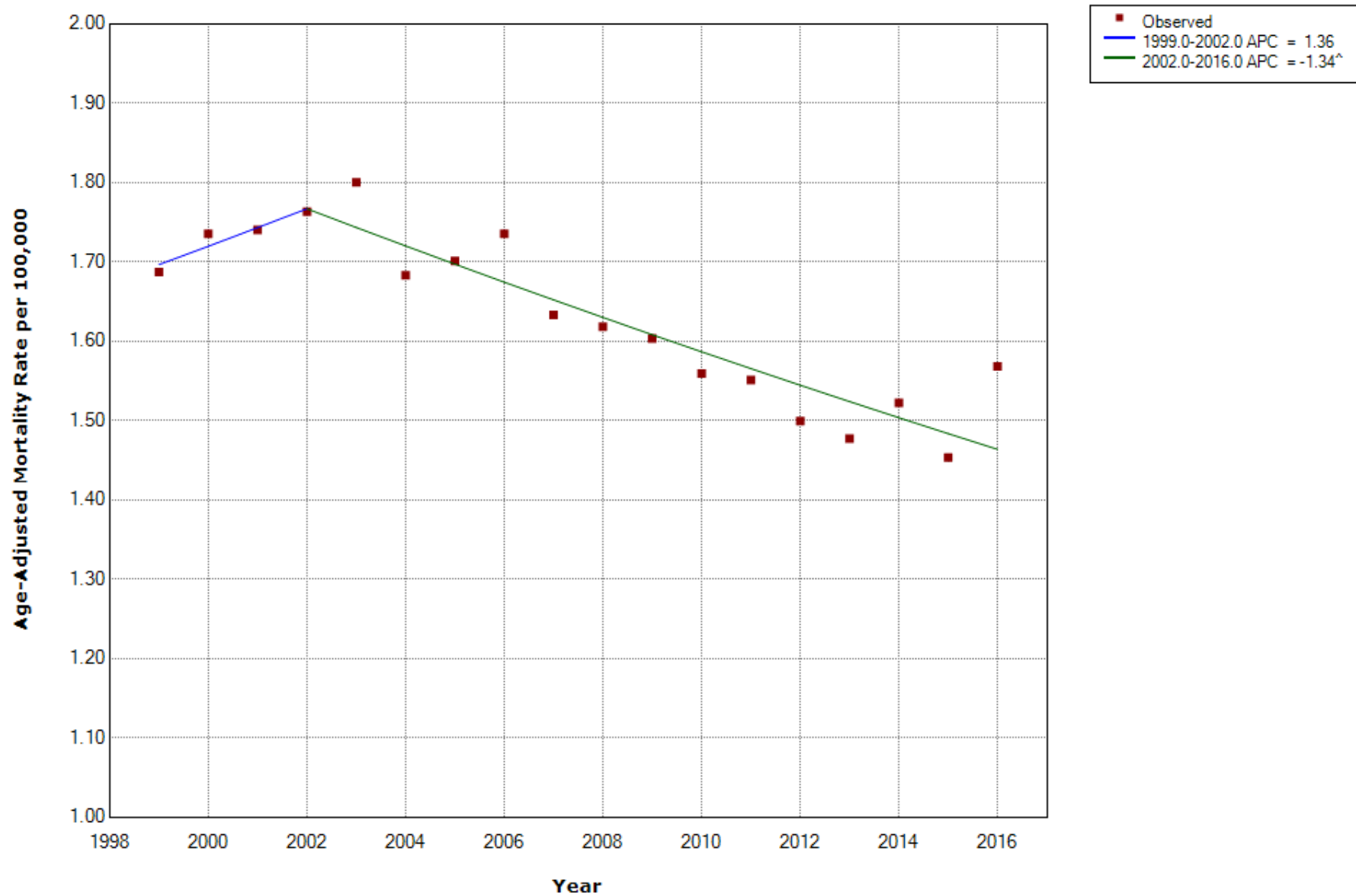
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

M00-M99 (Diseases of the musculoskeletal system and connective tissue) / NH Blacks: 2 Joinpoints



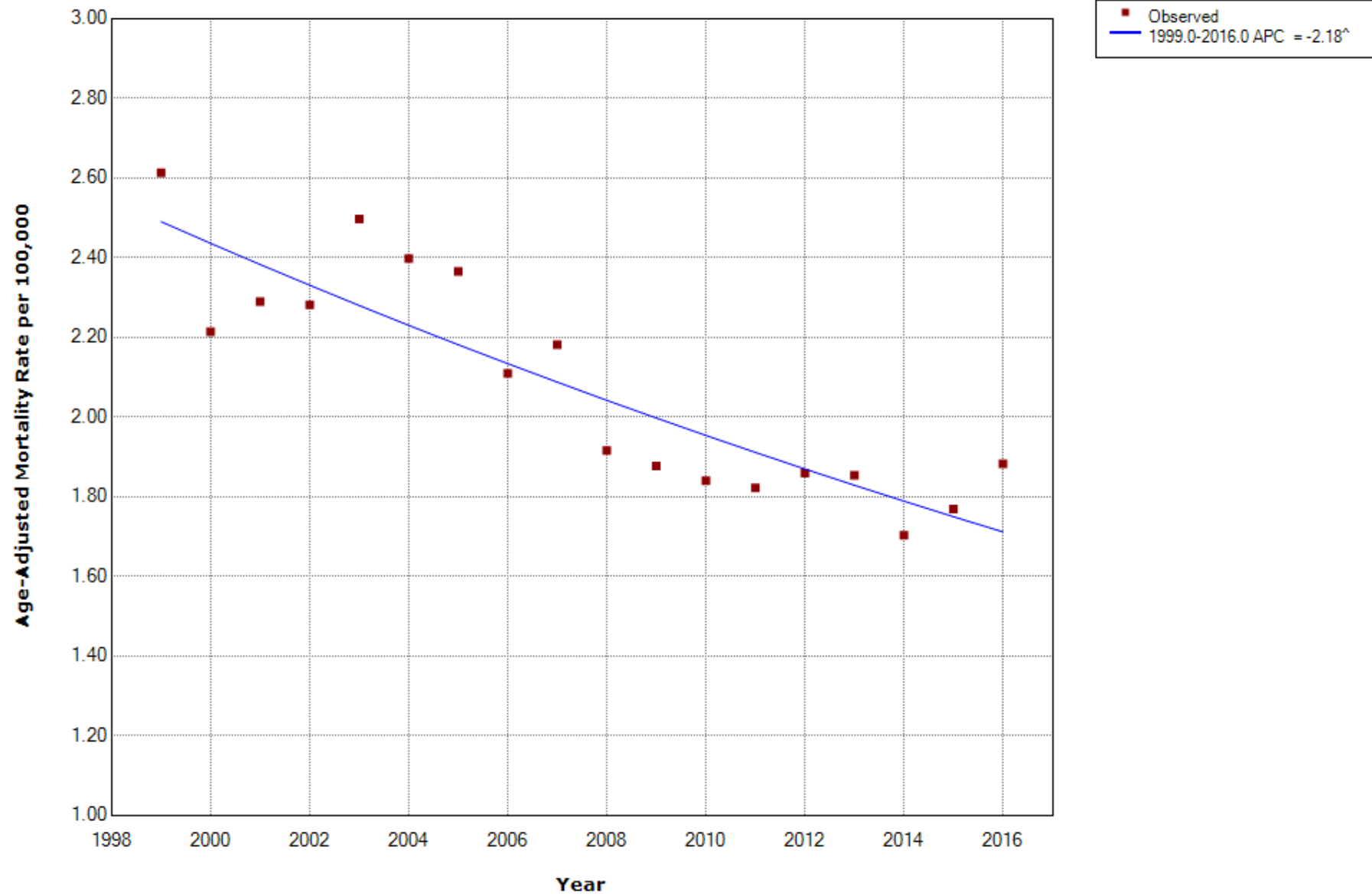
<sup>^</sup> Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

M00-M99 (Diseases of the musculoskeletal system and connective tissue) / NH whites: 1 Joinpoint



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

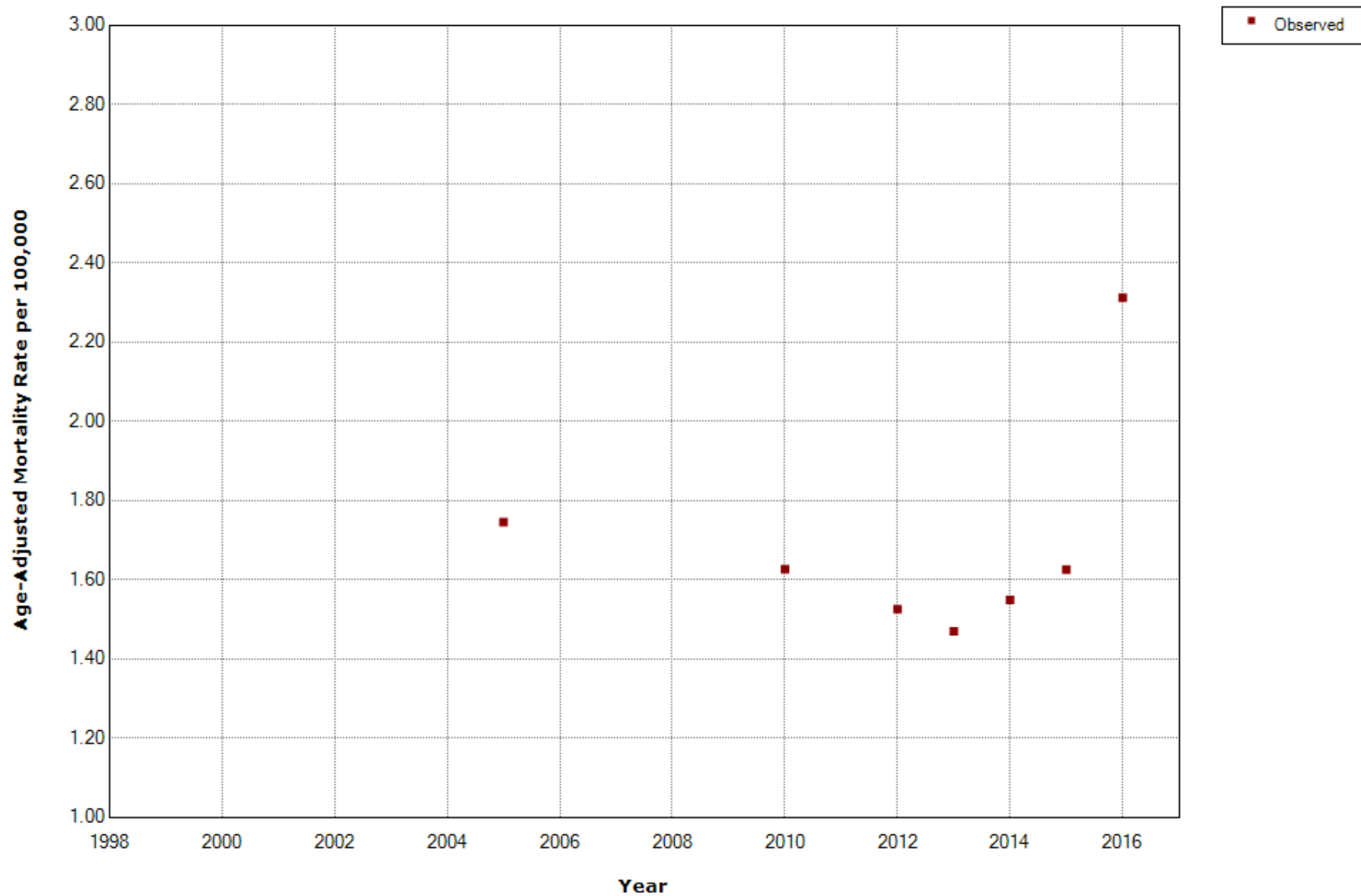
M00-M99 (Diseases of the musculoskeletal system and connective tissue) / Hispanics: 0 Joinpoints



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.



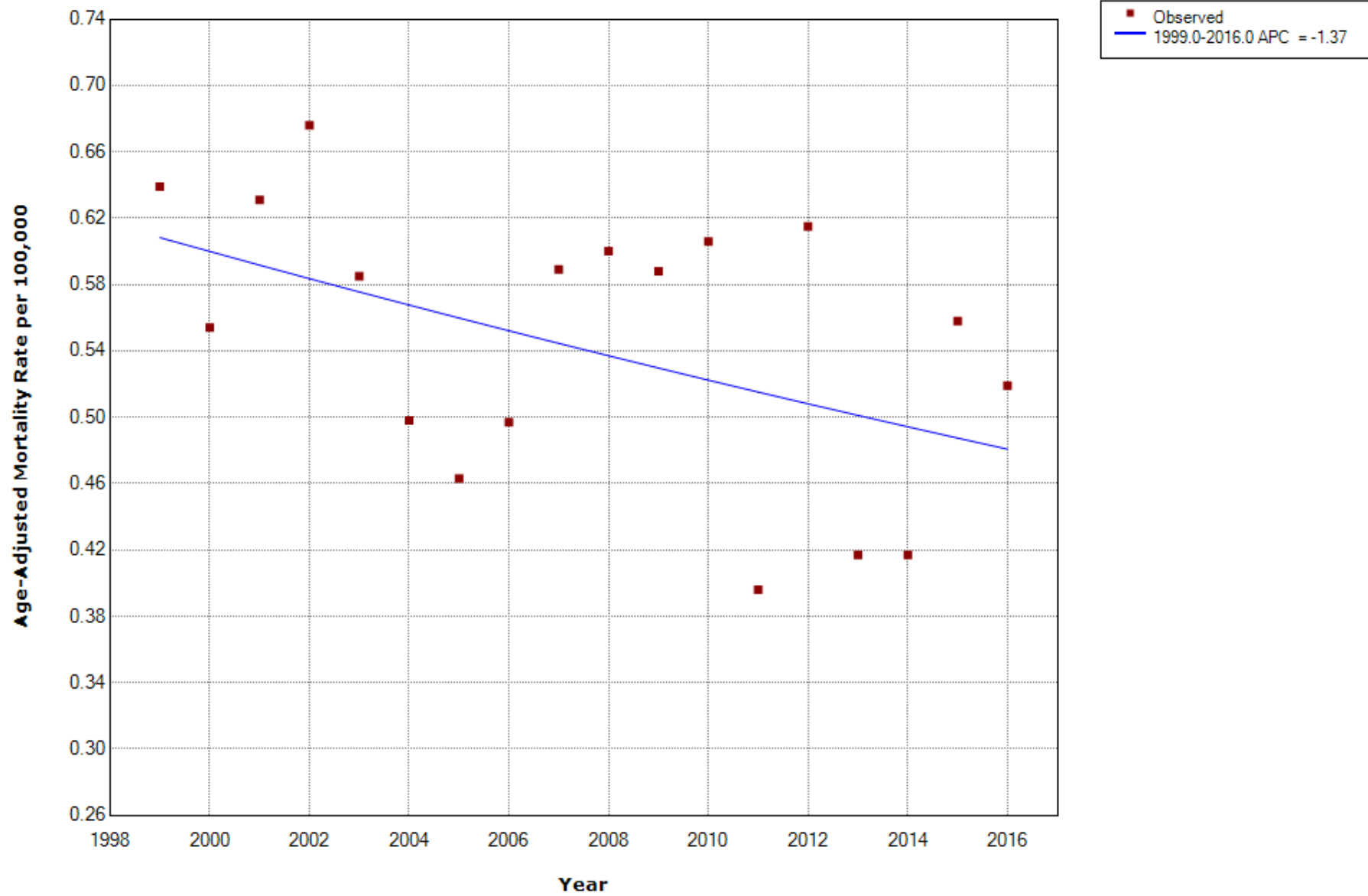
Q00-Q99 (Congenital malformations, deformations and chromosomal abnormalities) / NH AIAN: Observed



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

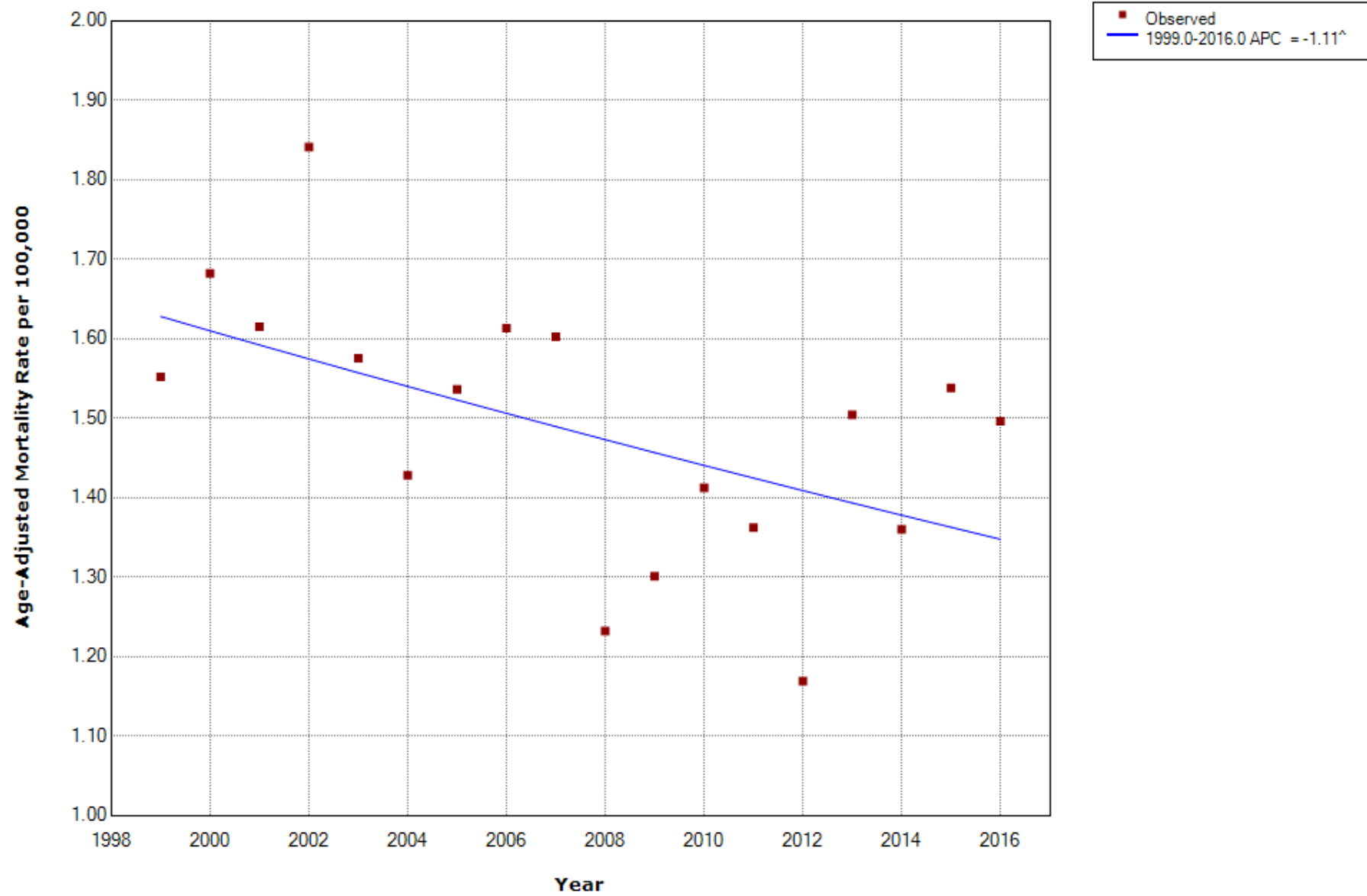
\* Joinpoint cannot process records with missing dependent variable values. Joinpoint will not analyze by-groups that have this error. (Row = 1260, Col = 1)

Q00-Q99 (Congenital malformations, deformations and chromosomal abnormalities) / NH API: 0 Joinpoints



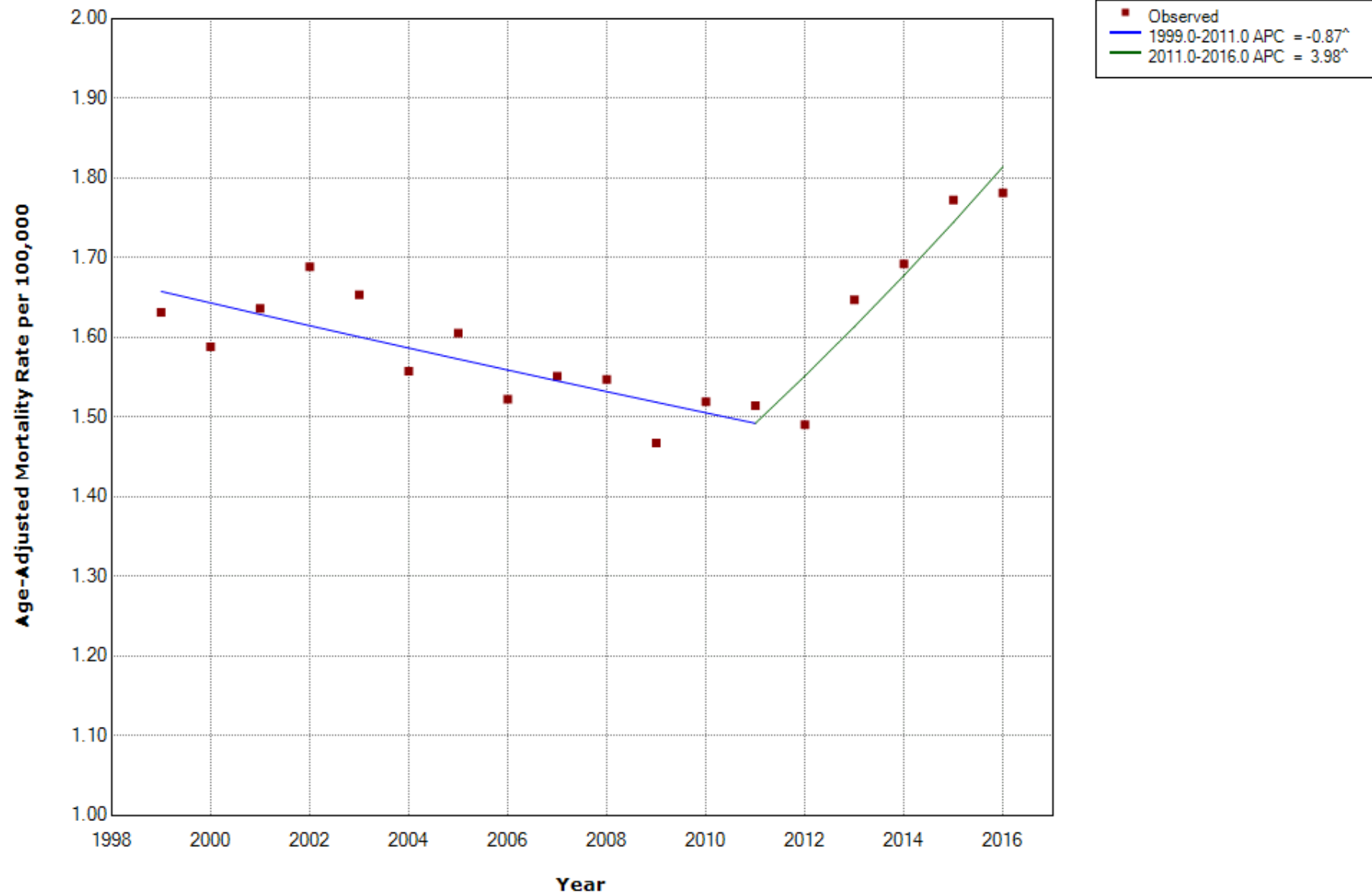
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

Q00-Q99 (Congenital malformations, deformations and chromosomal abnormalities) / NH Blacks: 0 Joinpoints



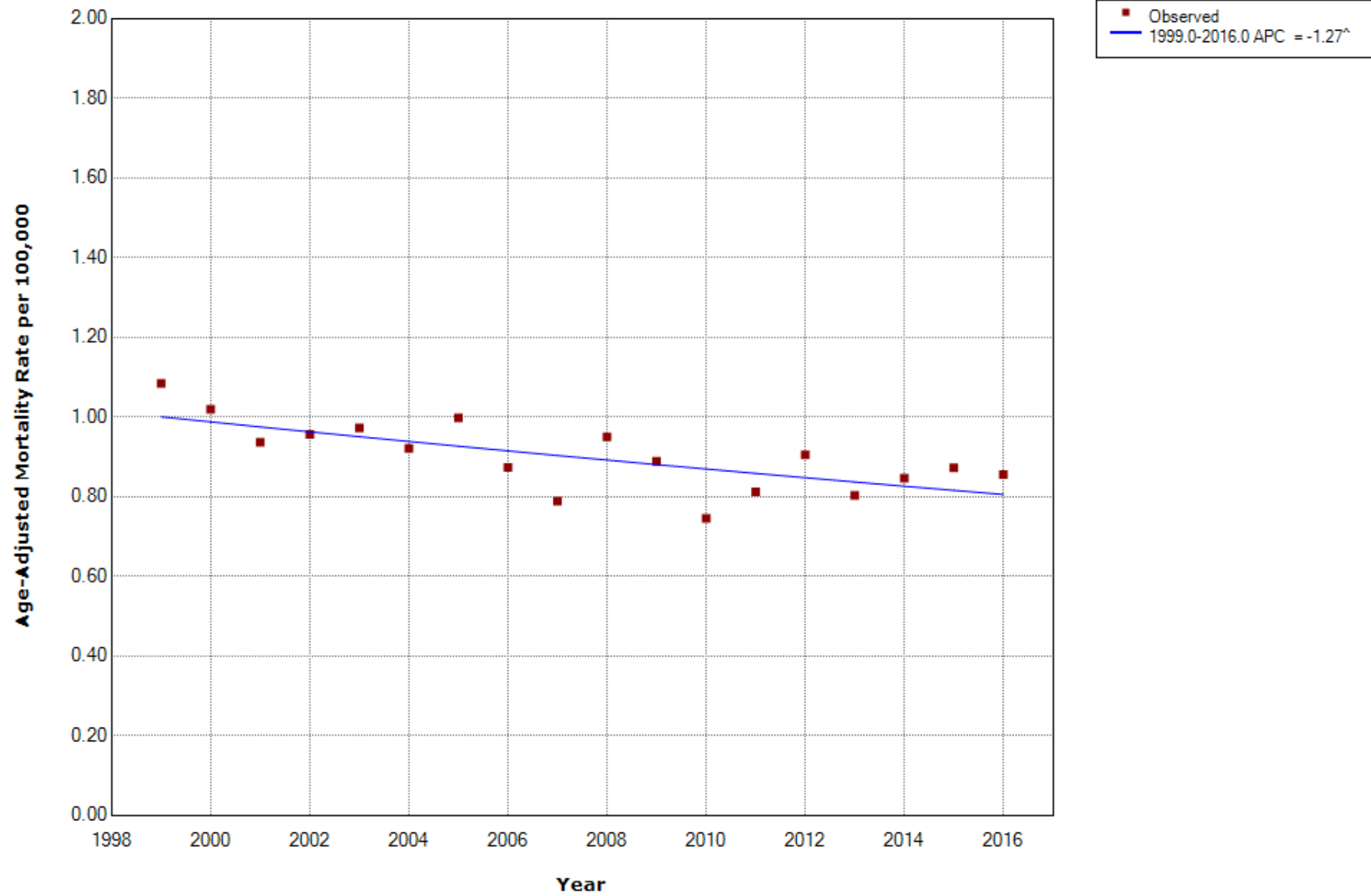
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

Q00-Q99 (Congenital malformations, deformations and chromosomal abnormalities) / NH whites: 1 Joinpoint



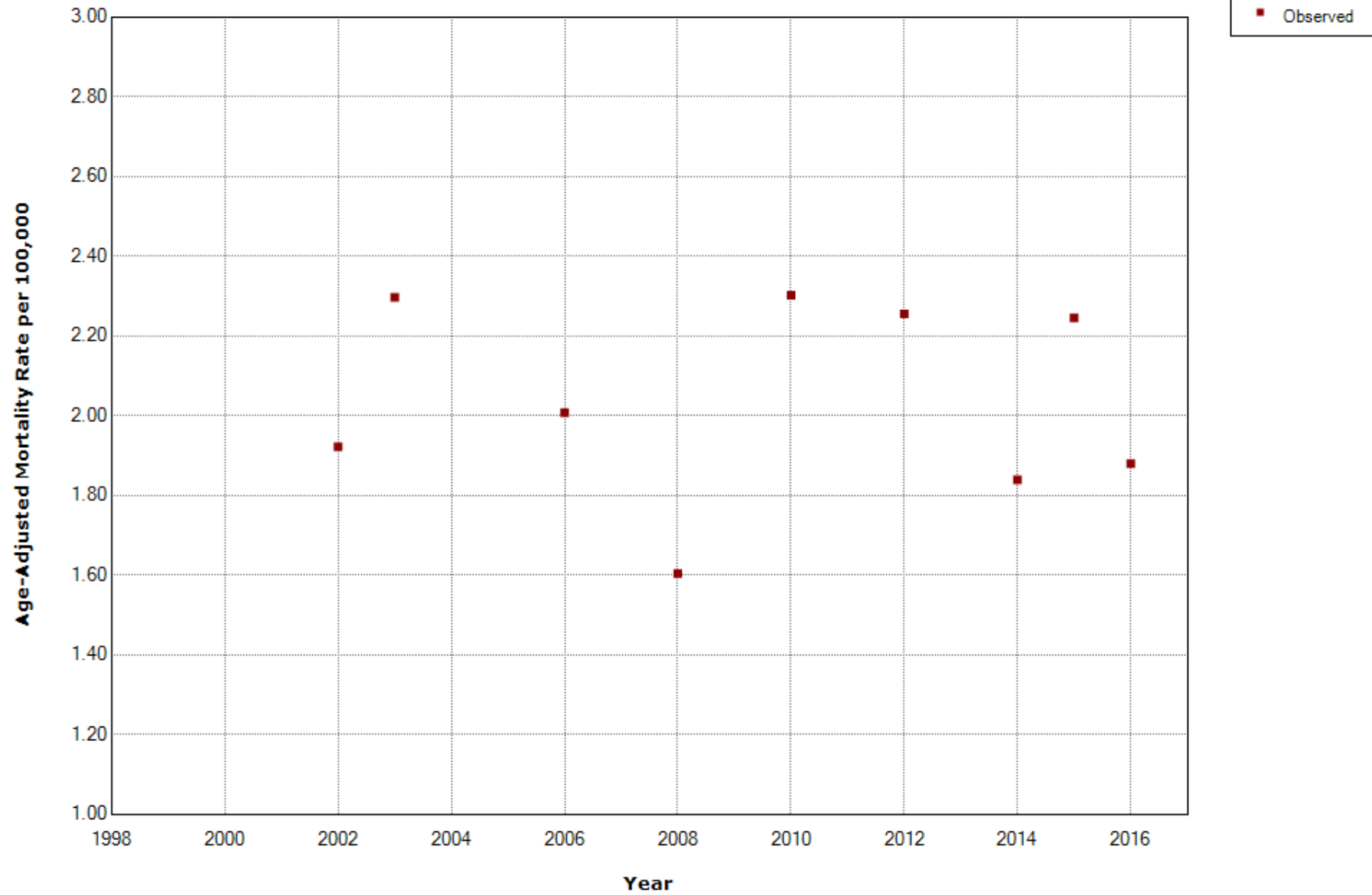
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

Q00-Q99 (Congenital malformations, deformations and chromosomal abnormalities) / Hispanics: 0 Joinpoints



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

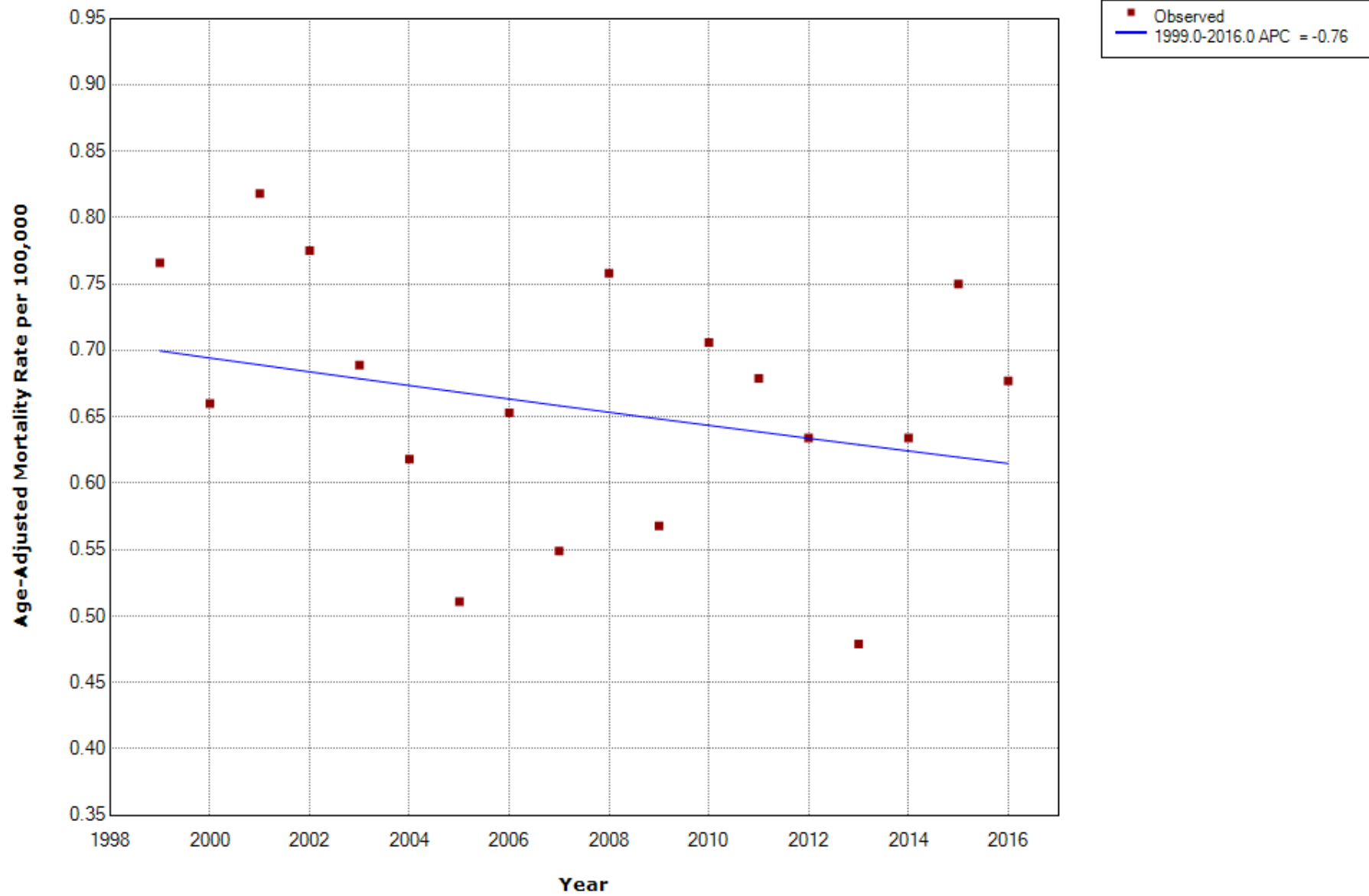
### D50-D89 (Diseases of the blood and immune mechanism) / NH AIAN: Observed



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

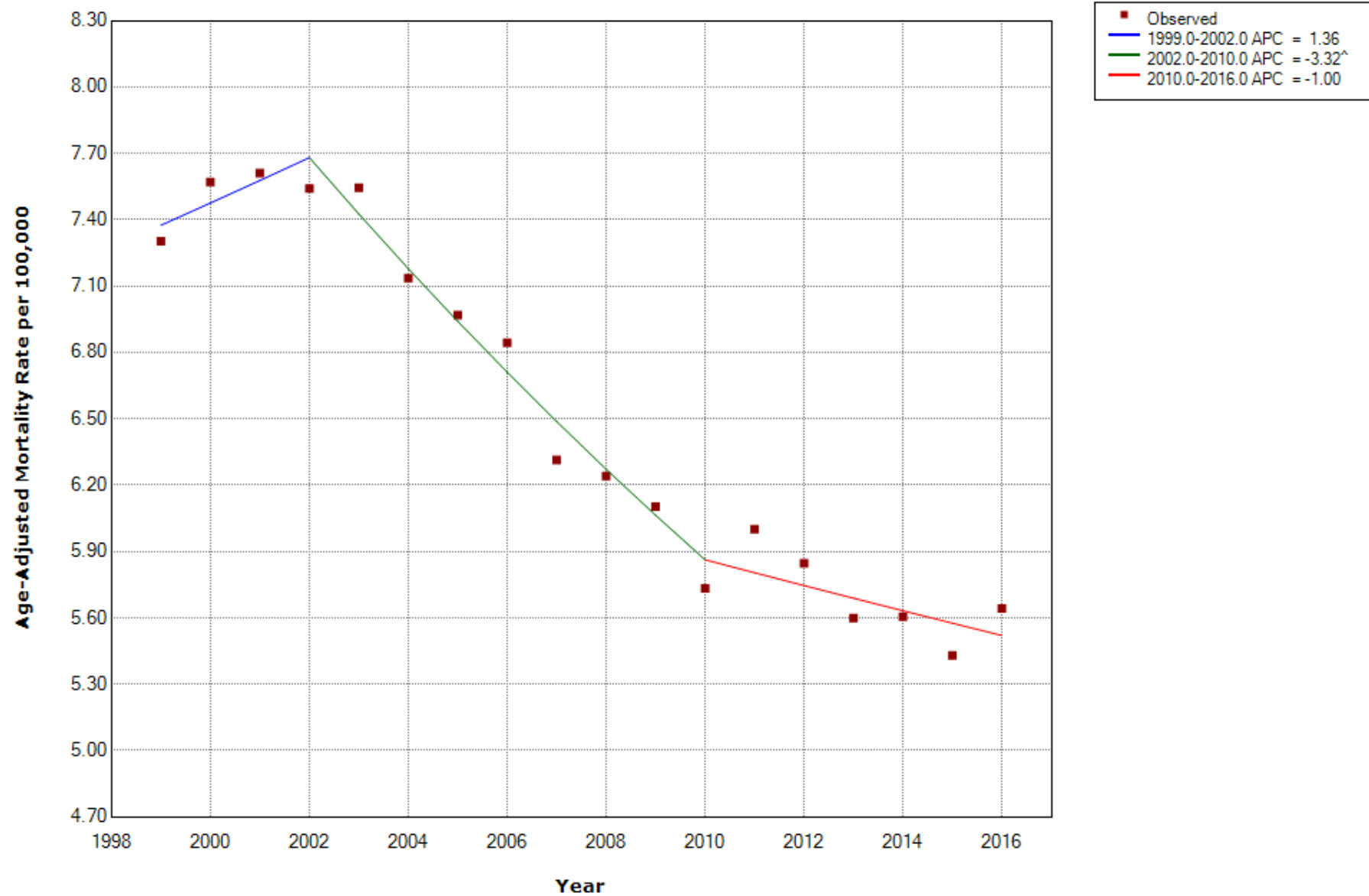
\* Joinpoint cannot process records with missing dependent variable values. Joinpoint will not analyze by-groups that have this error. (Row = 1350, Col = 1)

D50-D89 (Diseases of the blood and immune mechanism) / NH API: 0 Joinpoints



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

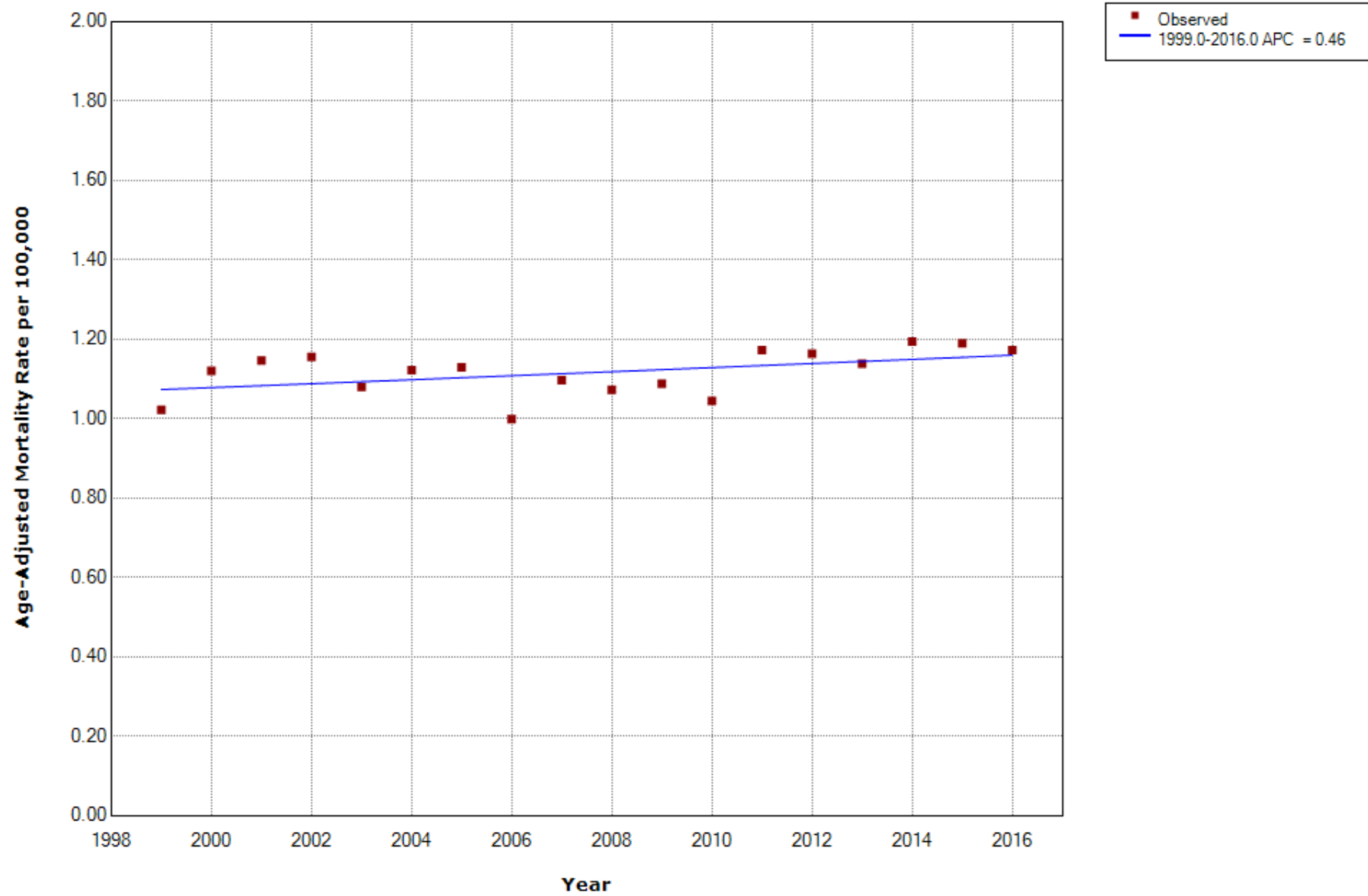
### D50-D89 (Diseases of the blood and immune mechanism) / NH Blacks: 2 Joinpoints



<sup>^</sup> Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

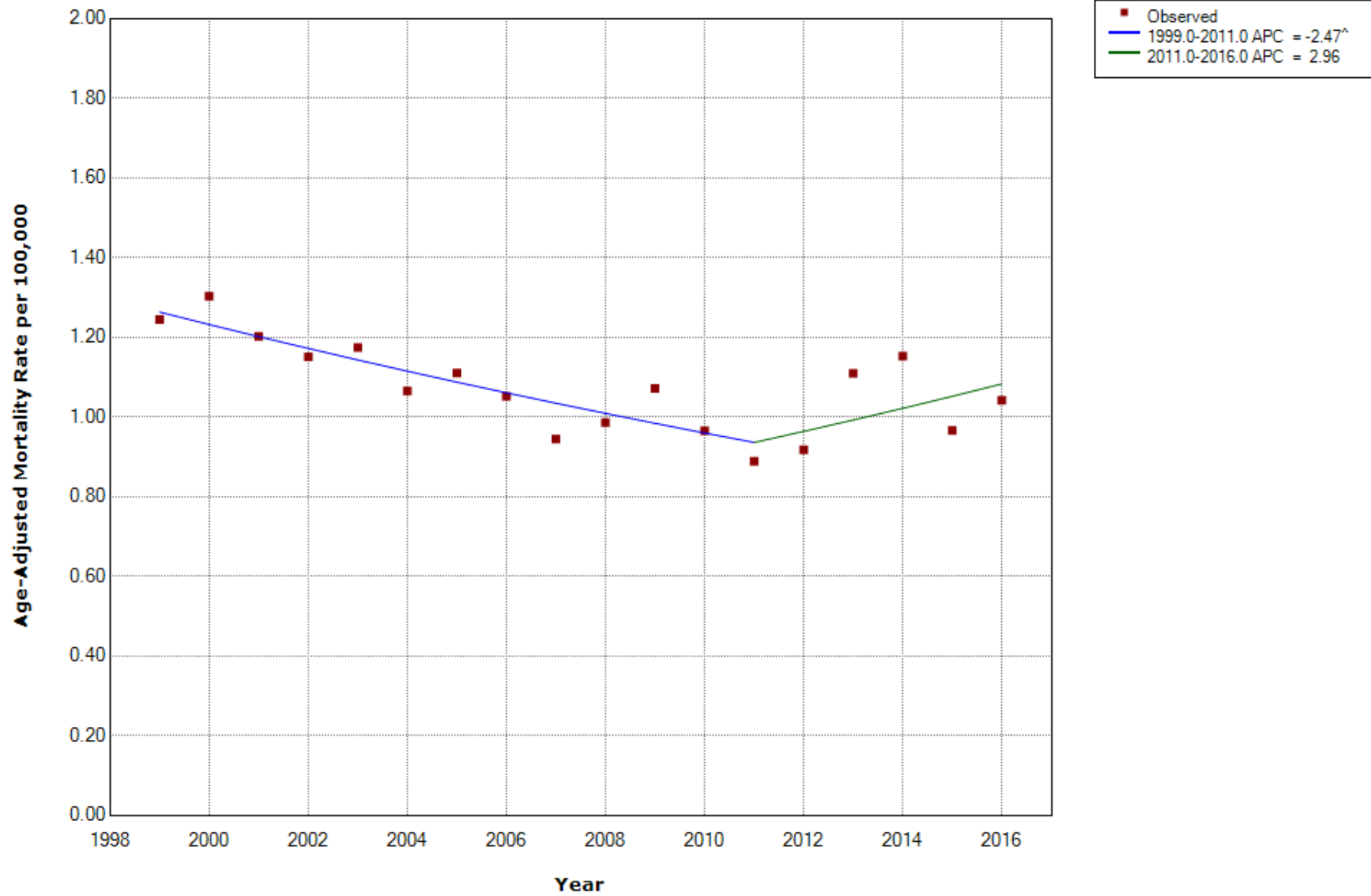


D50-D89 (Diseases of the blood and immune mechanism) / NH whites: 0 Joinpoints



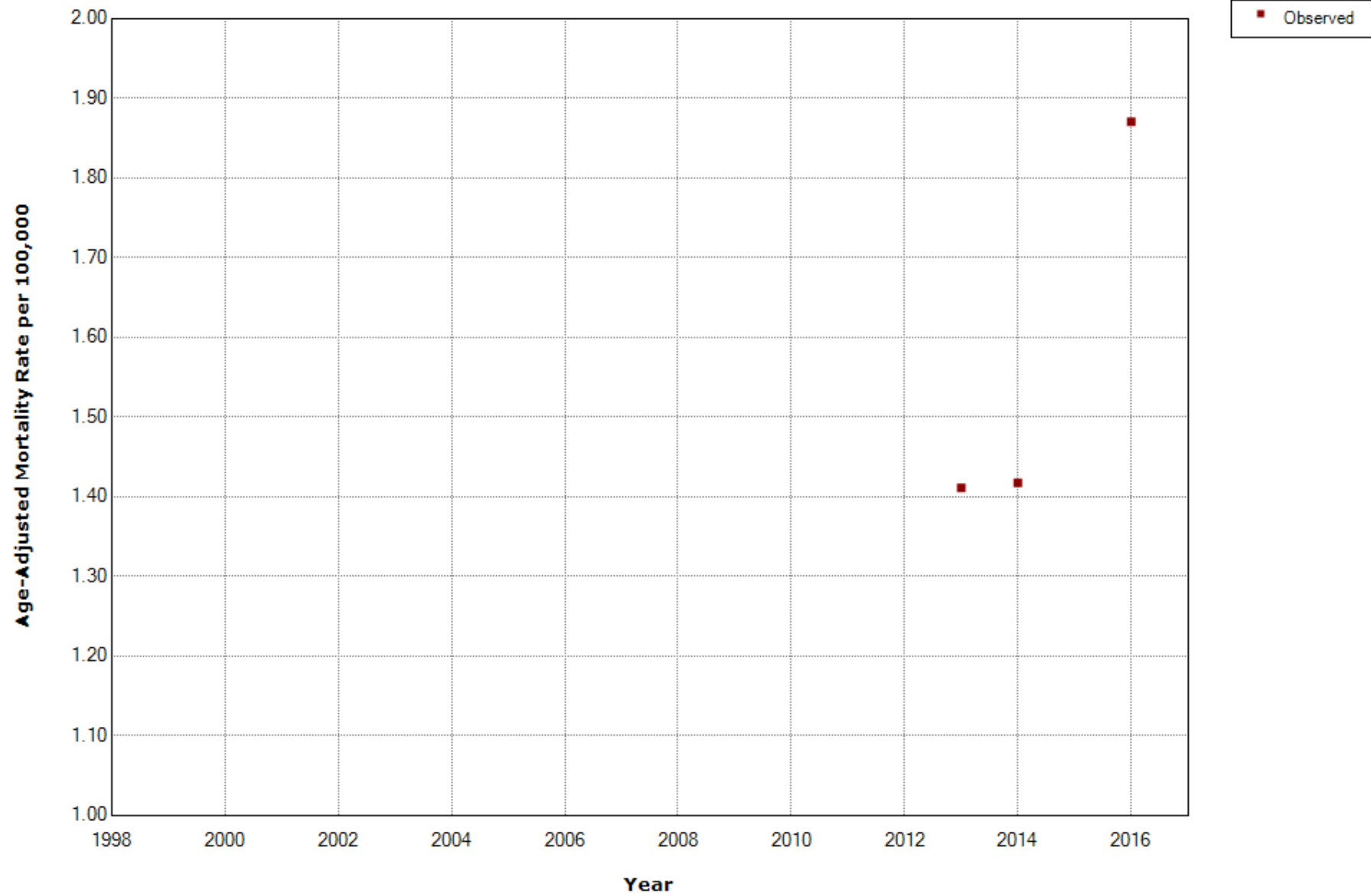
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

D50-D89 (Diseases of the blood and immune mechanism) / Hispanics: 1 Joinpoint



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

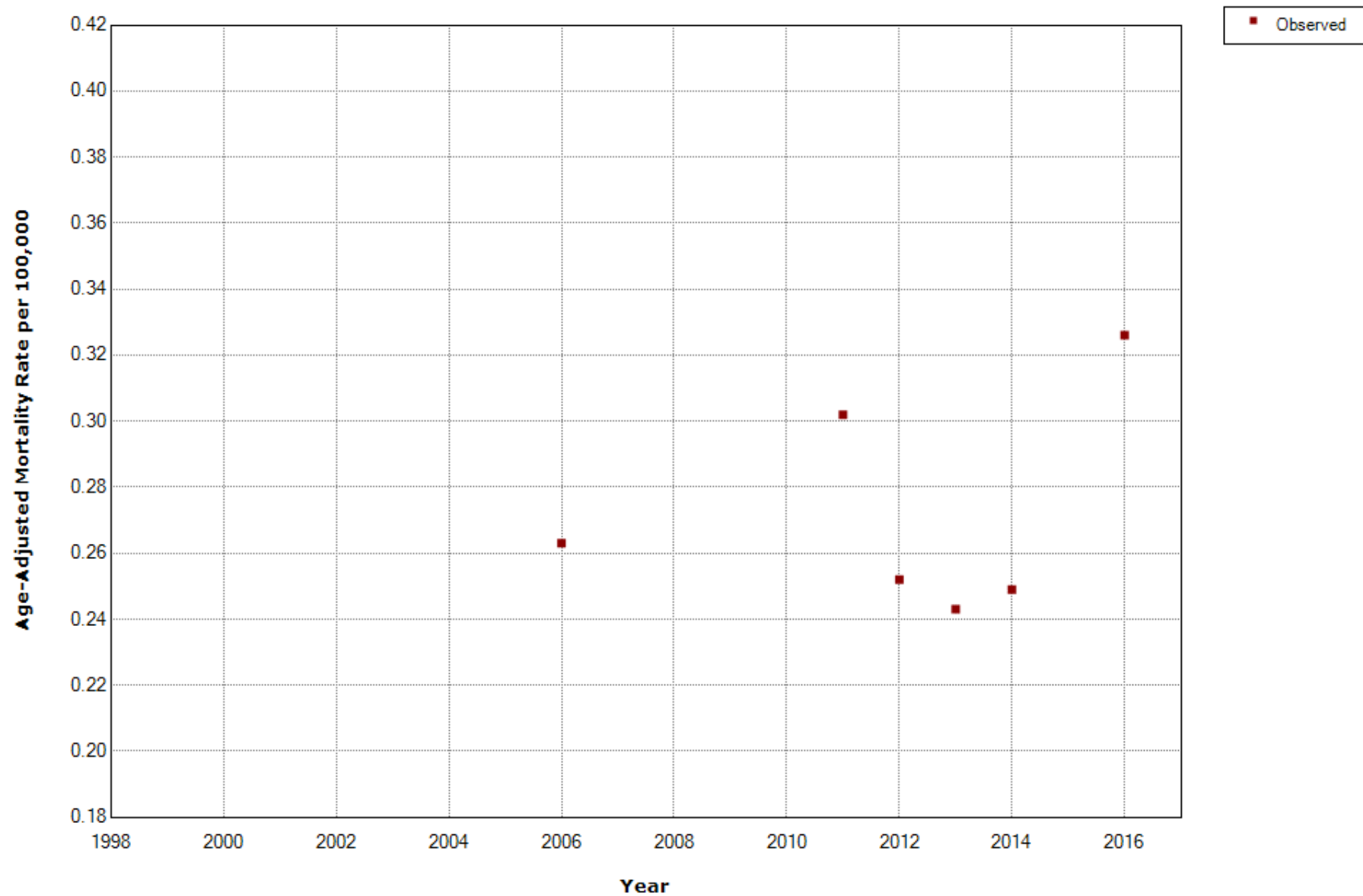
### L00-L98 (Diseases of the skin and subcutaneous tissue) / NH AIAN: Observed



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

\* Joinpoint cannot process records with missing dependent variable values. Joinpoint will not analyze by-groups that have this error. (Row = 1440, Col = 1)

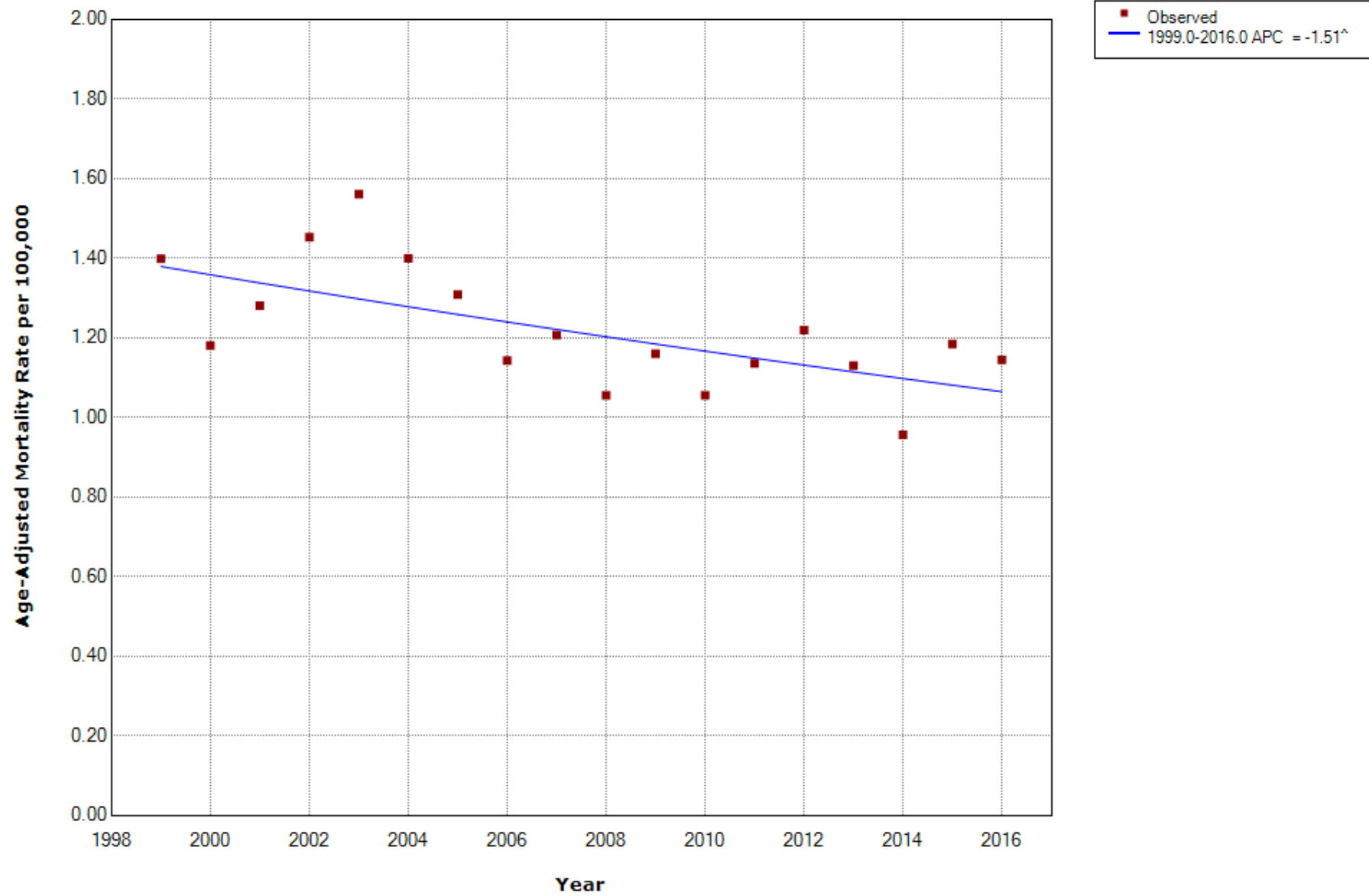
### L00-L98 (Diseases of the skin and subcutaneous tissue) / NH API: Observed



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

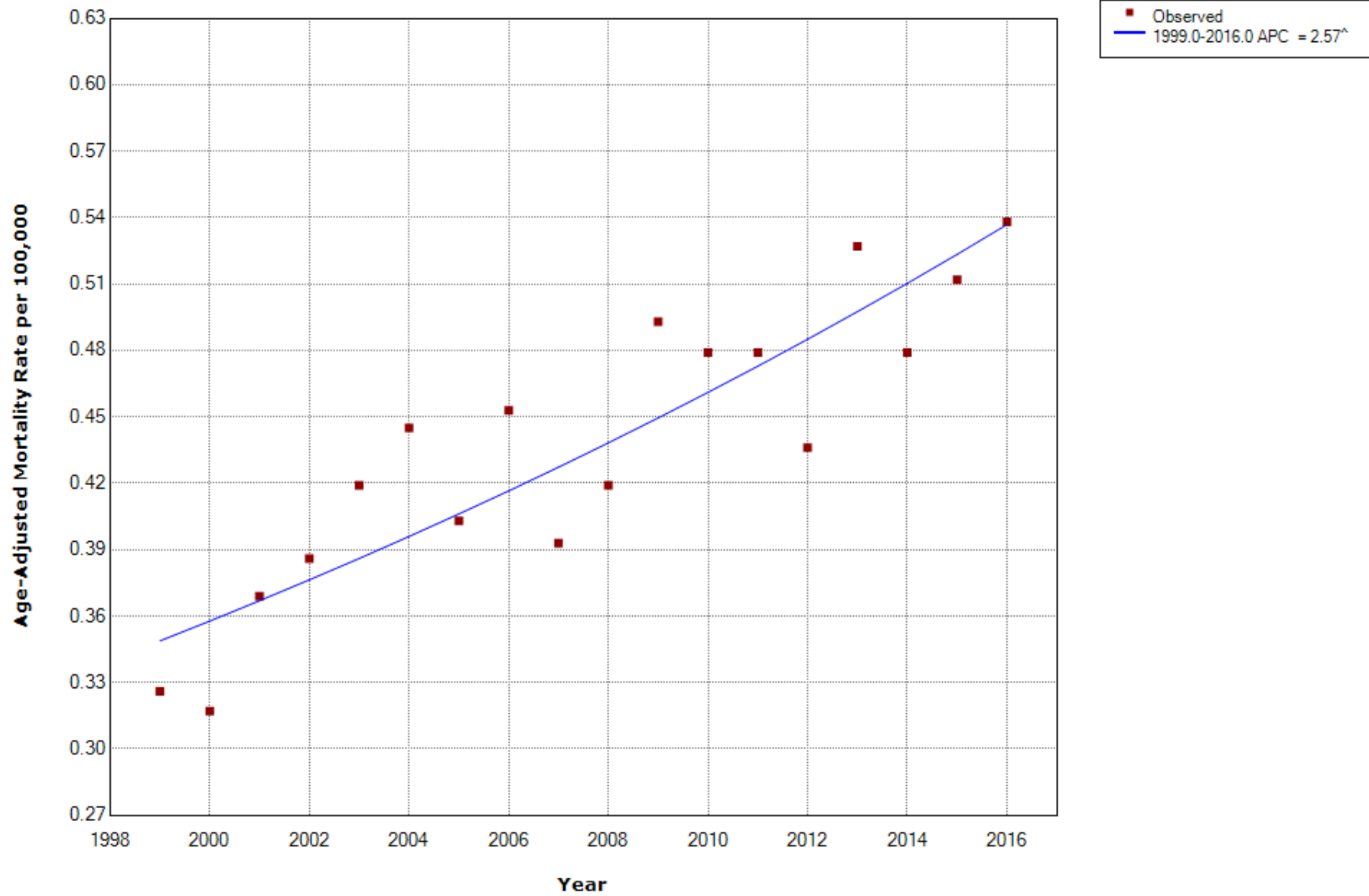
\* Joinpoint cannot process records with missing dependent variable values. Joinpoint will not analyze by-groups that have this error. (Row = 1458, Col = 1)

L00-L98 (Diseases of the skin and subcutaneous tissue) / NH Blacks: 0 Joinpoints



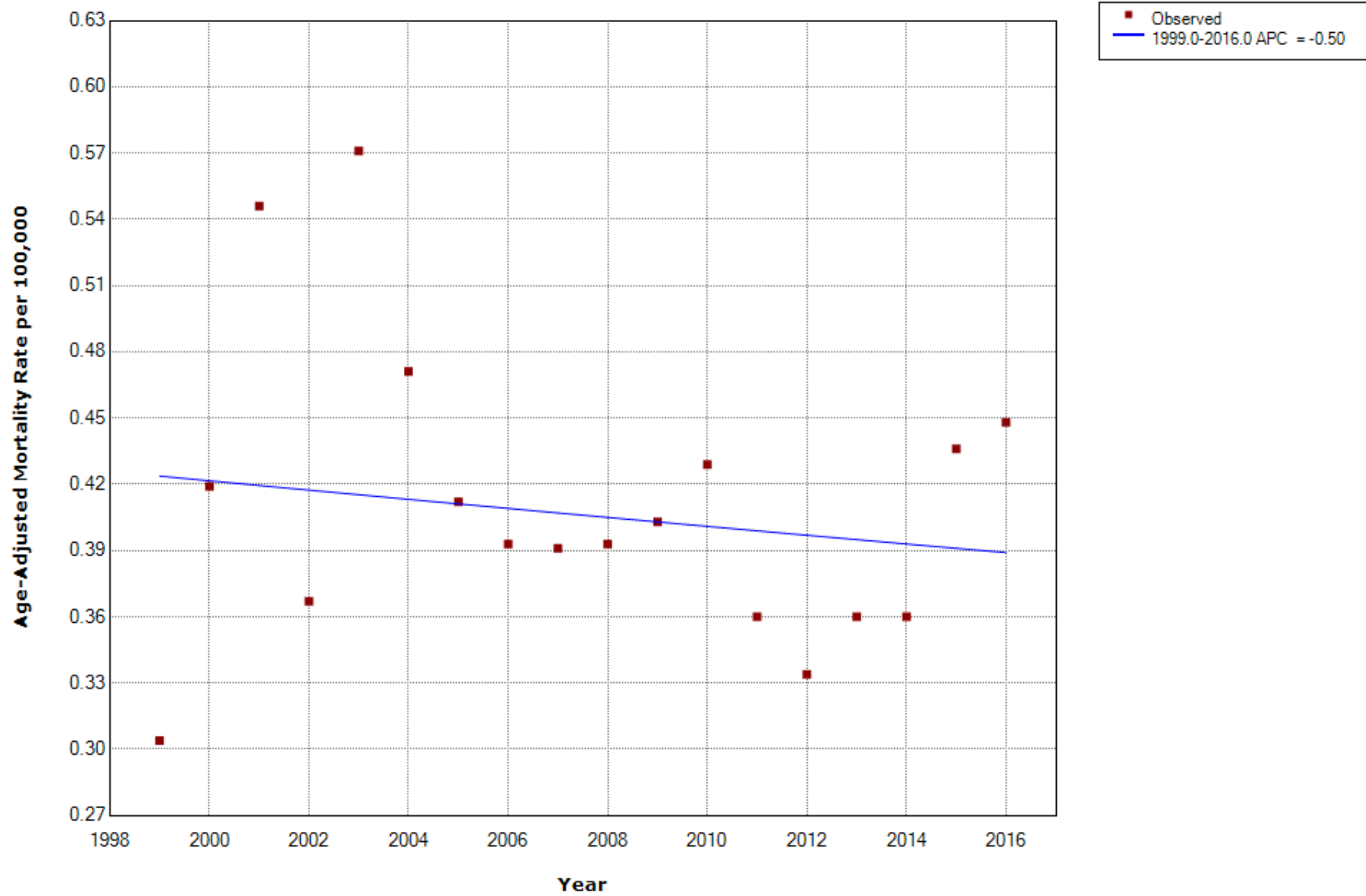
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

L00-L98 (Diseases of the skin and subcutaneous tissue) / NH whites: 0 Joinpoints



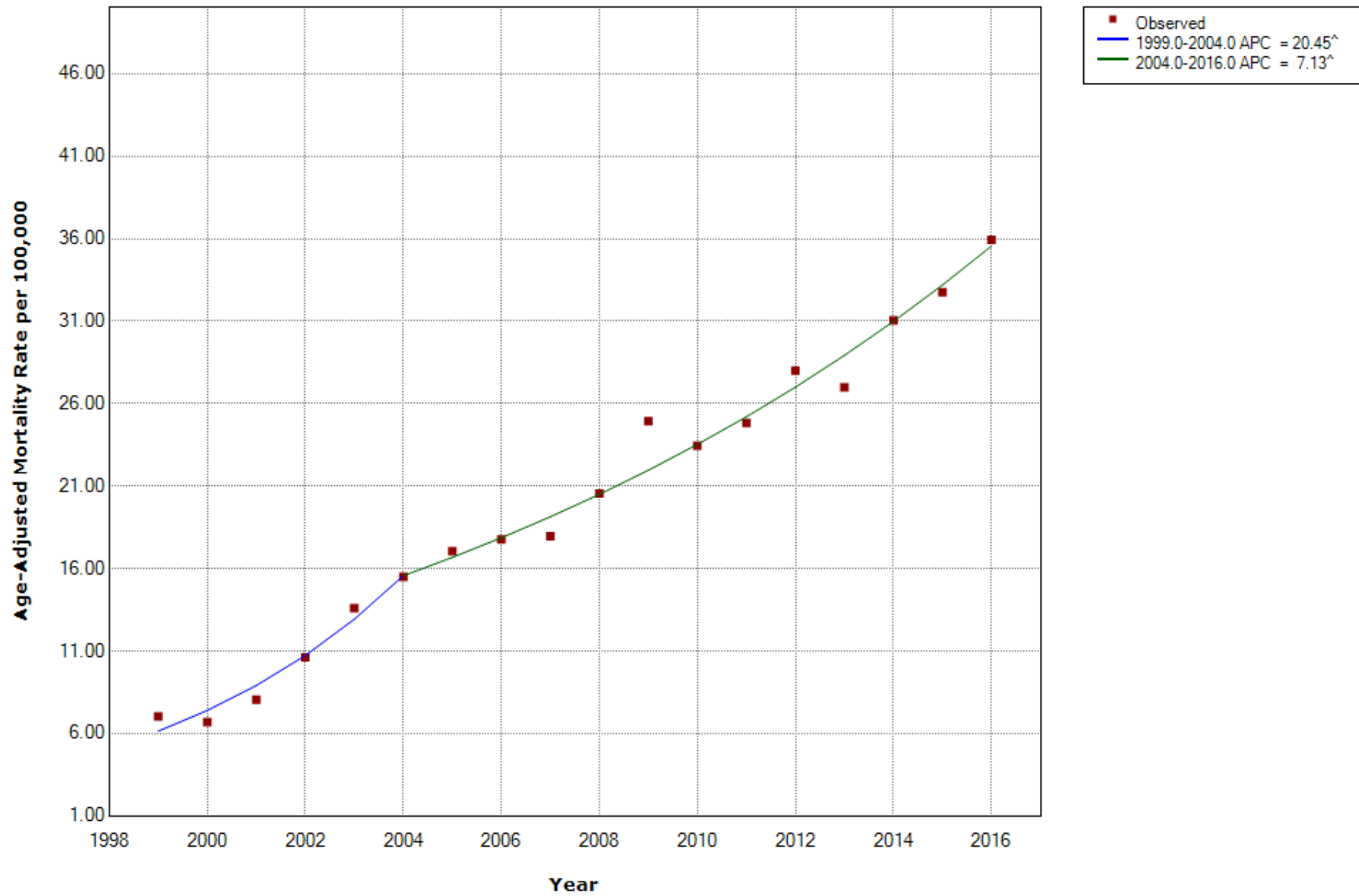
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

L00-L98 (Diseases of the skin and subcutaneous tissue) / Hispanics: 0 Joinpoints



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

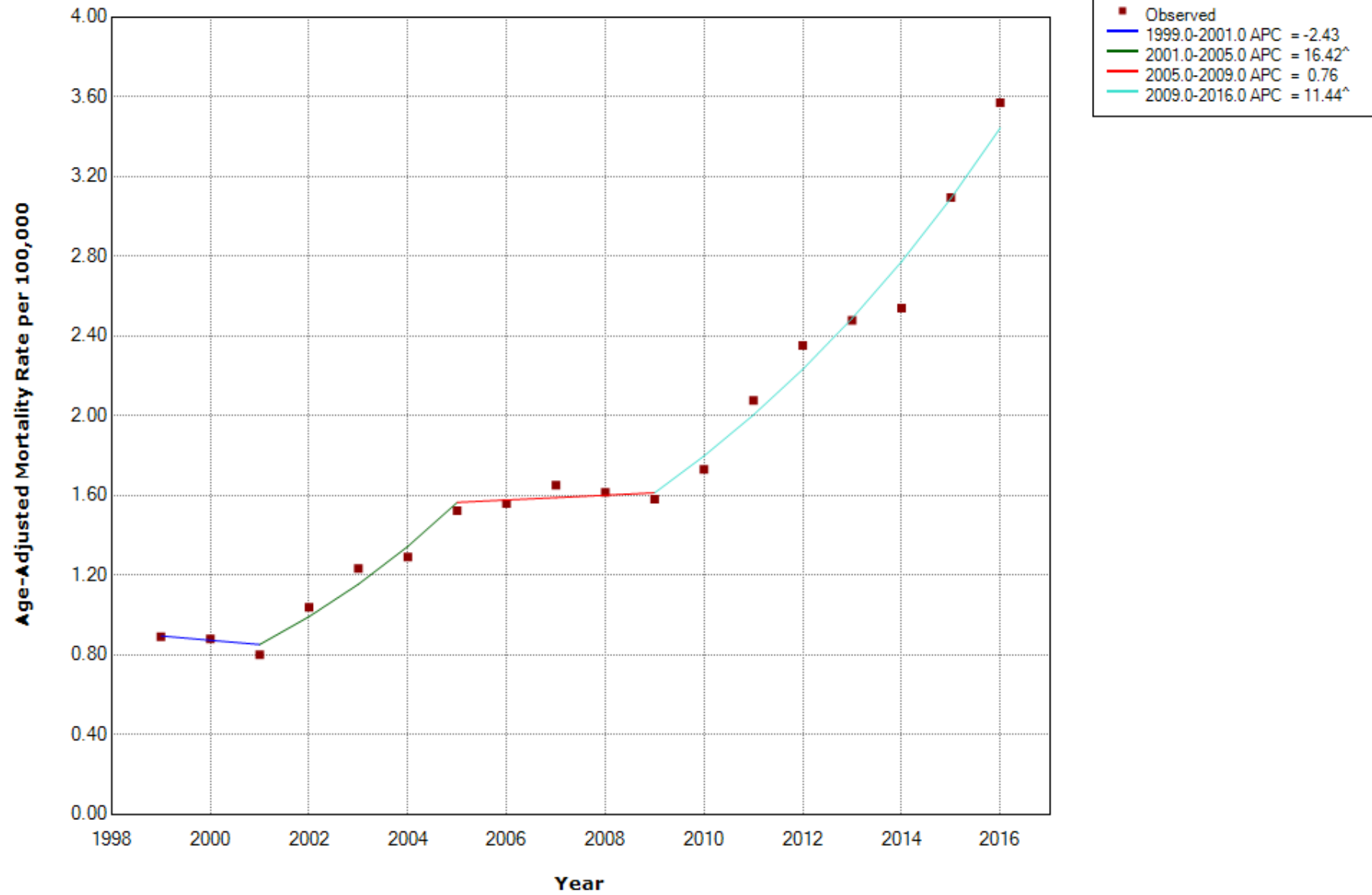
### Accidental drug poisoning (X40-X44) / NH AIAN: 1 Joinpoint



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

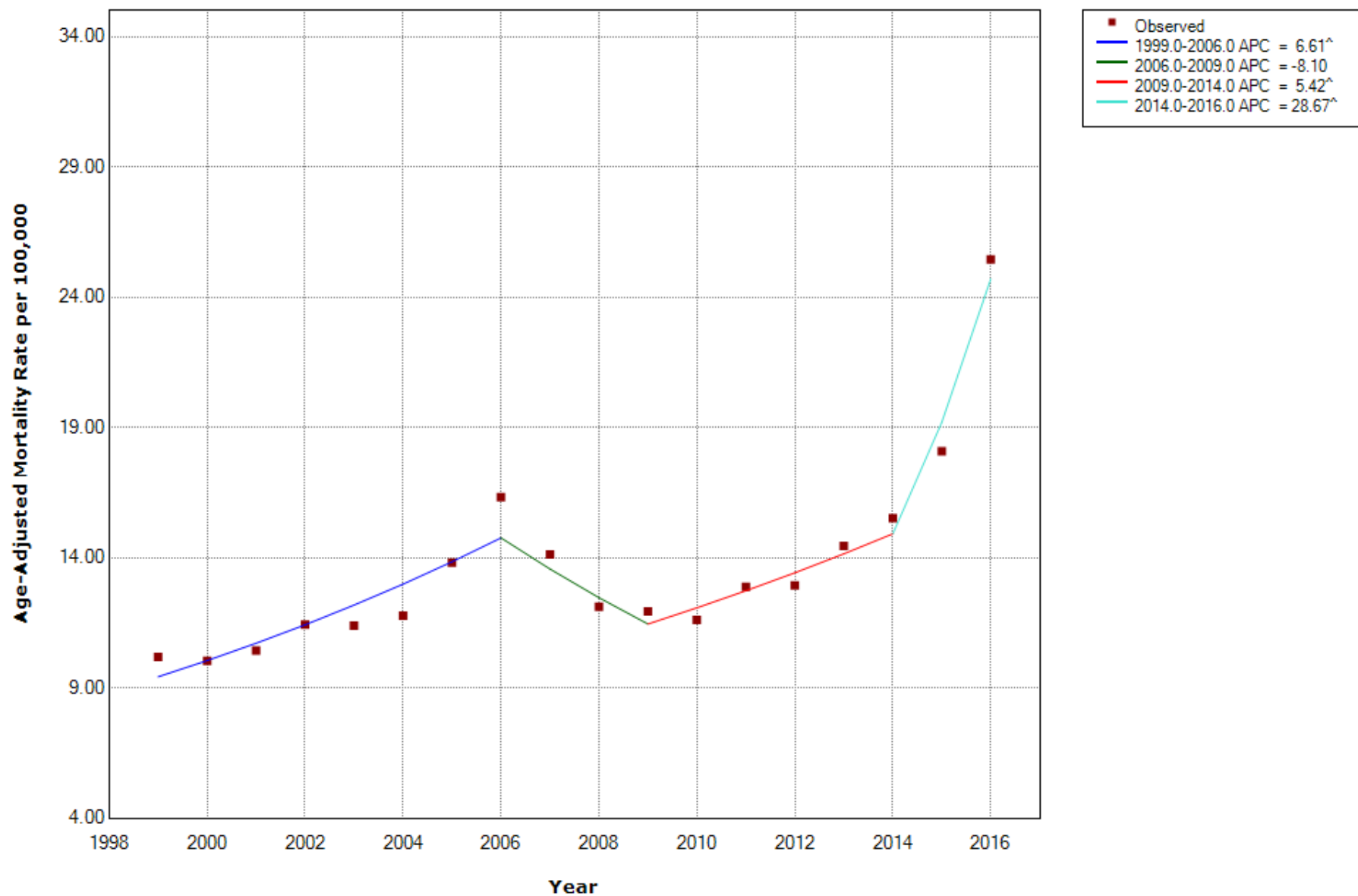


### Accidental drug poisoning (X40-X44) / NH API: 3 Joinpoints



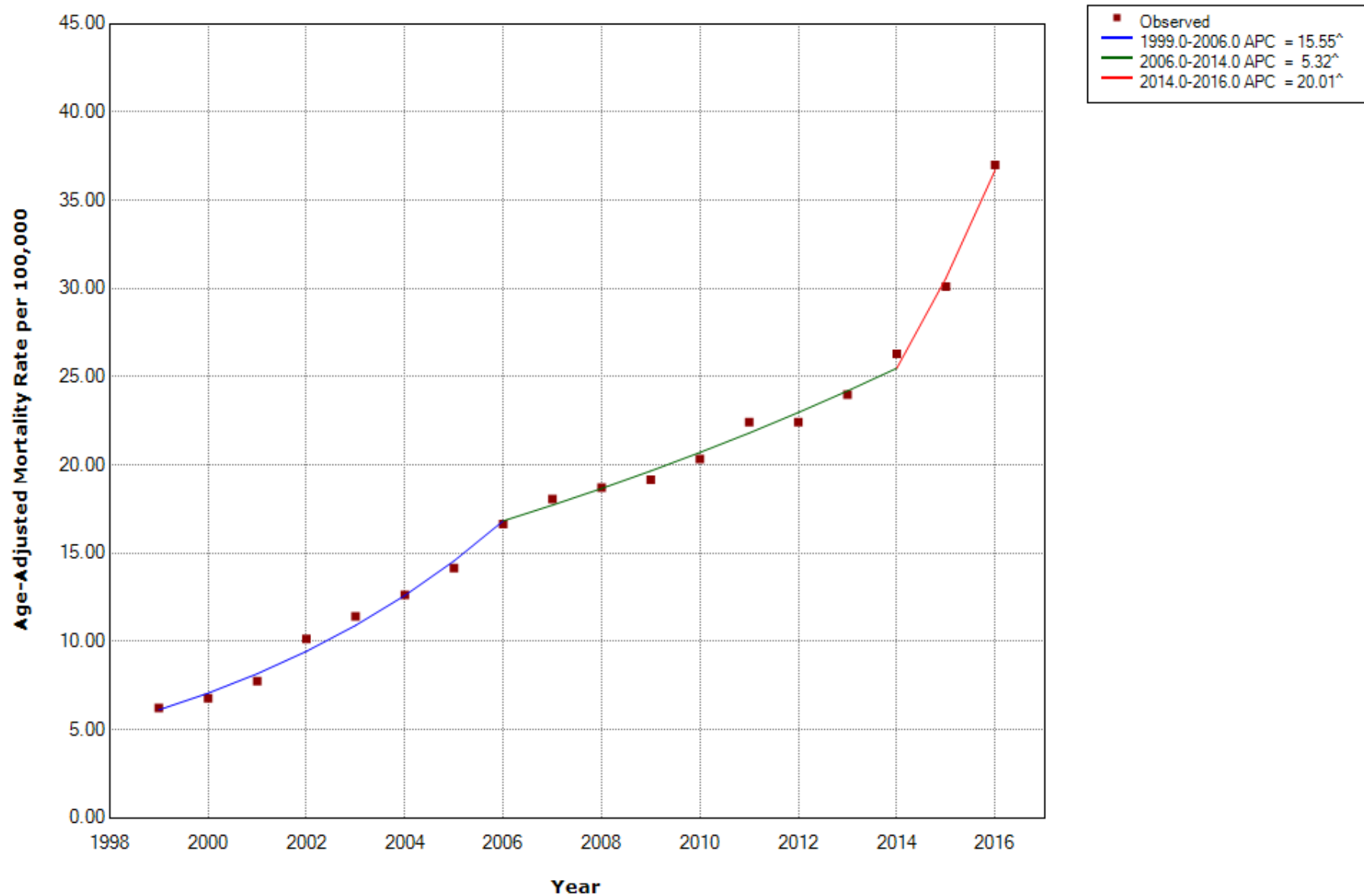
<sup>^</sup> Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 3 Joinpoints.

### Accidental drug poisoning (X40-X44) / NH Blacks: 3 Joinpoints



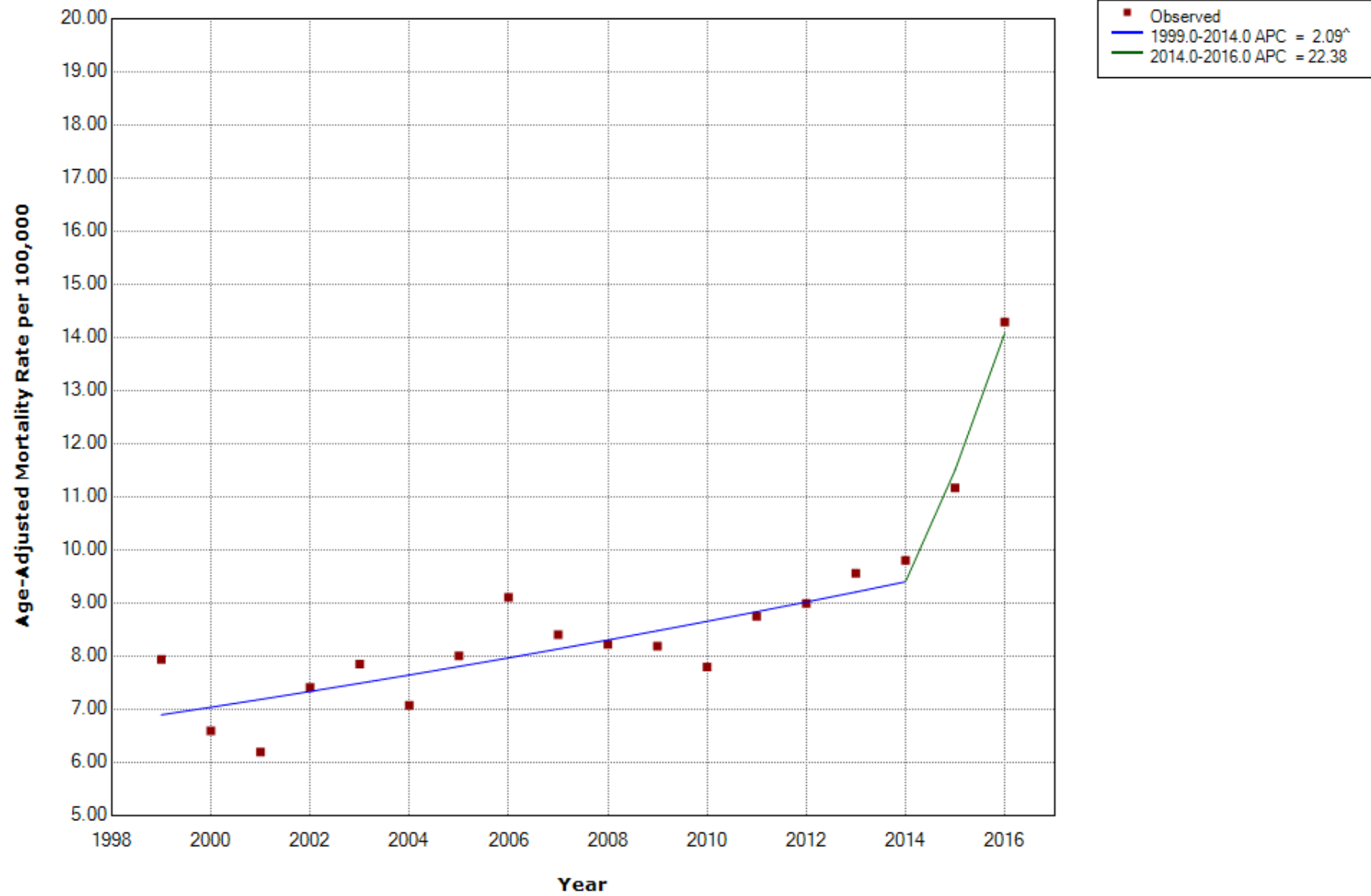
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 3 Joinpoints.

### Accidental drug poisoning (X40-X44) / NH whites: 2 Joinpoints



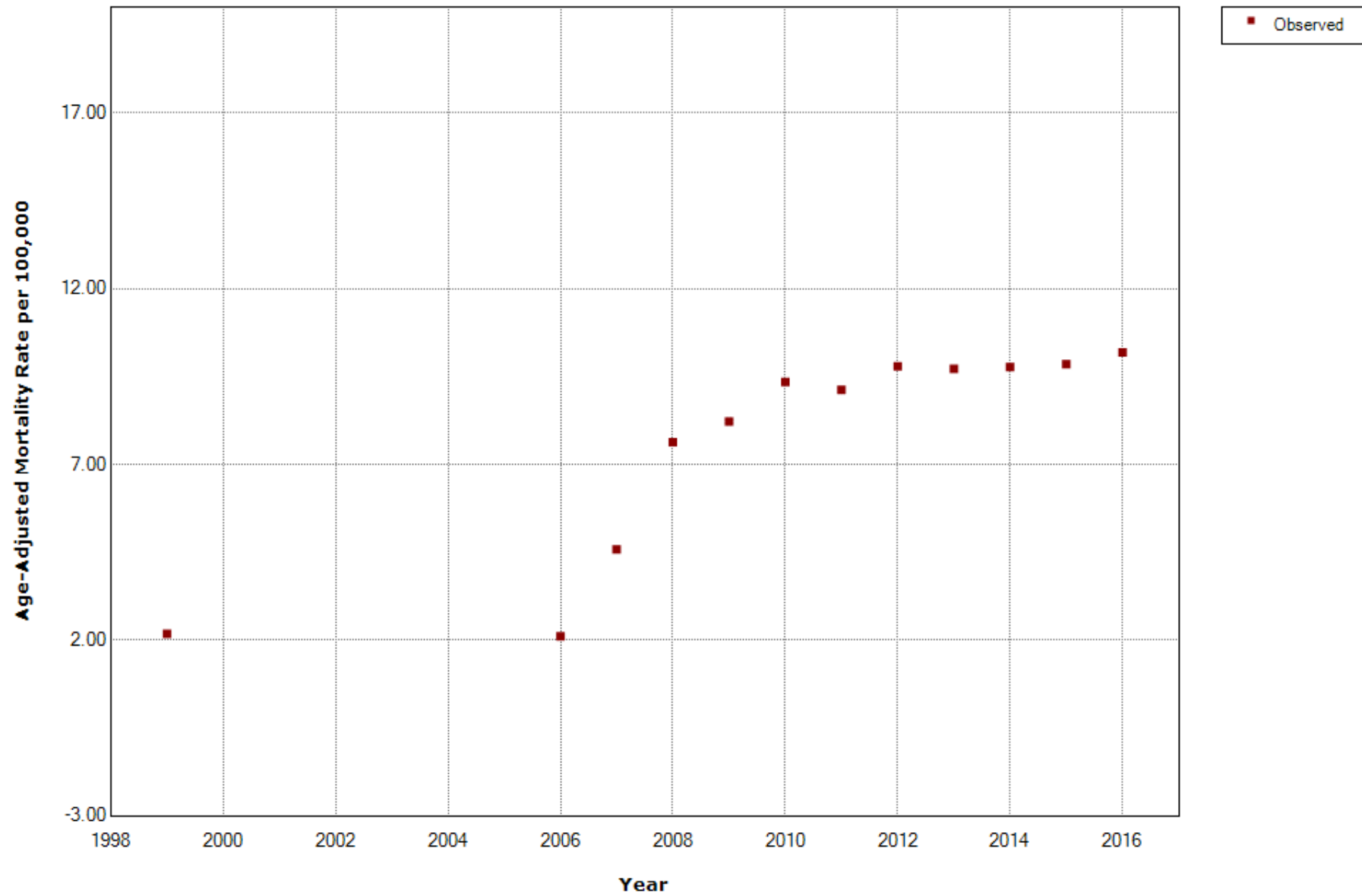
<sup>^</sup> Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

### Accidental drug poisoning (X40-X44) / Hispanics: 1 Joinpoint



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

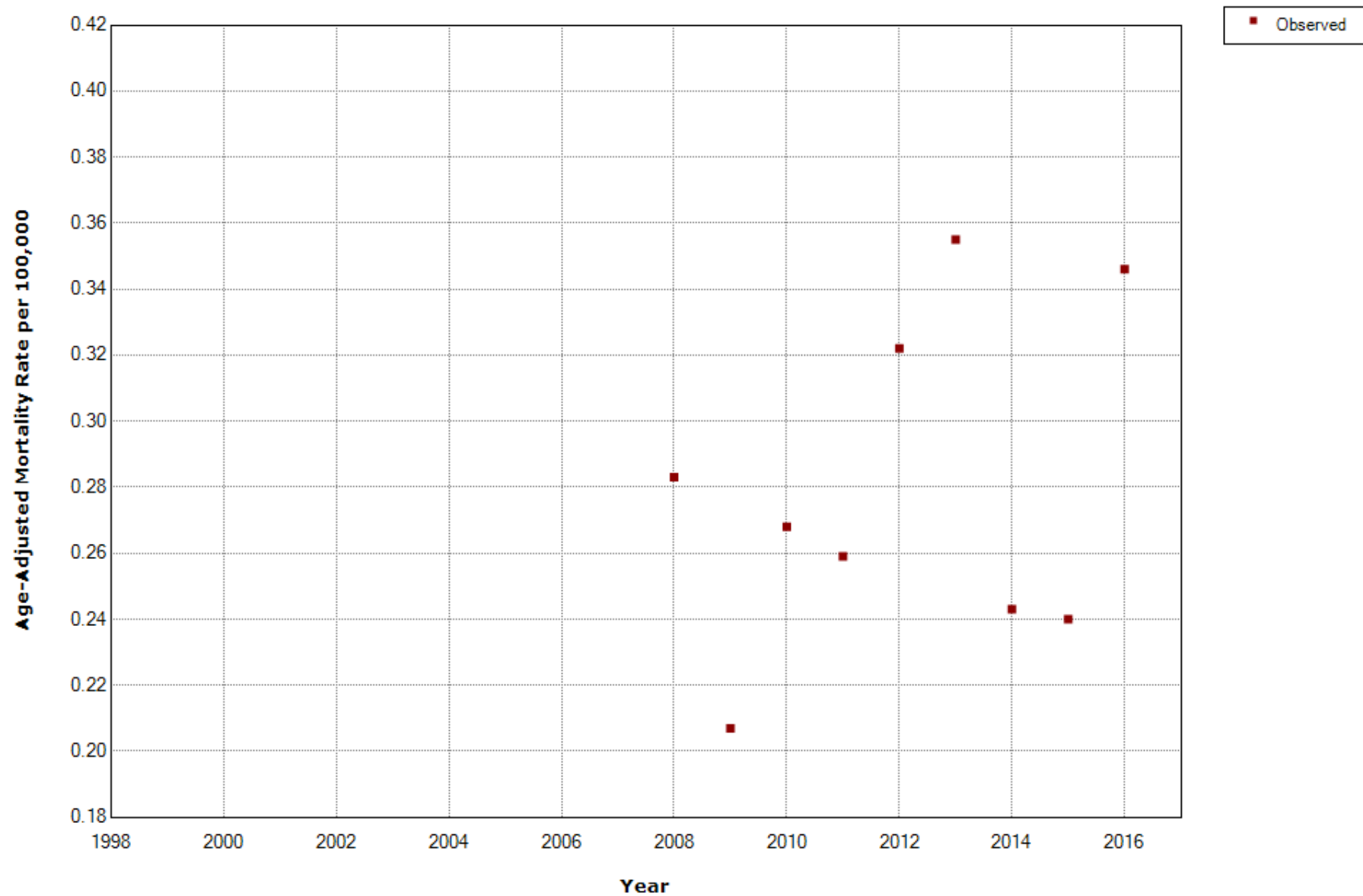
### Accidental alcohol poisoning (X45) / NH AIAN: Observed



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

\* Joinpoint cannot process records with missing dependent variable values. Joinpoint will not analyze by-groups that have this error. (Row = 91, Col = 1)

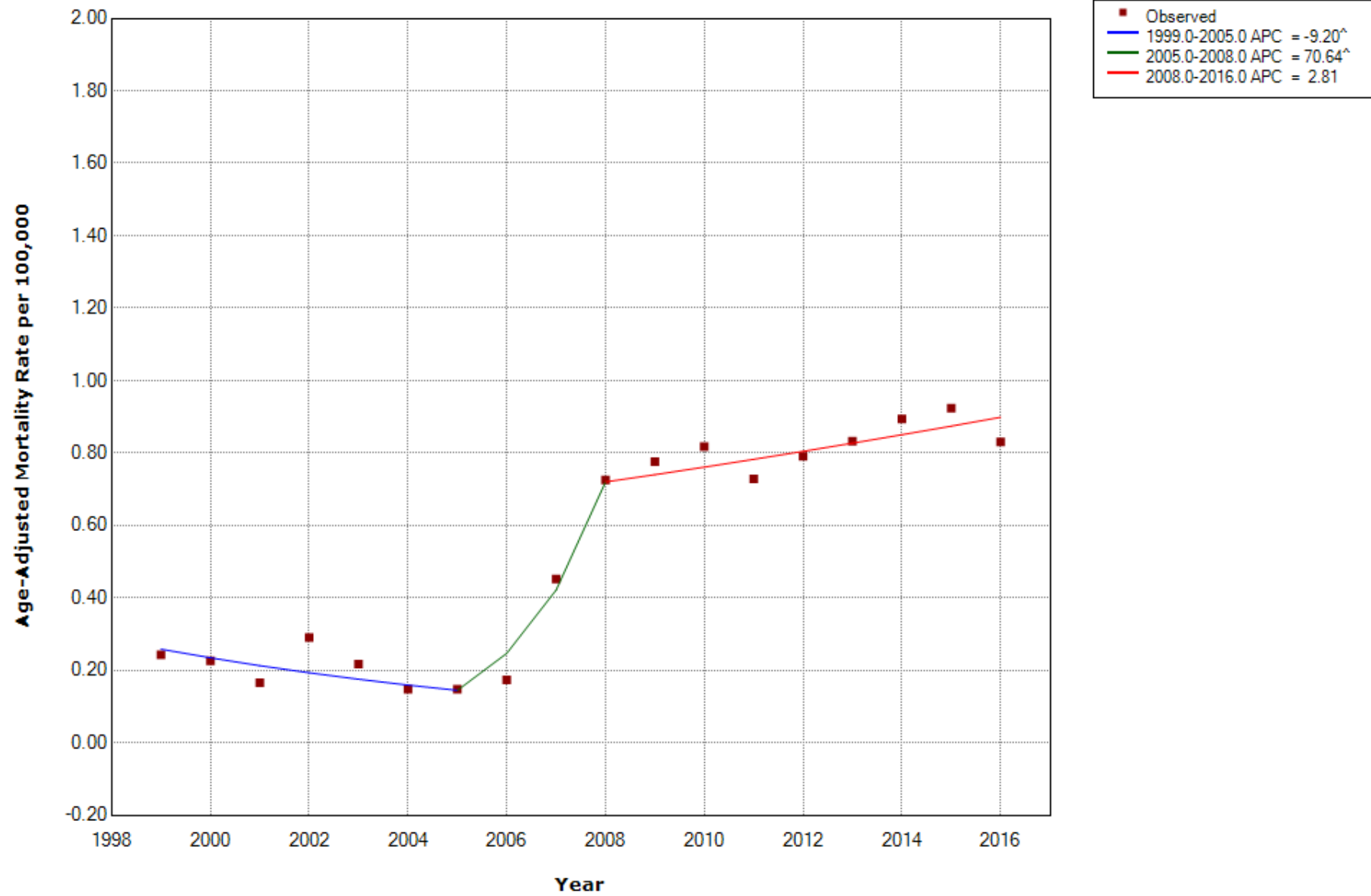
### Accidental alcohol poisoning (X45) / NH API: Observed



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

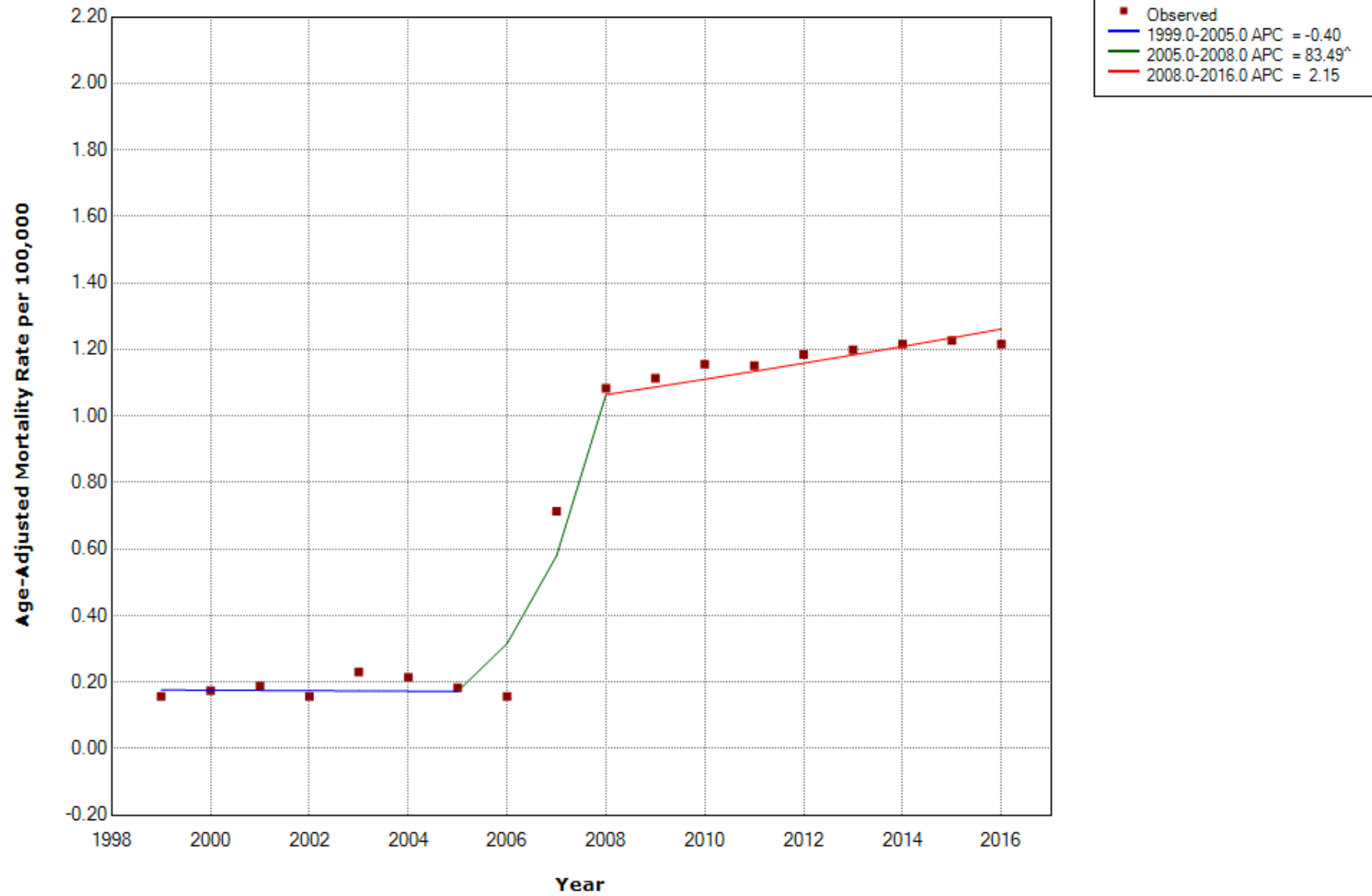
\* Joinpoint cannot process records with missing dependent variable values. Joinpoint will not analyze by-groups that have this error. (Row = 108, Col = 1)

### Accidental alcohol poisoning (X45) / NH Blacks: 2 Joinpoints



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

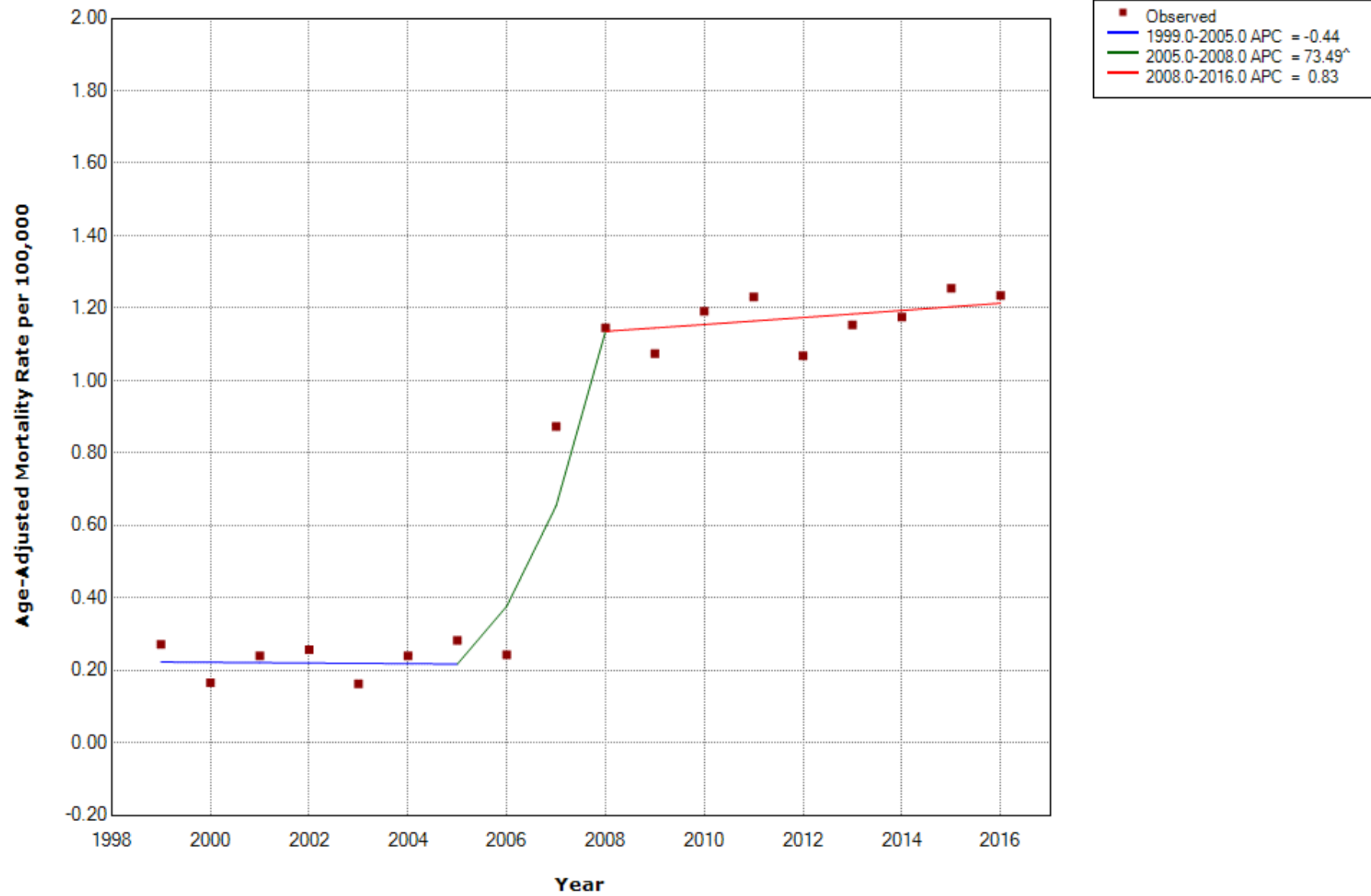
### Accidental alcohol poisoning (X45) / NH whites: 2 Joinpoints



<sup>^</sup> Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

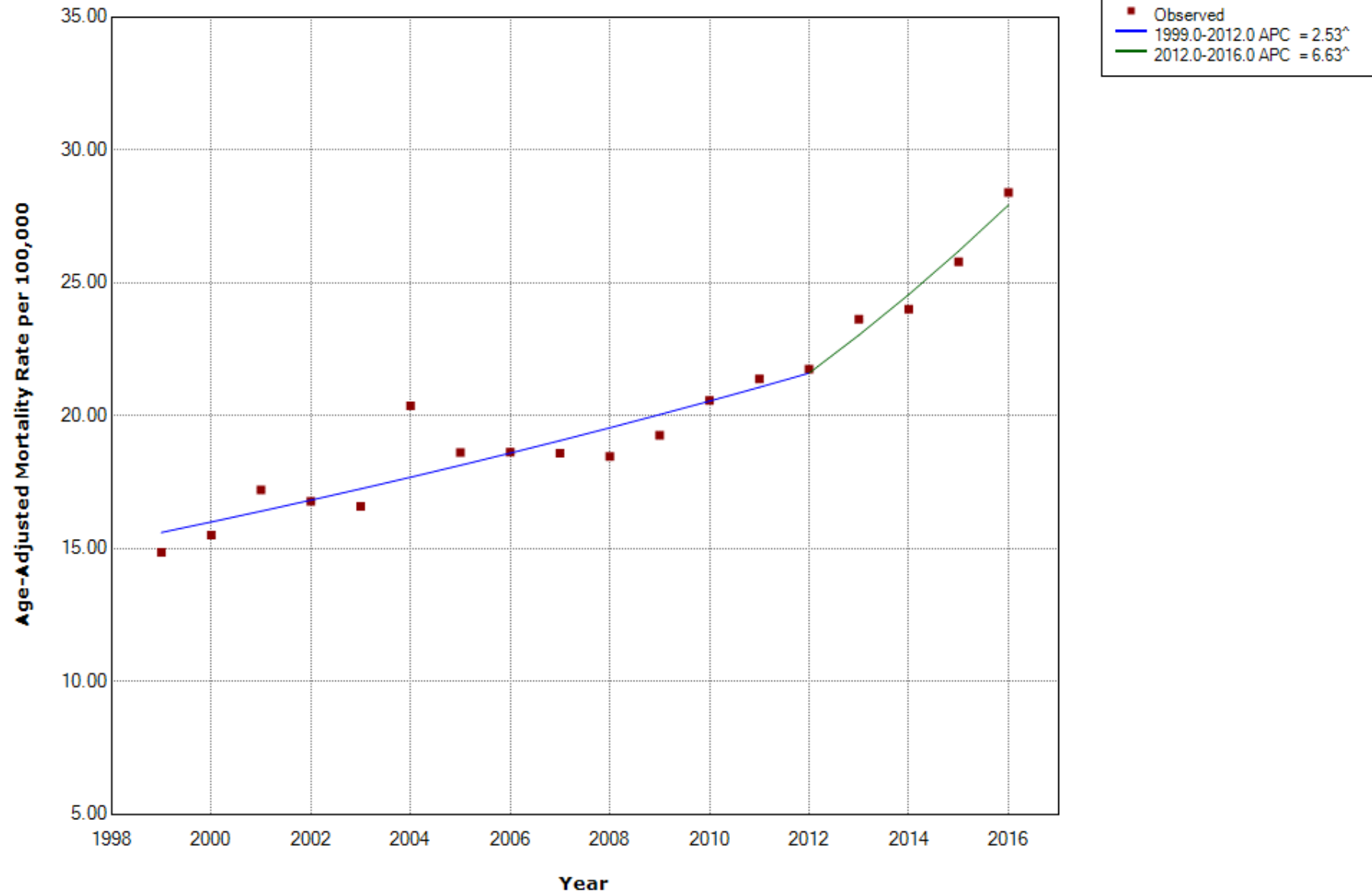


### Accidental alcohol poisoning (X45) / Hispanics: 2 Joinpoints



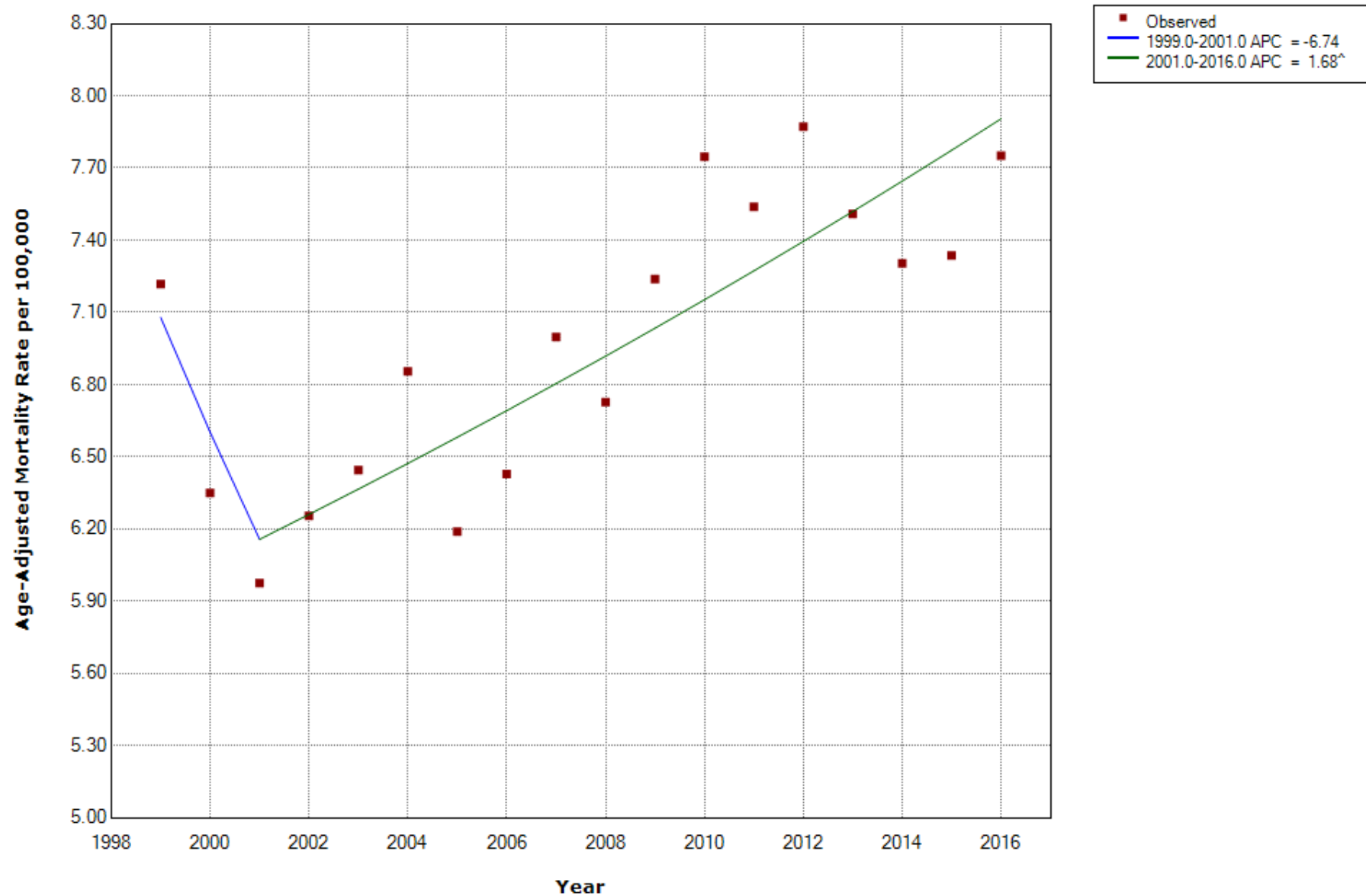
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

### Suicide (X60-X84) / NH AIAN: 1 Joinpoint



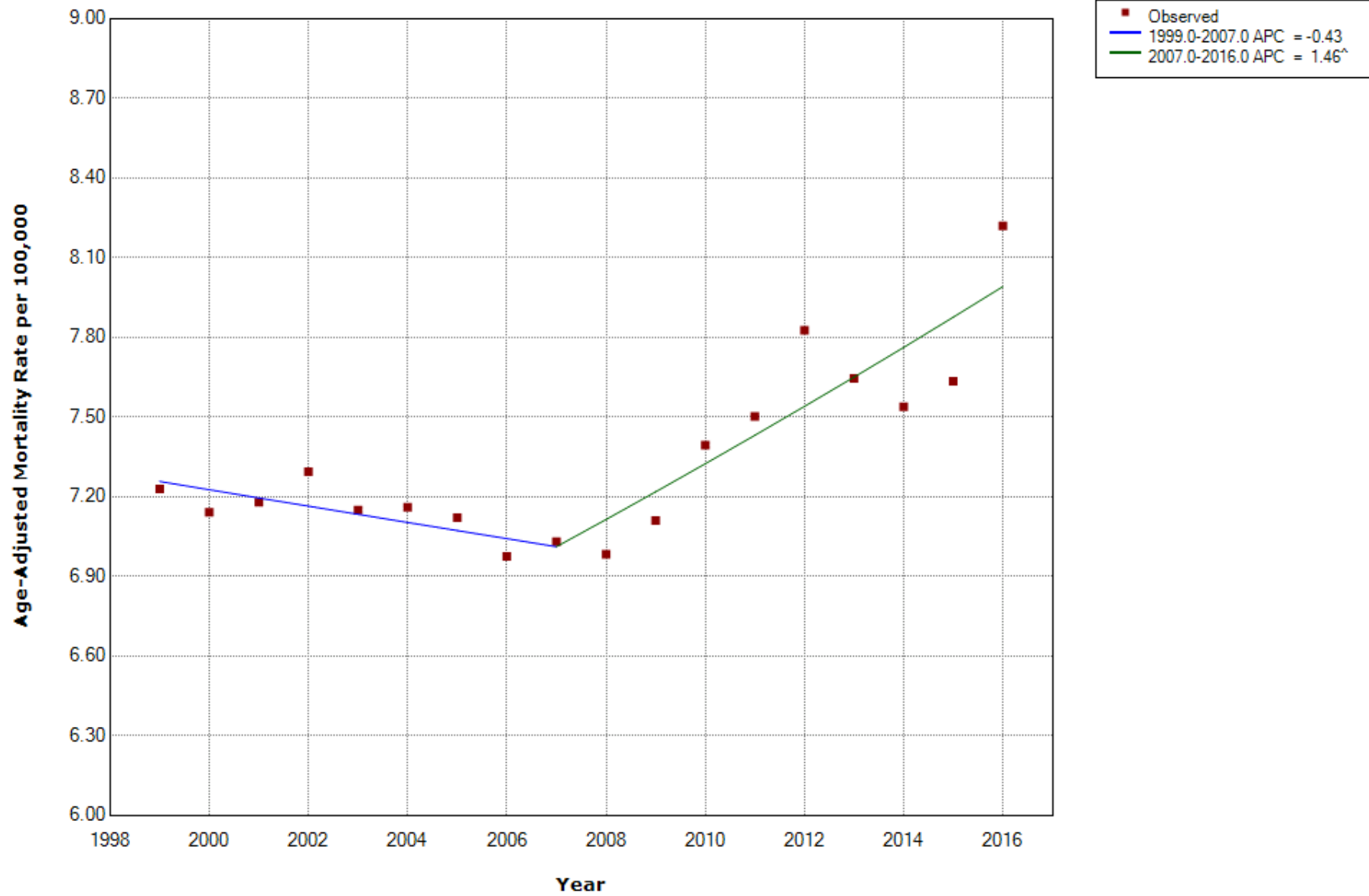
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

### Suicide (X60-X84) / NH API: 1 Joinpoint



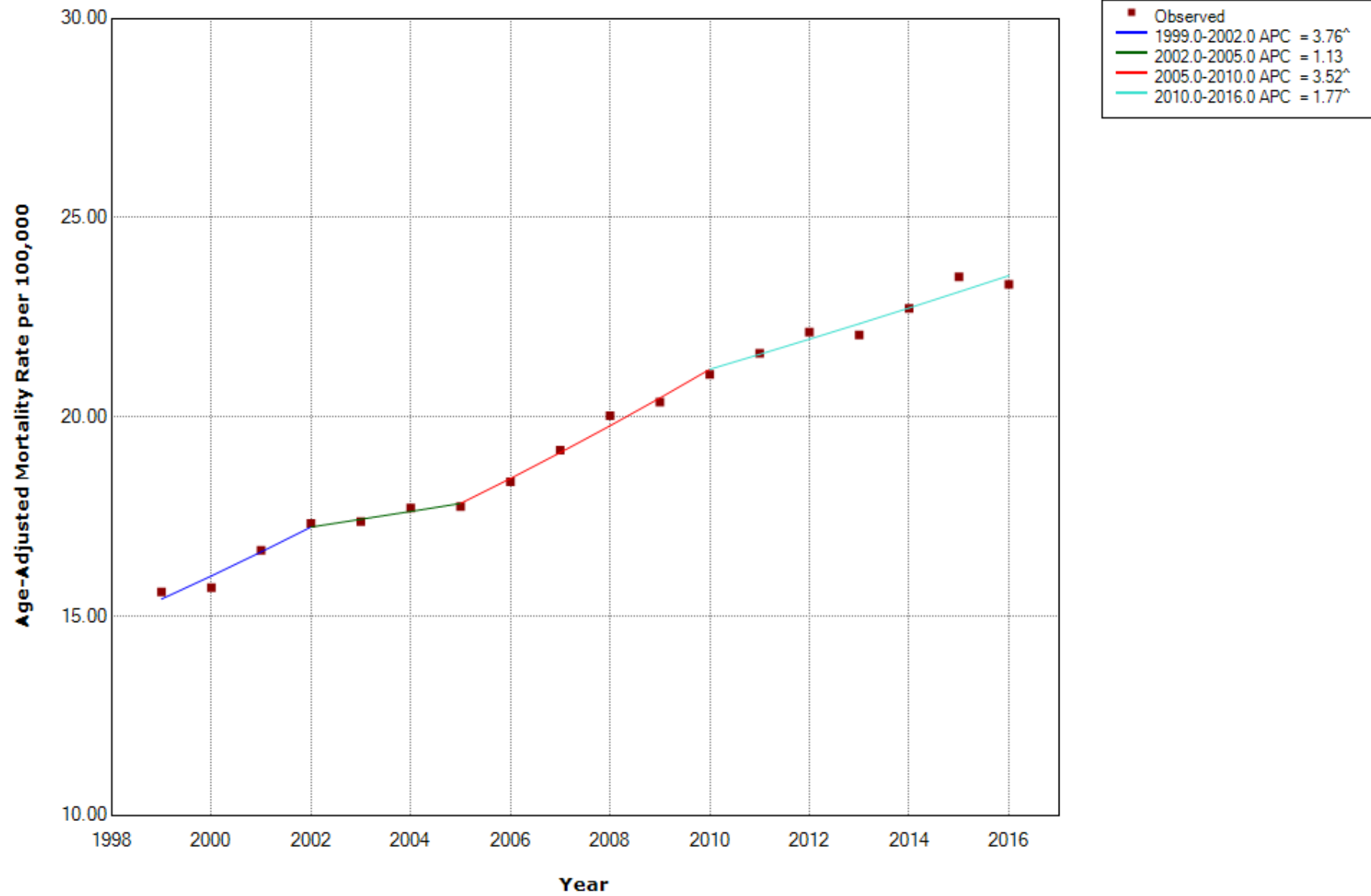
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

### Suicide (X60-X84) / NH Blacks: 1 Joinpoint



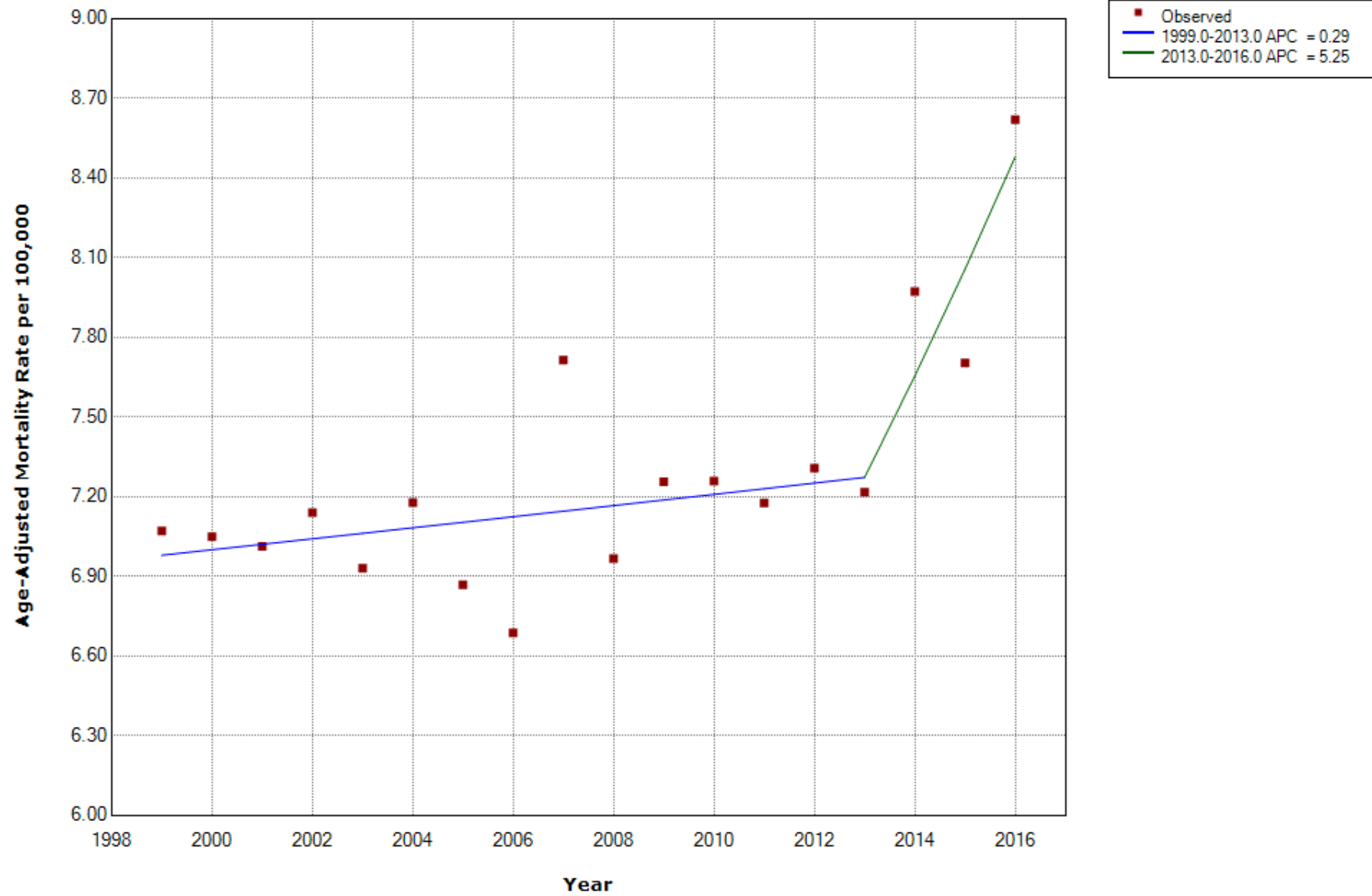
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

### Suicide (X60-X84) / NH whites: 3 Joinpoints



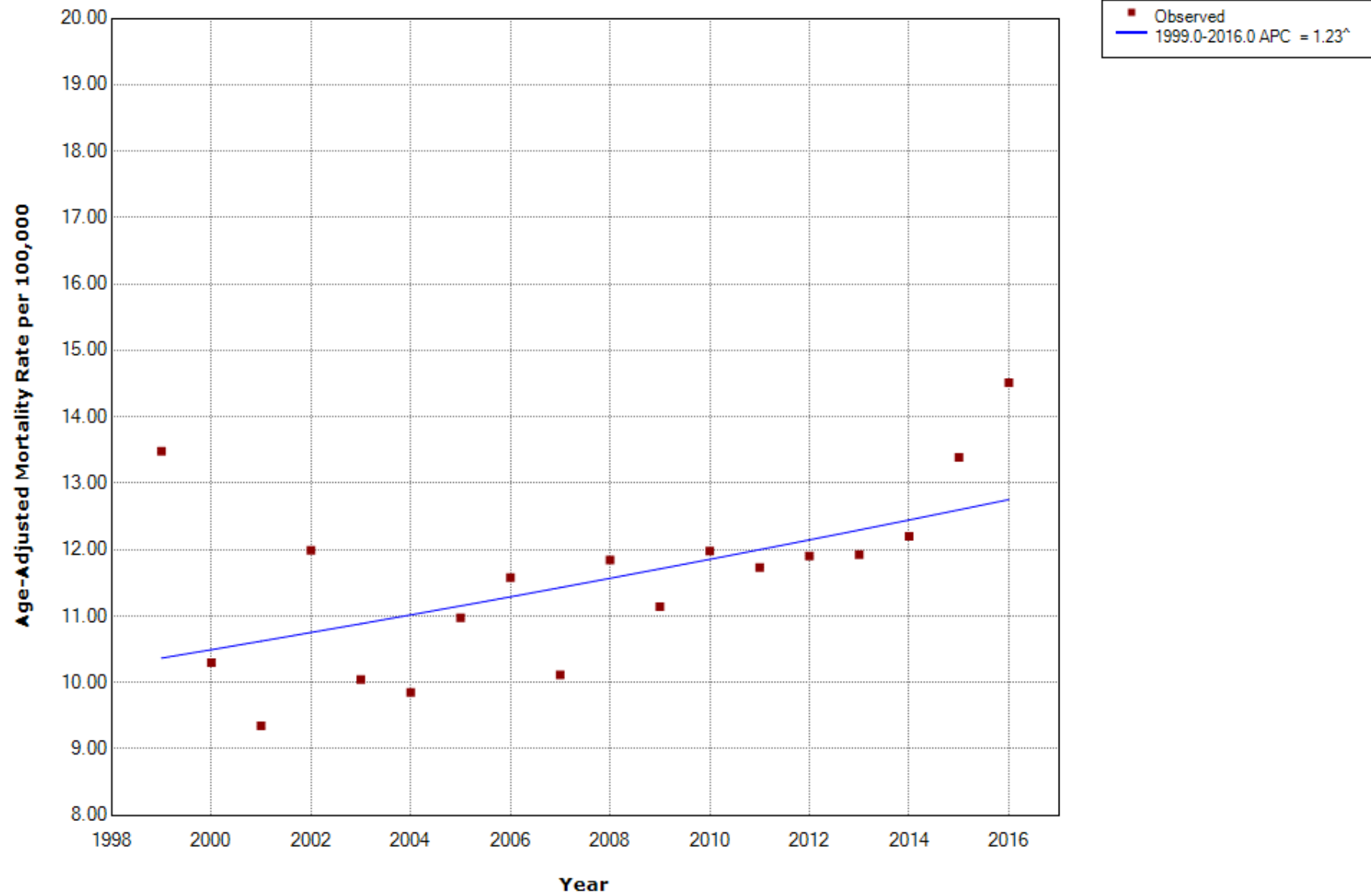
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 3 Joinpoints.

### Suicide (X60-X84) / Hispanics: 1 Joinpoint



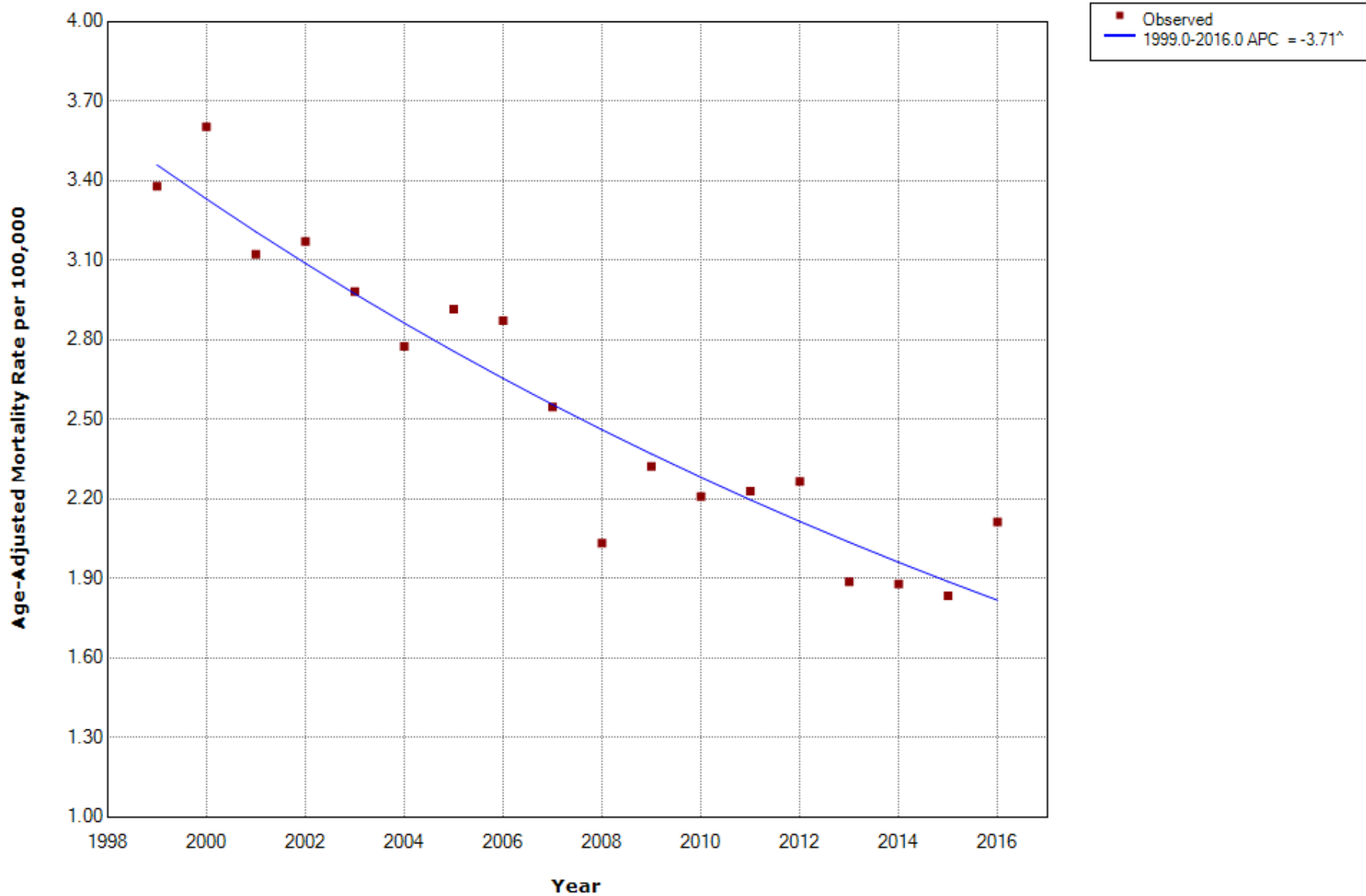
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

### Homicide (X85-Y09) / NH AIAN: 0 Joinpoints



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

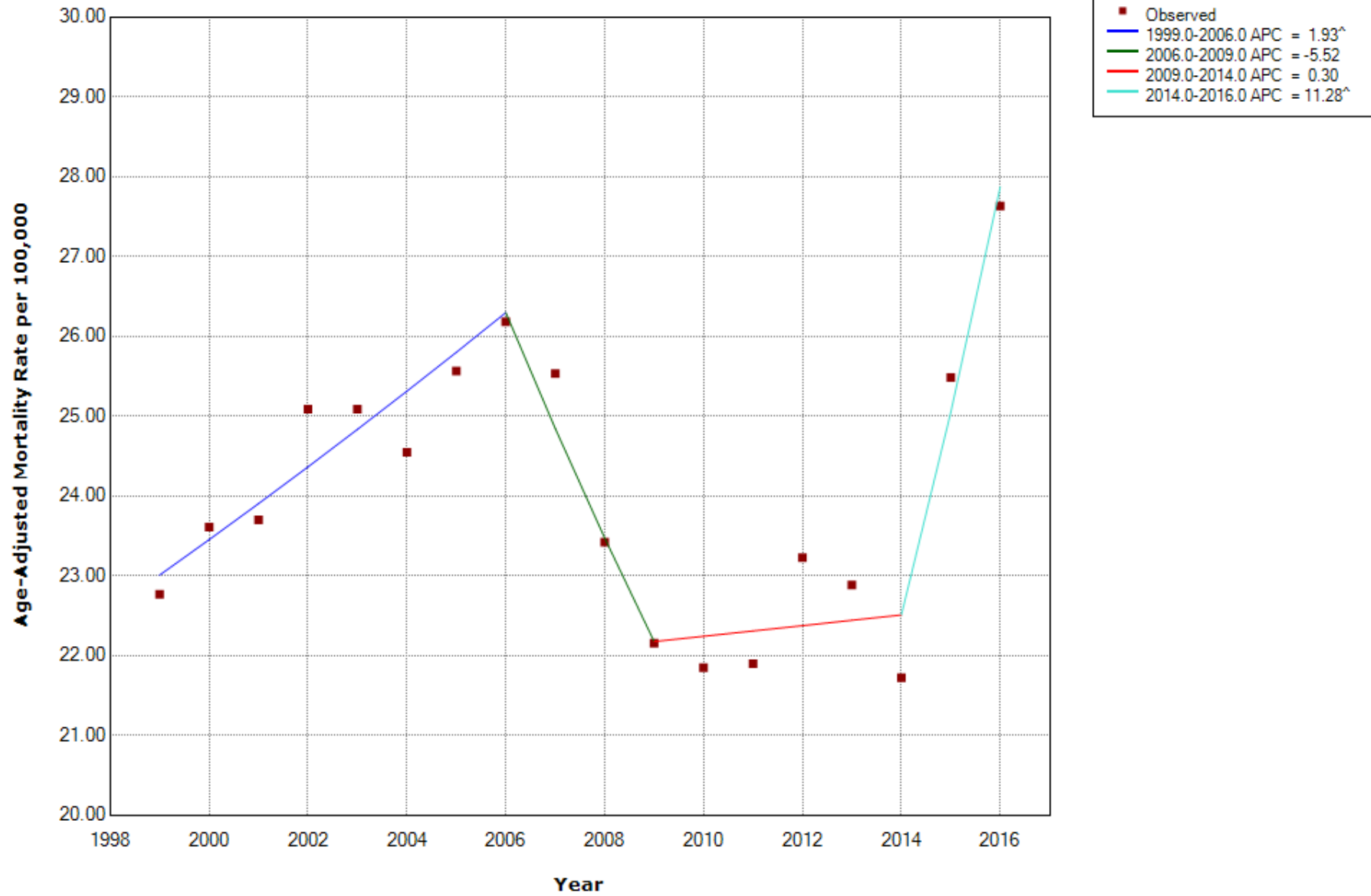
### Homicide (X85-Y09) / NH API: 0 Joinpoints



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

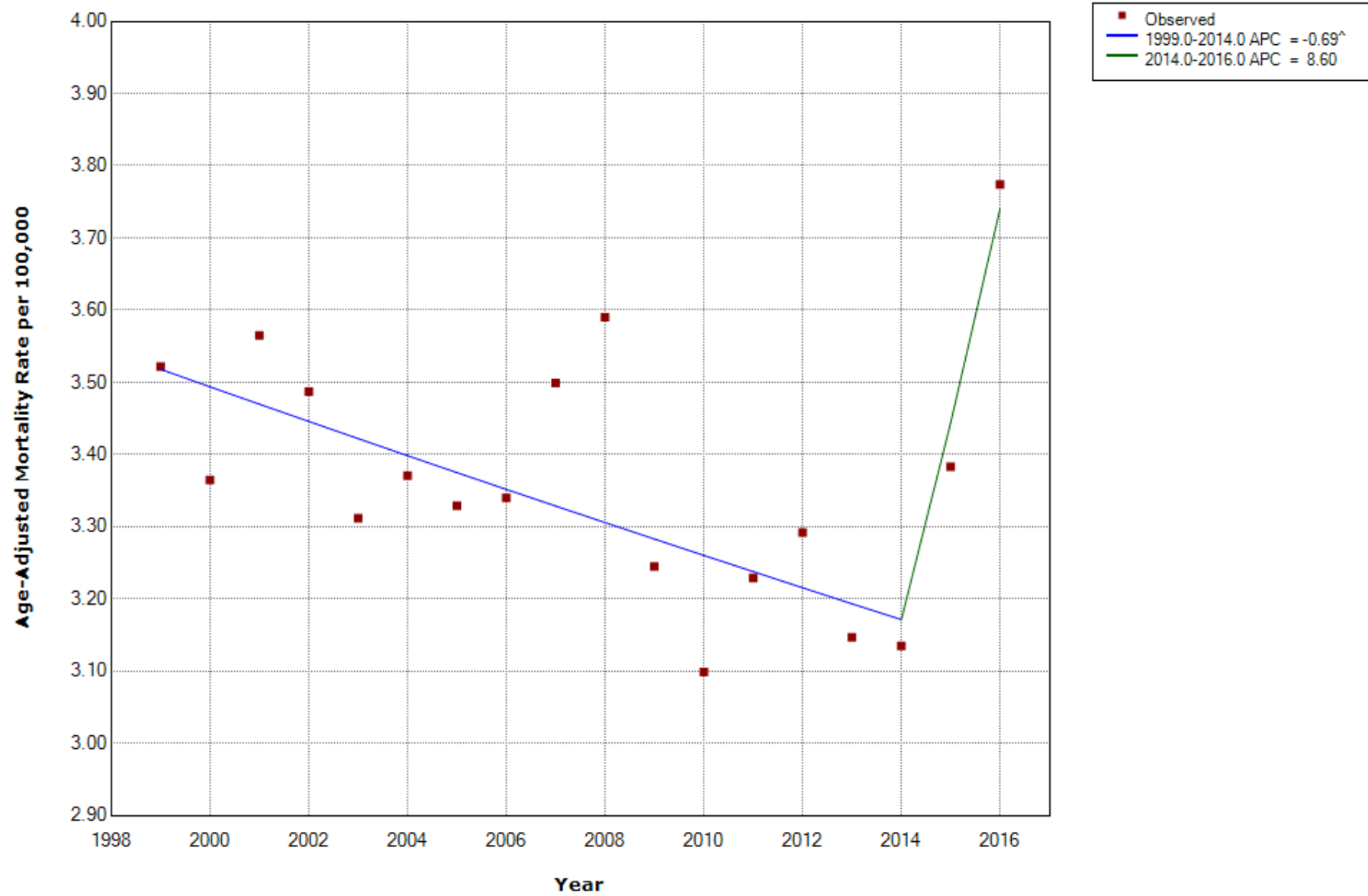


### Homicide (X85-Y09) / NH Blacks: 3 Joinpoints



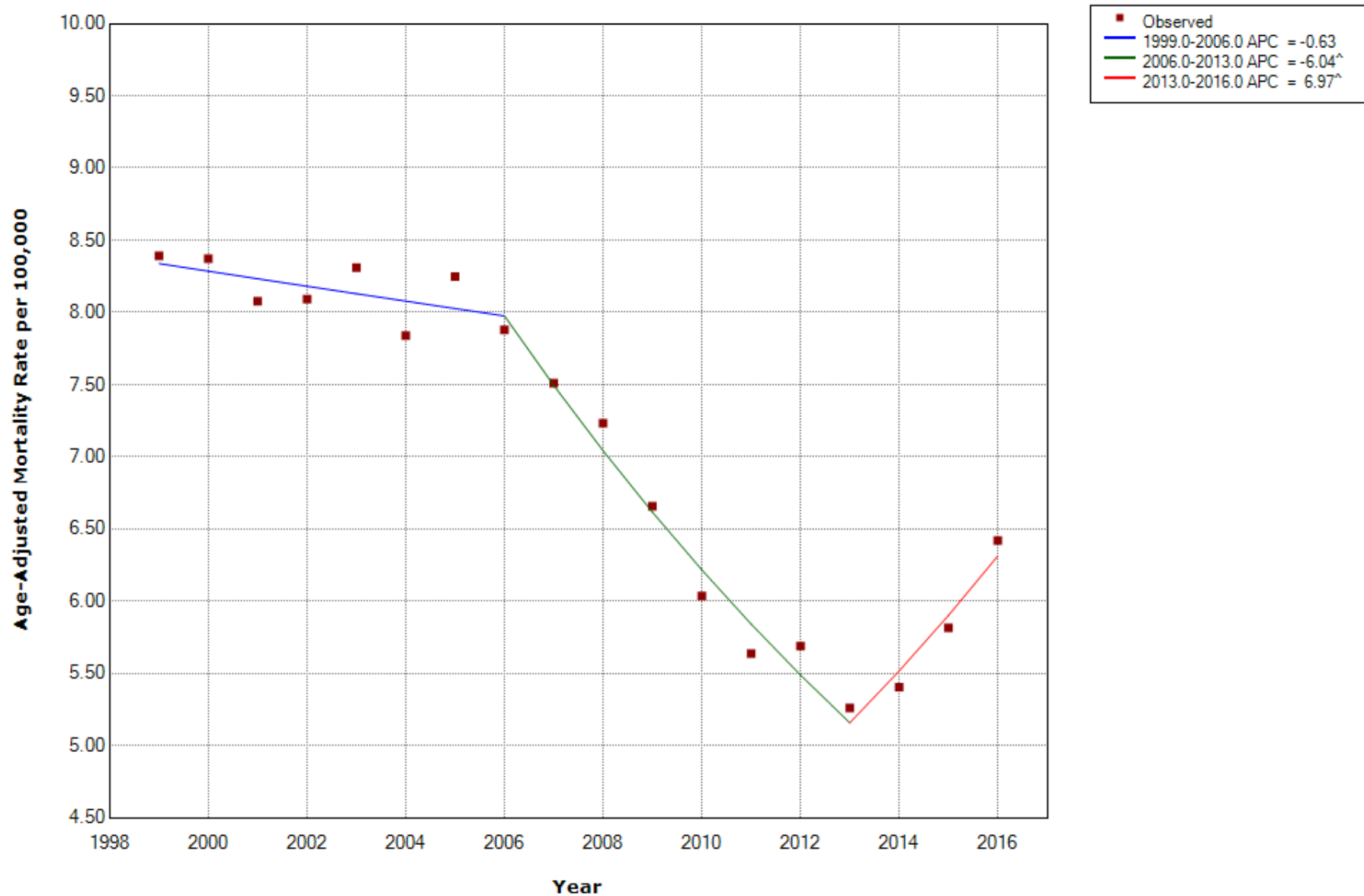
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 3 Joinpoints.

### Homicide (X85-Y09) / NH whites: 1 Joinpoint



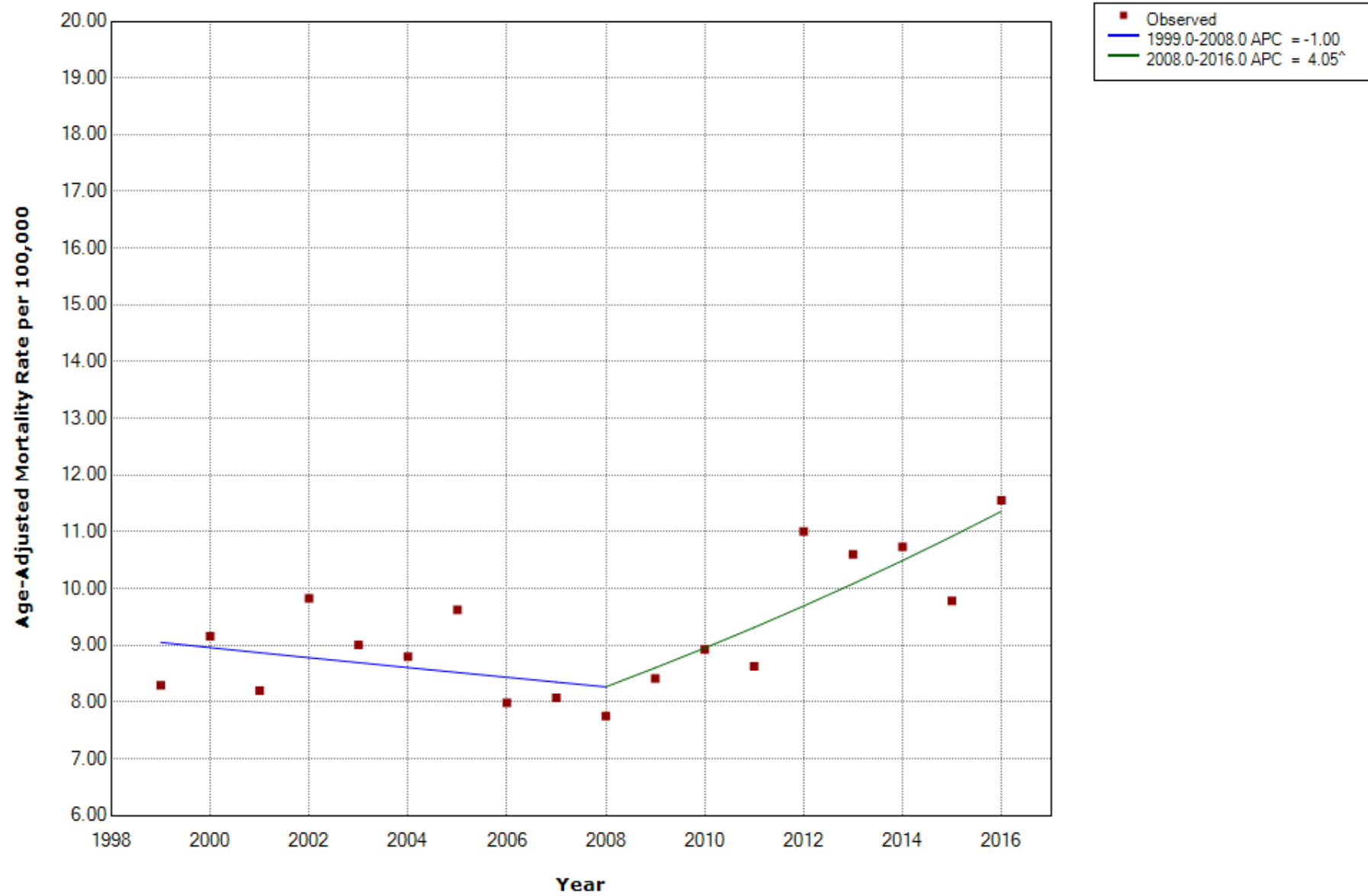
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

### Homicide (X85-Y09) / Hispanics: 2 Joinpoints



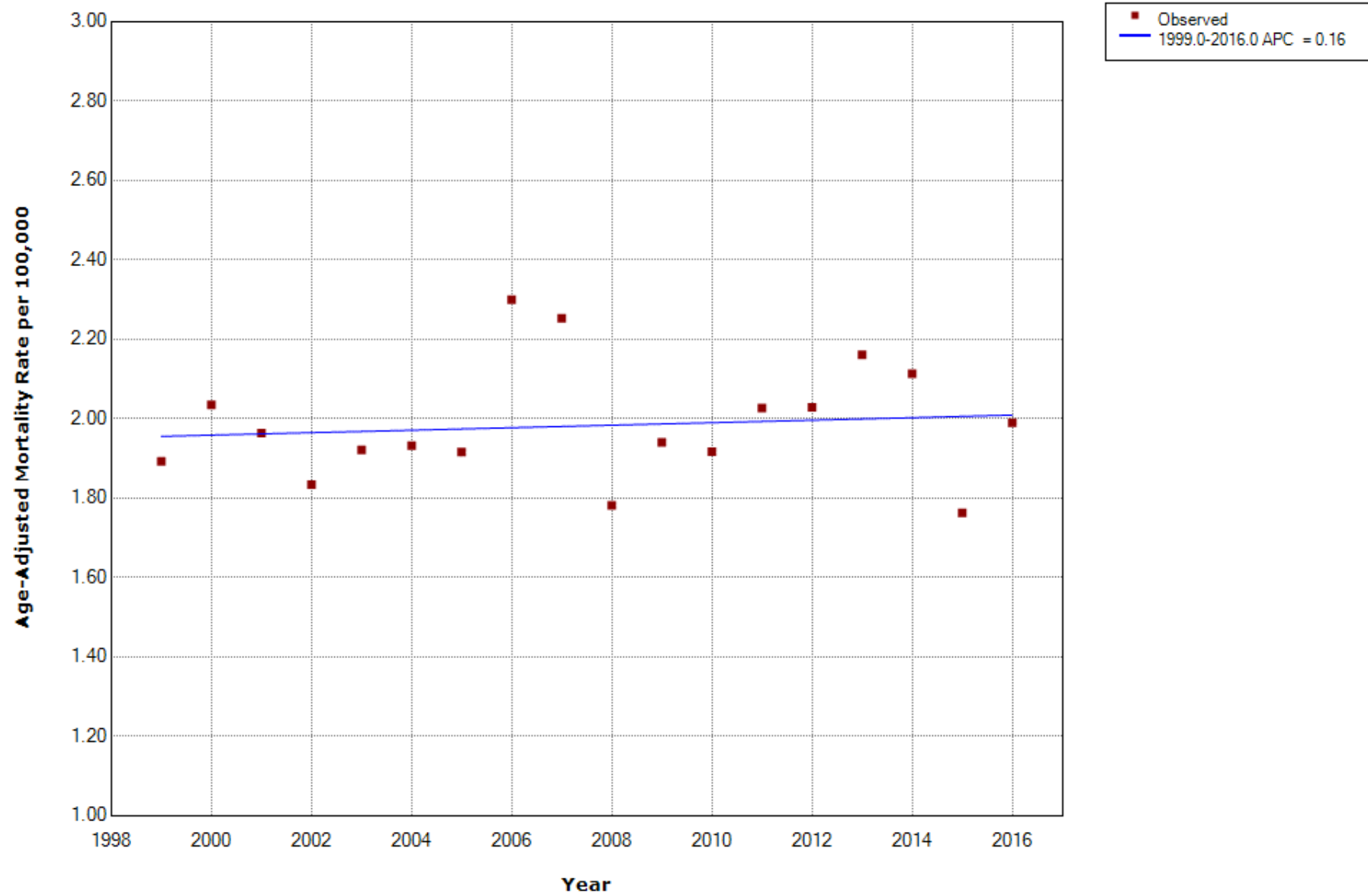
<sup>^</sup> Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

Accidental falls, drowning, fire (W00-W19, W65-W74, X00-X09) / NH AIAN: 1 Joinpoint



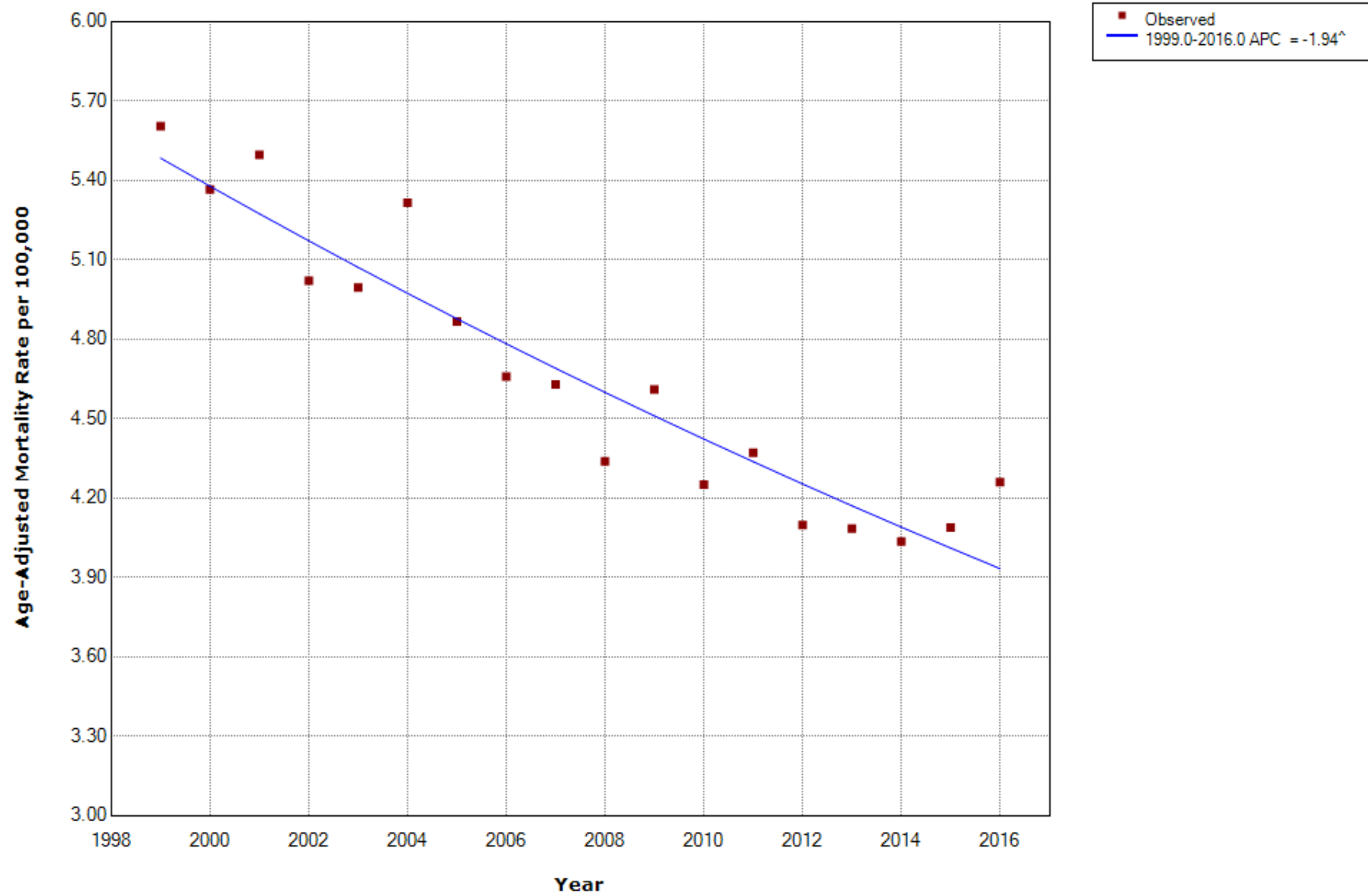
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

Accidental falls, drowning, fire (W00-W19, W65-W74, X00-X09) / NH API: 0 Joinpoints



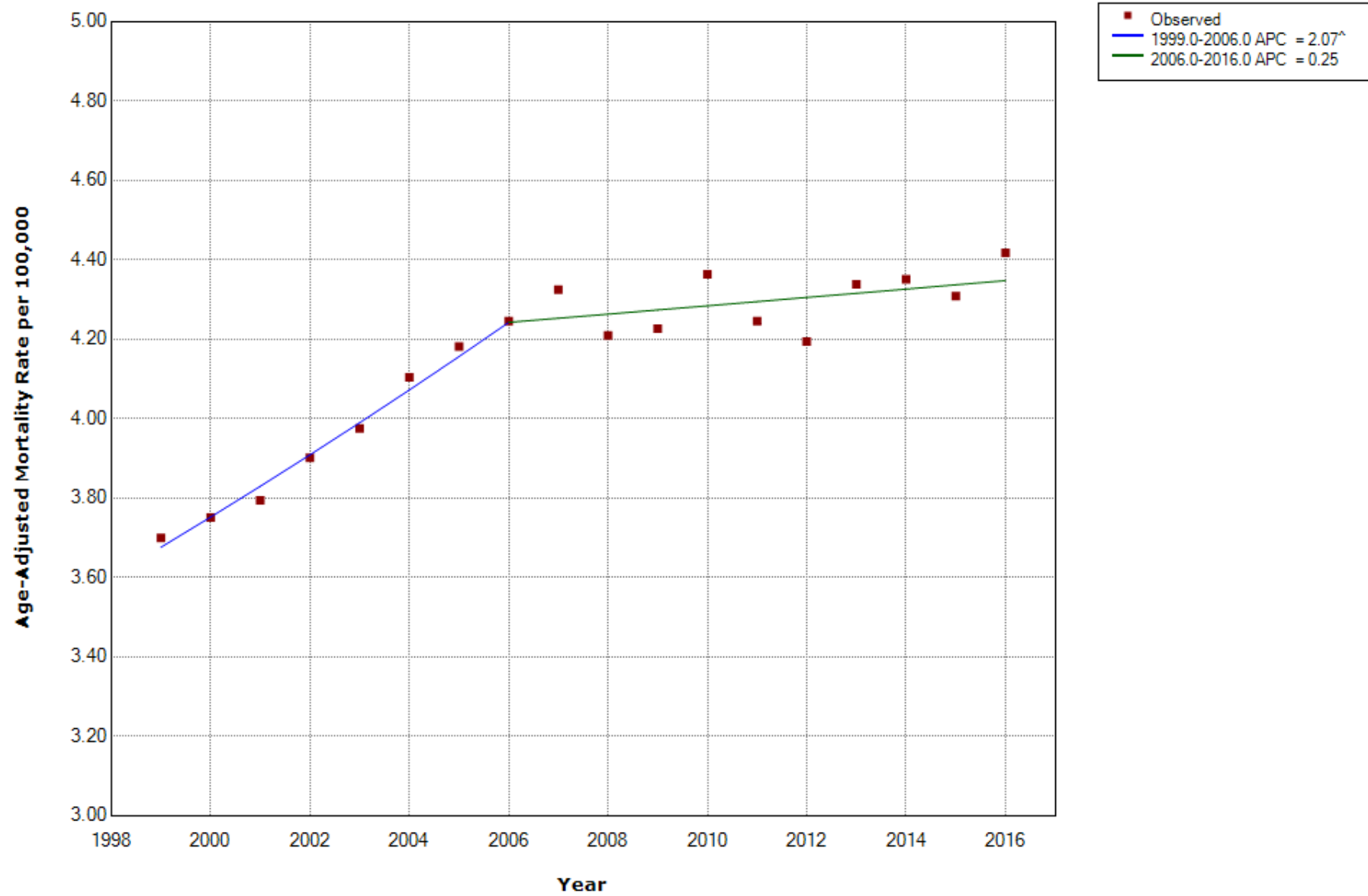
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

Accidental falls, drowning, fire (W00-W19, W65-W74, X00-X09) / NH Blacks: 0 Joinpoints



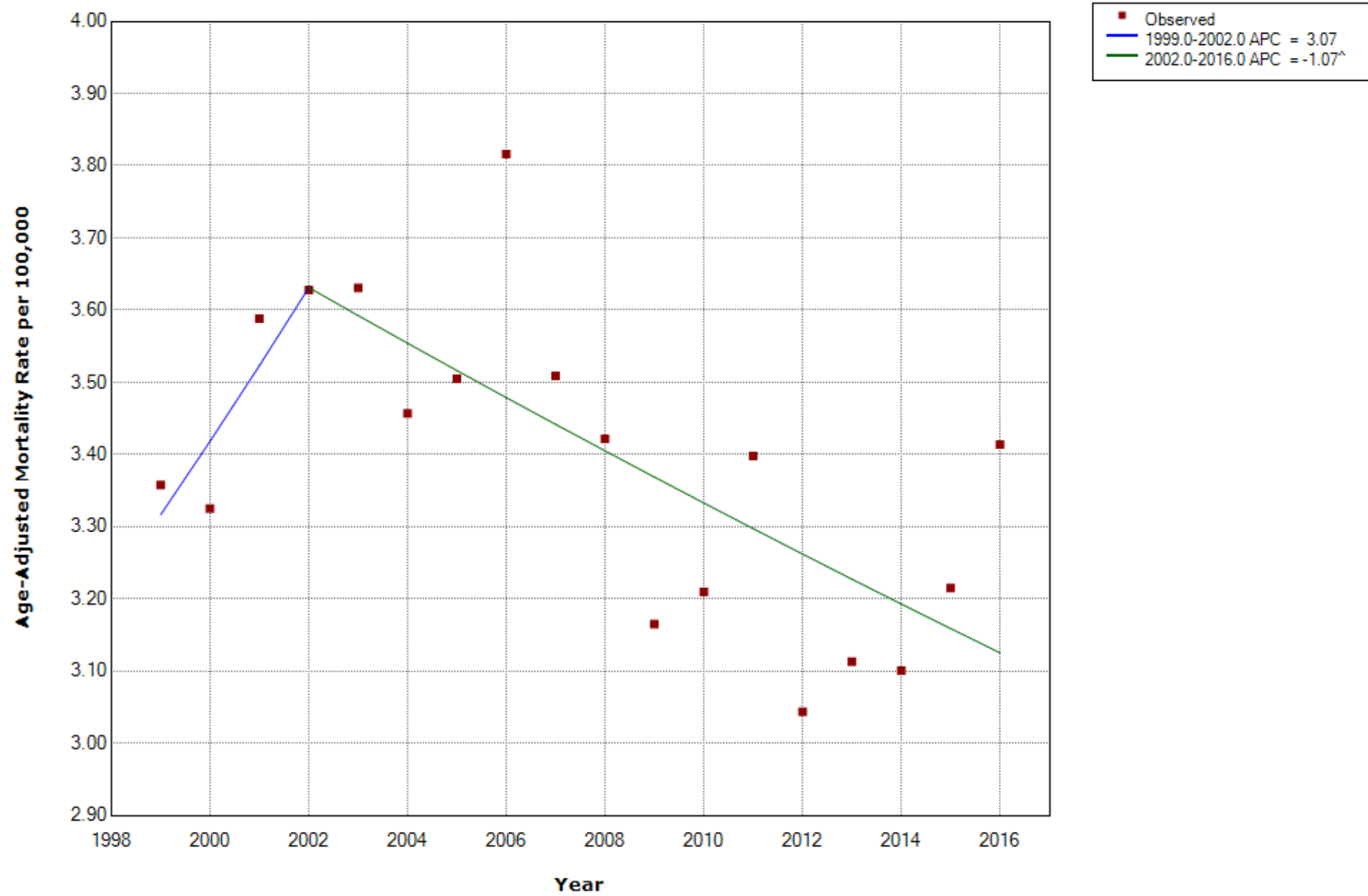
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

Accidental falls, drowning, fire (W00-W19, W65-W74, X00-X09) / NH whites: 1 Joinpoint



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

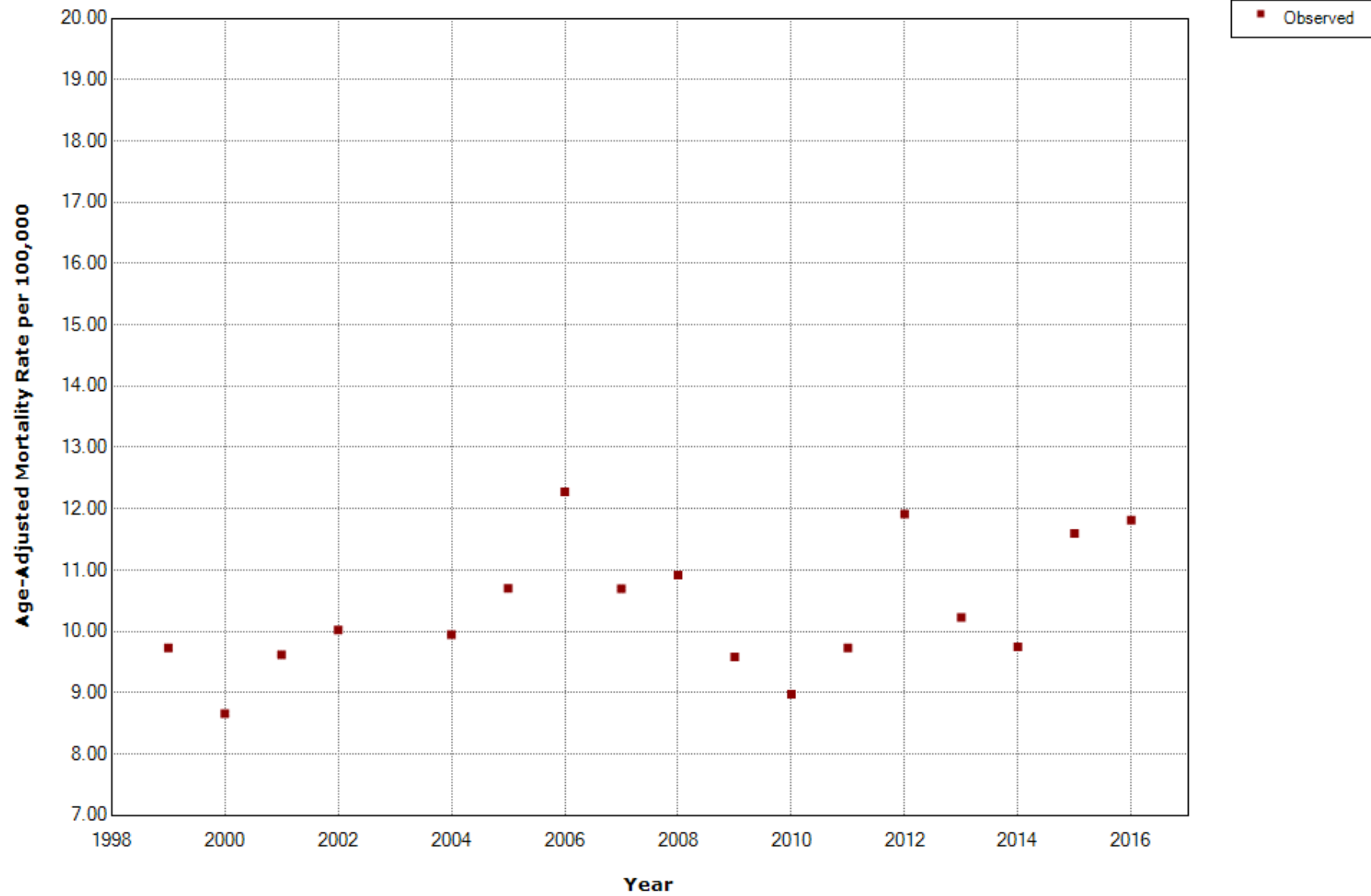
Accidental falls, drowning, fire (W00-W19, W65-W74, X00-X09) / Hispanics: 1 Joinpoint



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.



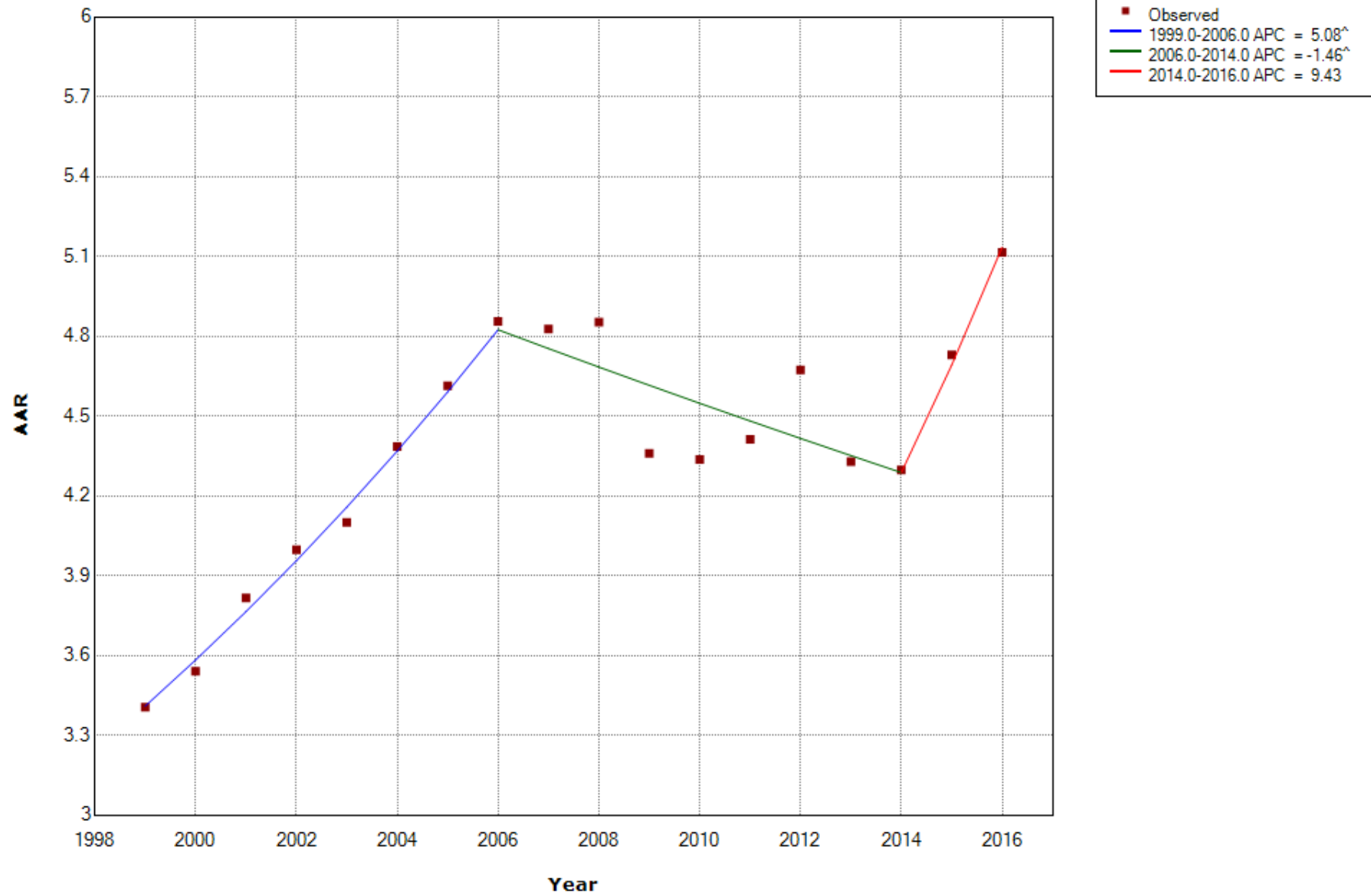
### Pedestrian, cyclist, and motorcycle injury in transport accident (V01-V29) / NH AIAN: Observed



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

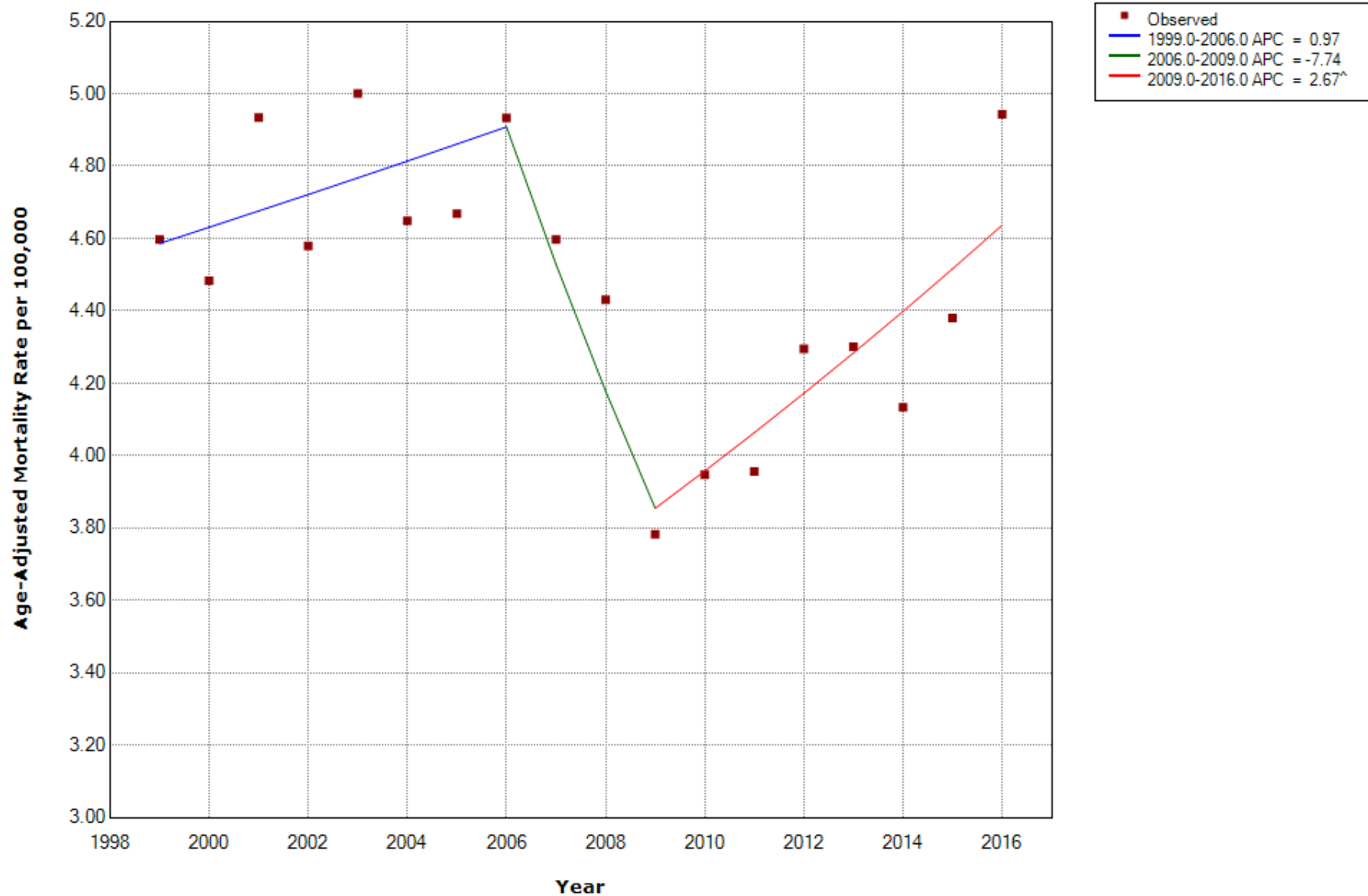
\* Joinpoint cannot process records with missing dependent variable values. Joinpoint will not analyze by-groups that have this error. (Row = 454, Col = 1)

Pedestrian, cyclist, and motorcycle injury in transport accident (V01-V29) / NH whites: 2 Joinpoints



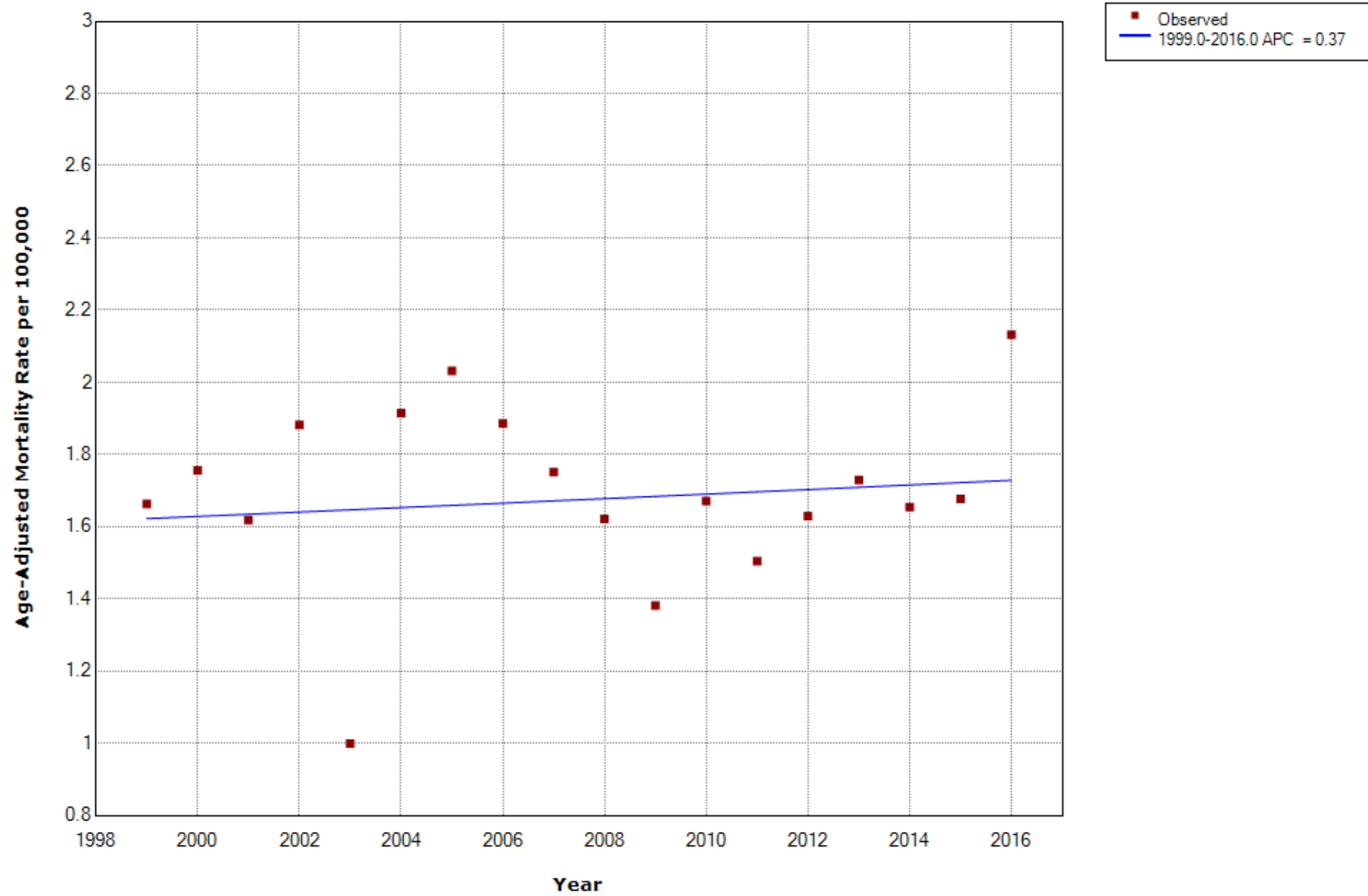
<sup>^</sup> Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

Pedestrian, cyclist, and motorcycle injury in transport accident (V01-V29) / Hispanics: 2 Joinpoints



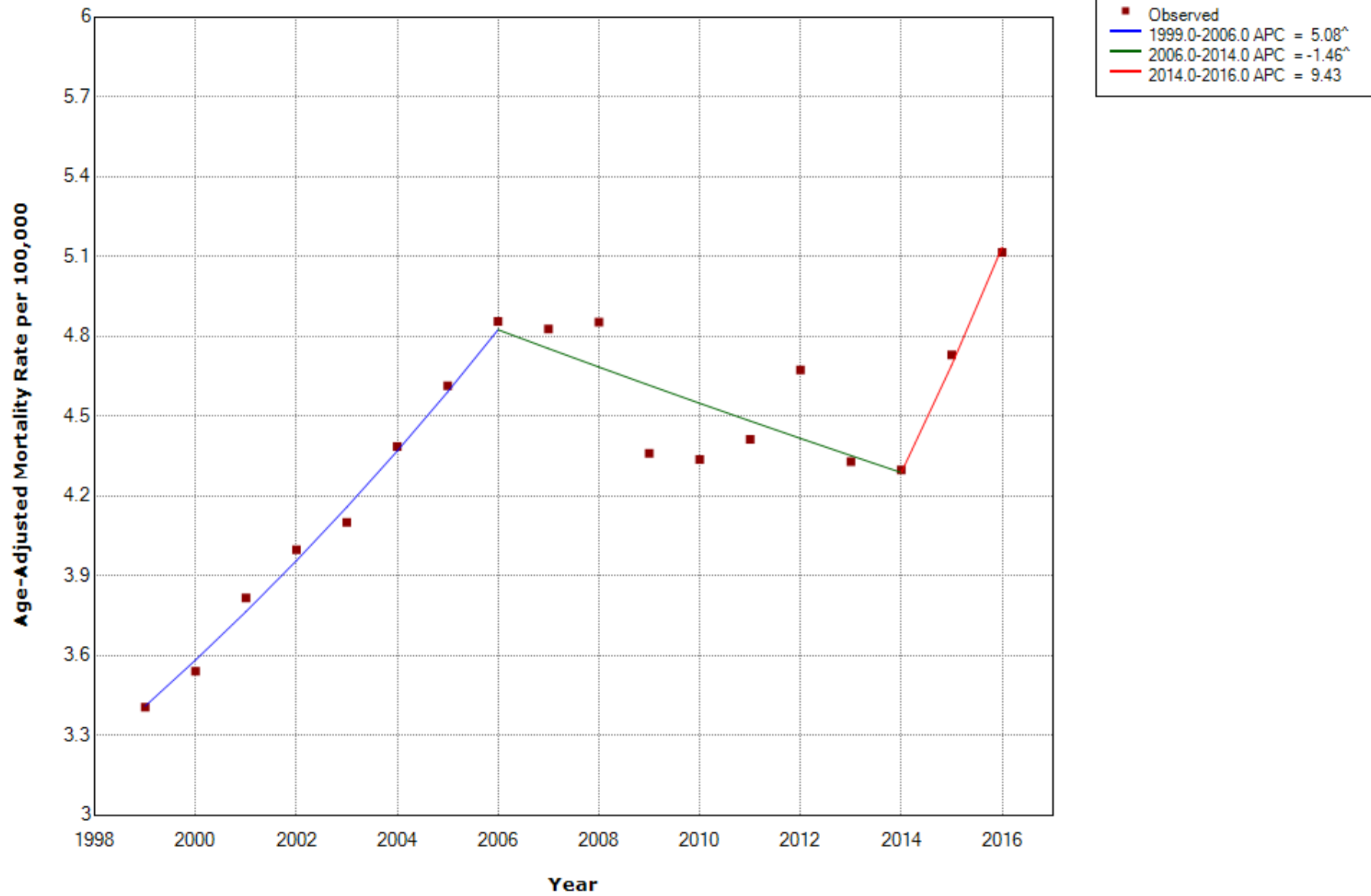
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

Pedestrian, cyclist, and motorcycle injury in transport accident (V01-V29) / NH API: 0 Joinpoints



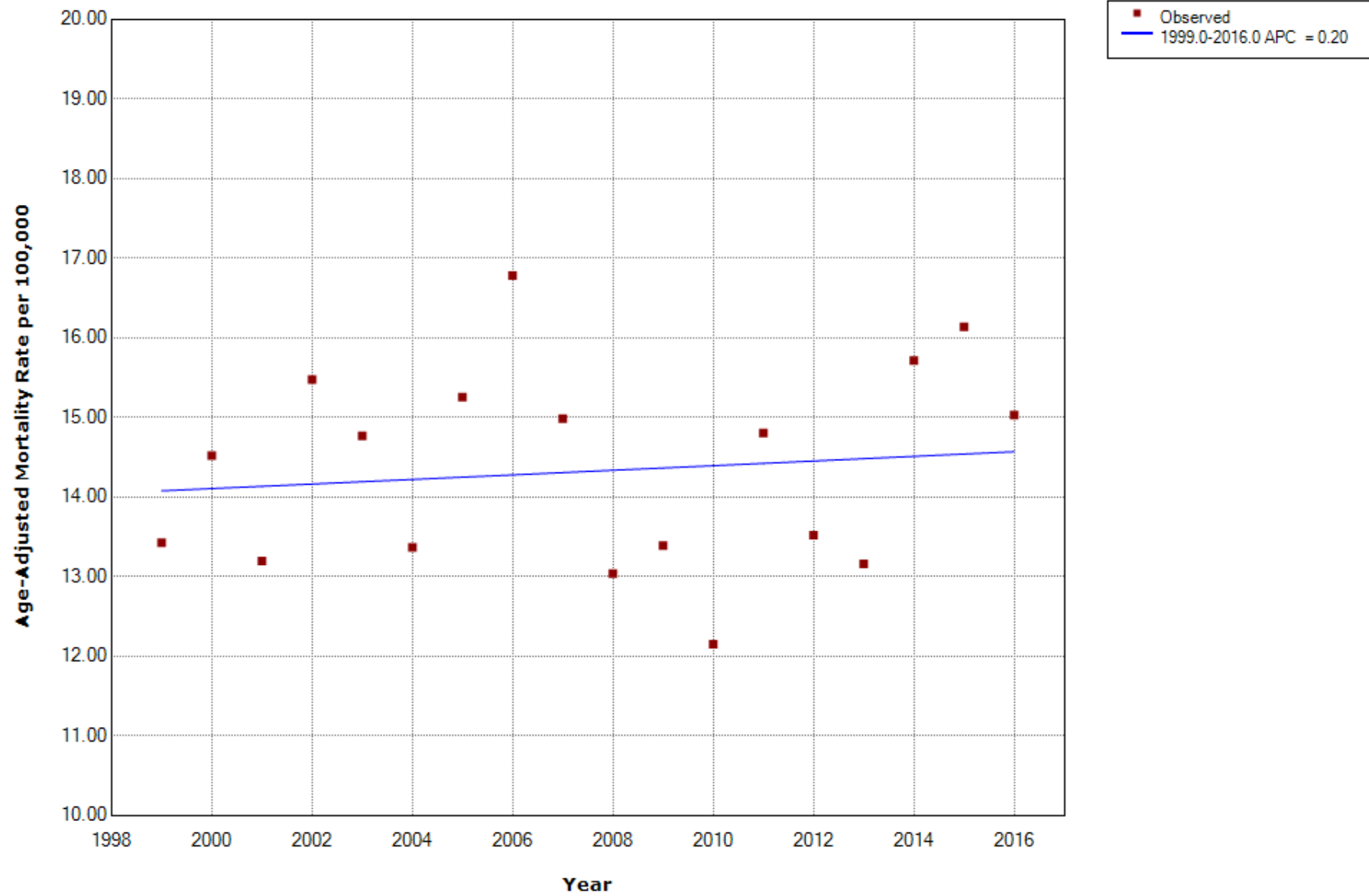
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

Pedestrian, cyclist, and motorcycle injury in transport accident (V01-V29) / NH whites: 2 Joinpoints



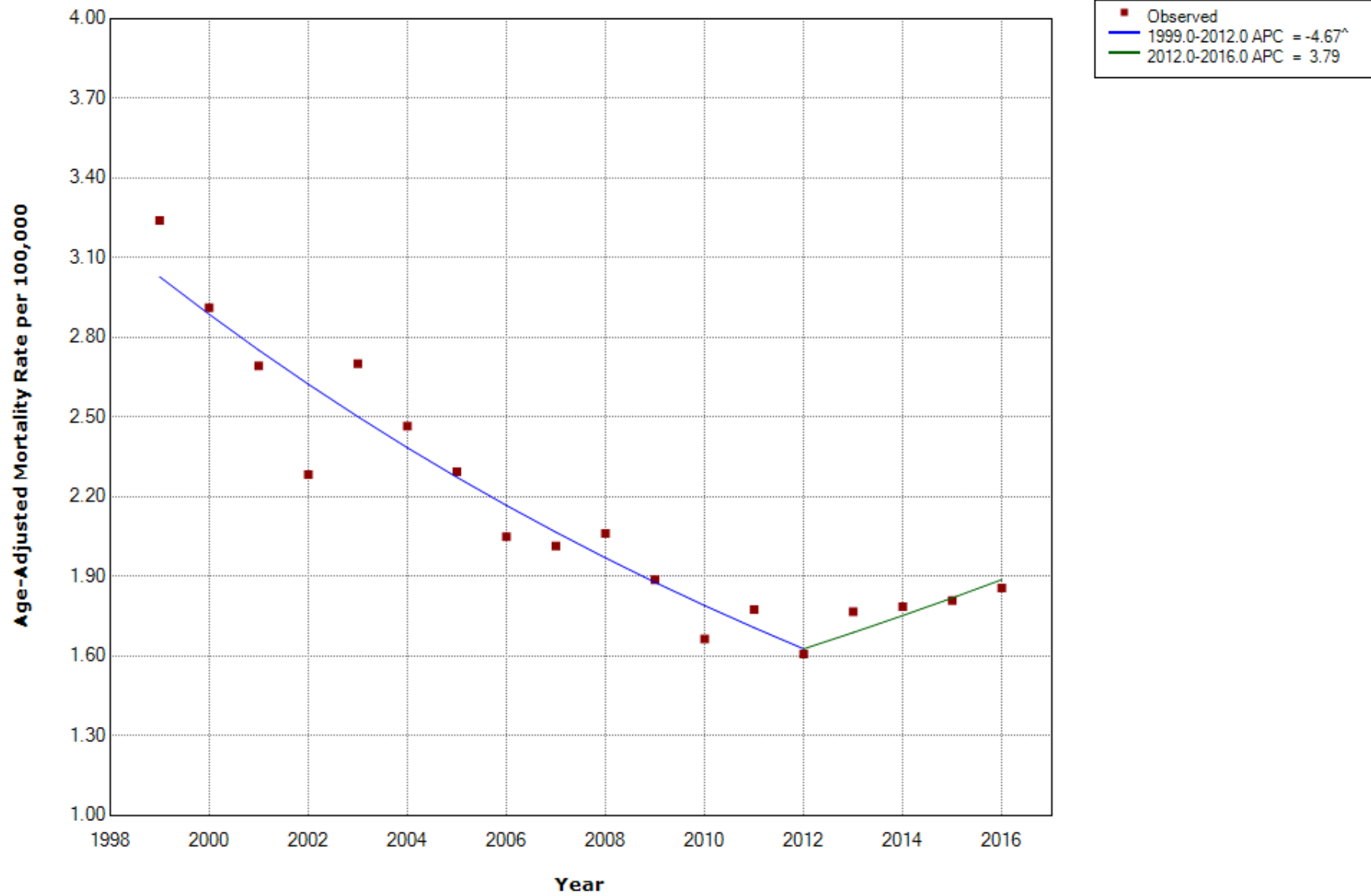
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

Other land transport and water, air, space, and other/unspecified transport accidents (V80-V99) / NH AIAN: 0 Joinpoints



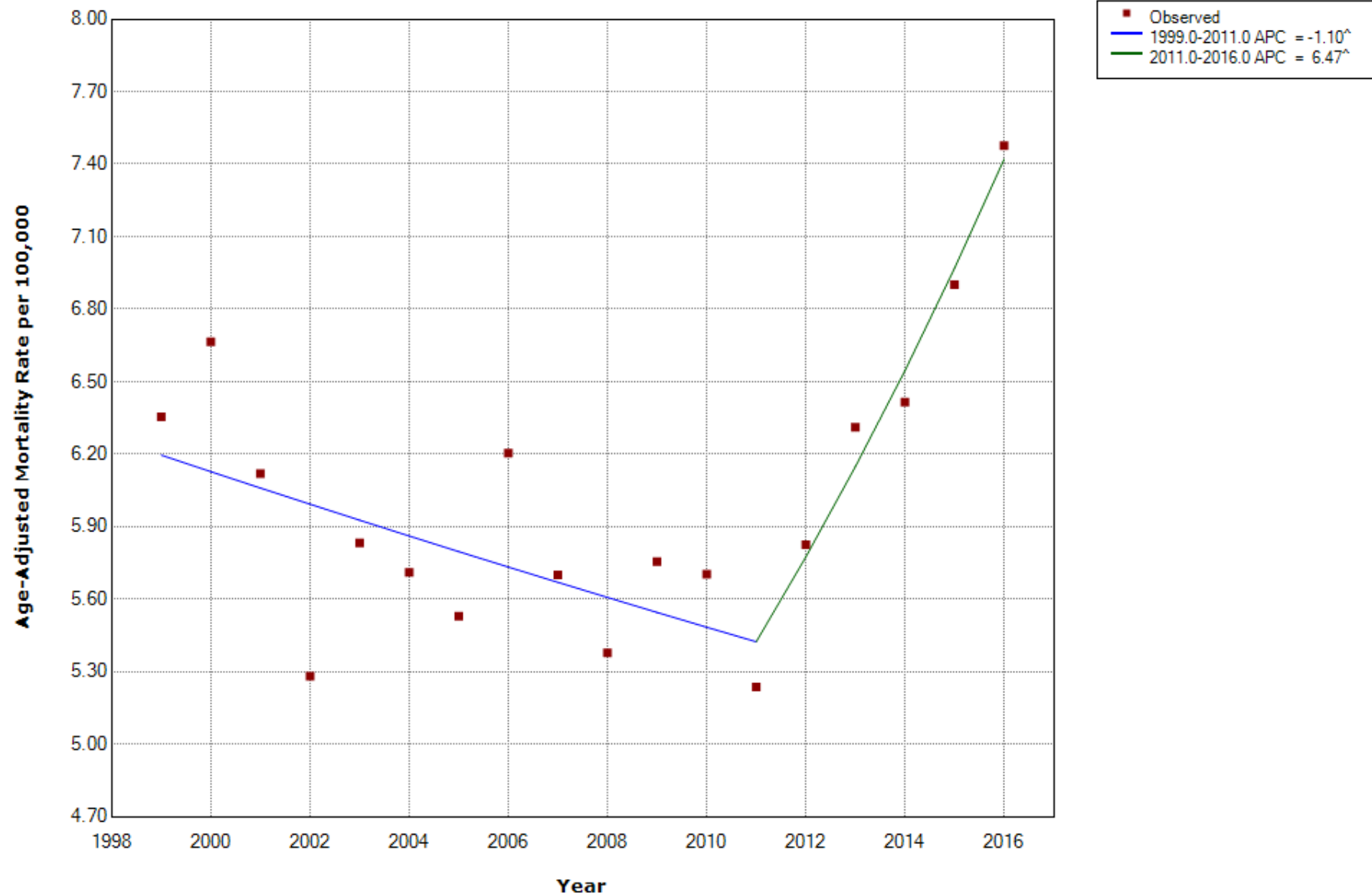
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

Other land transport and water, air, space, and other/unspecified transport accidents (V80-V99) / NH API: 1 Joinpoint



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

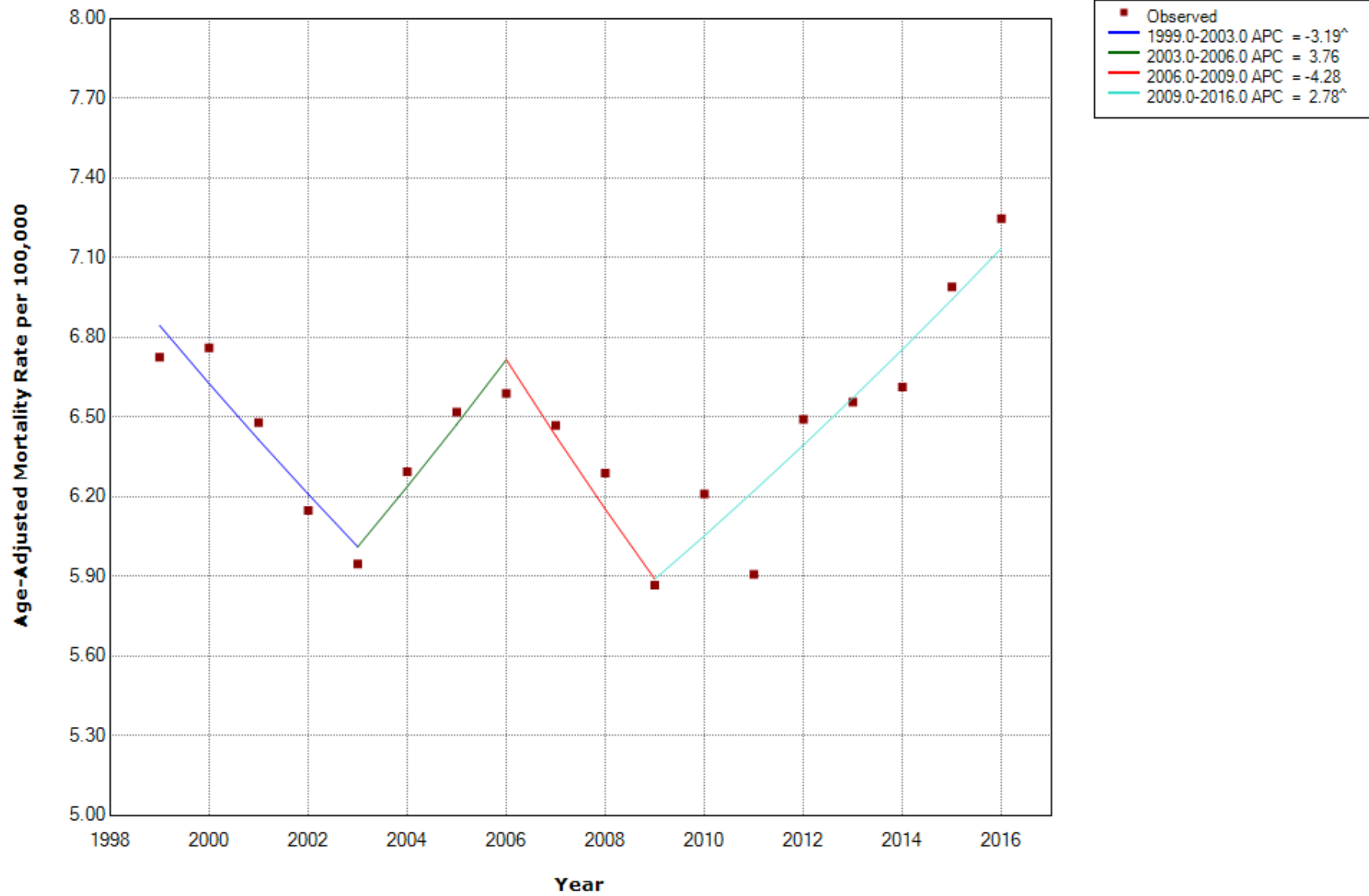
Other land transport and water, air, space, and other/unspecified transport accidents (V80-V99) / NH Blacks: 1 Joinpoint



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

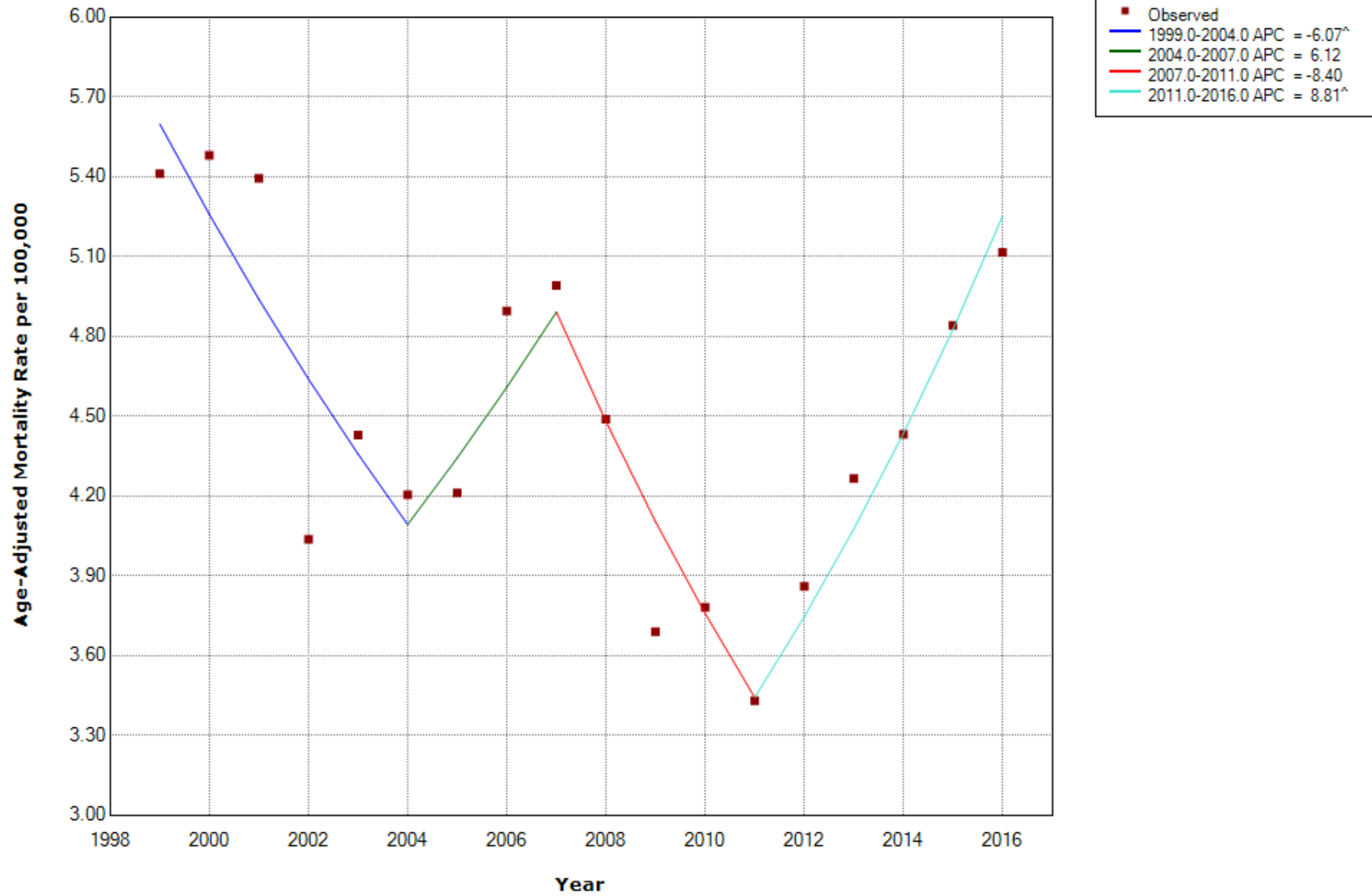


Other land transport and water, air, space, and other/unspecified transport accidents (V80-V99) / NH whites: 3 Joinpoints



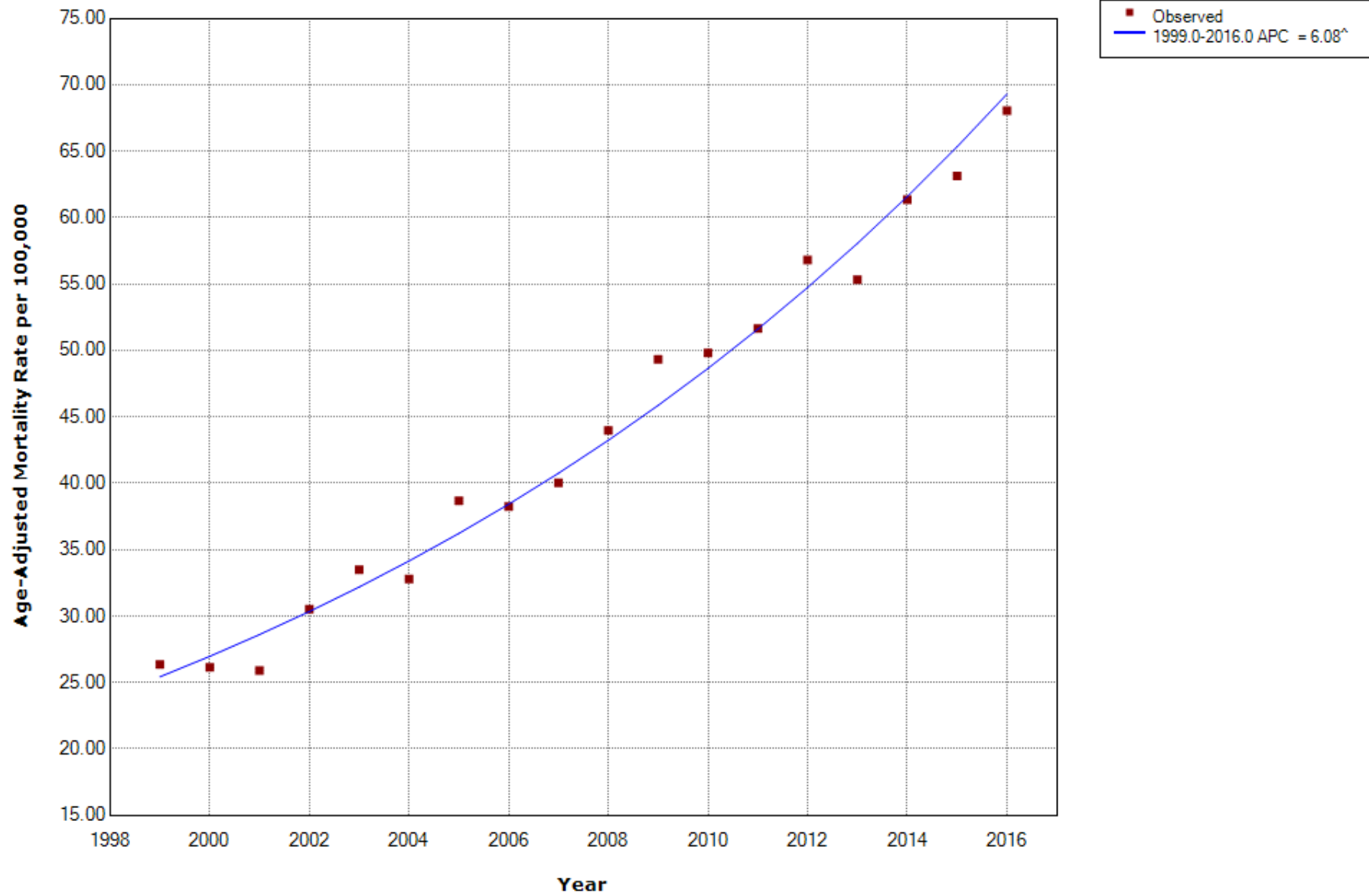
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 3 Joinpoints.

Other land transport and water, air, space, and other/unspecified transport accidents (V80-V99) / Hispanics: 3 Joinpoints



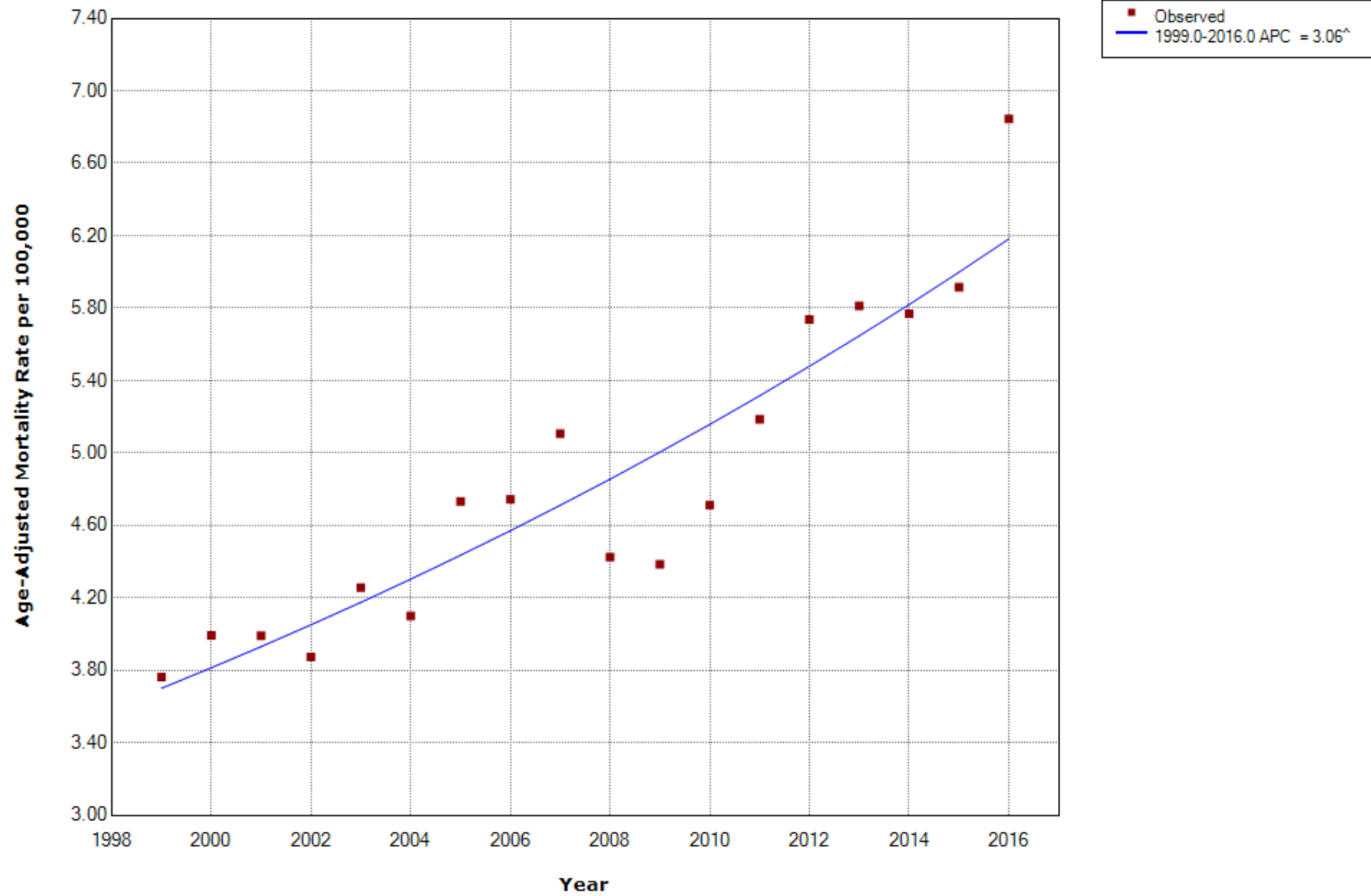
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 3 Joinpoints.

Other external causes of accidental injury (W00-X59) / NH AIAN: 0 Joinpoints



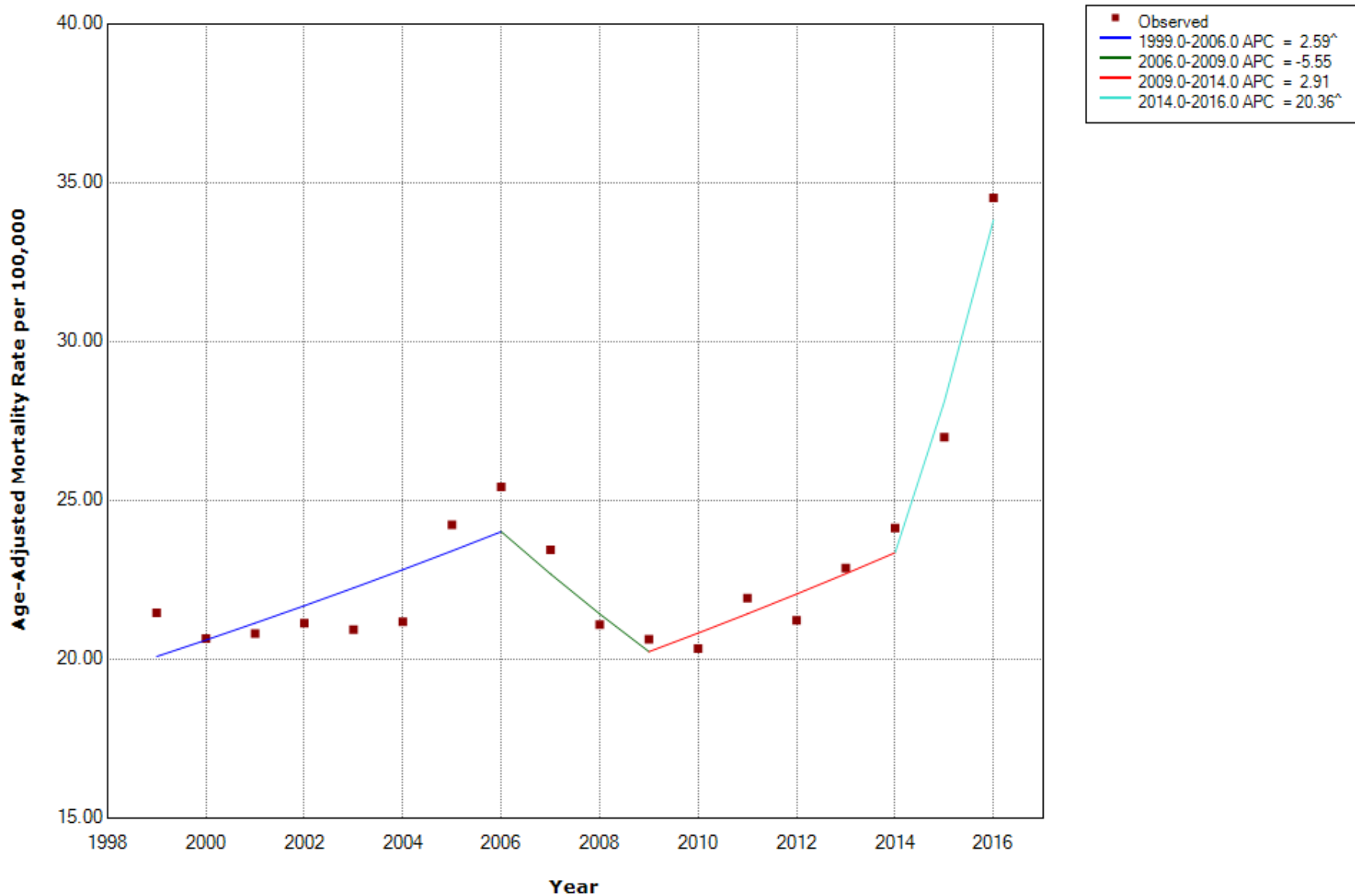
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

Other external causes of accidental injury (W00-X59) / NH API: 0 Joinpoints



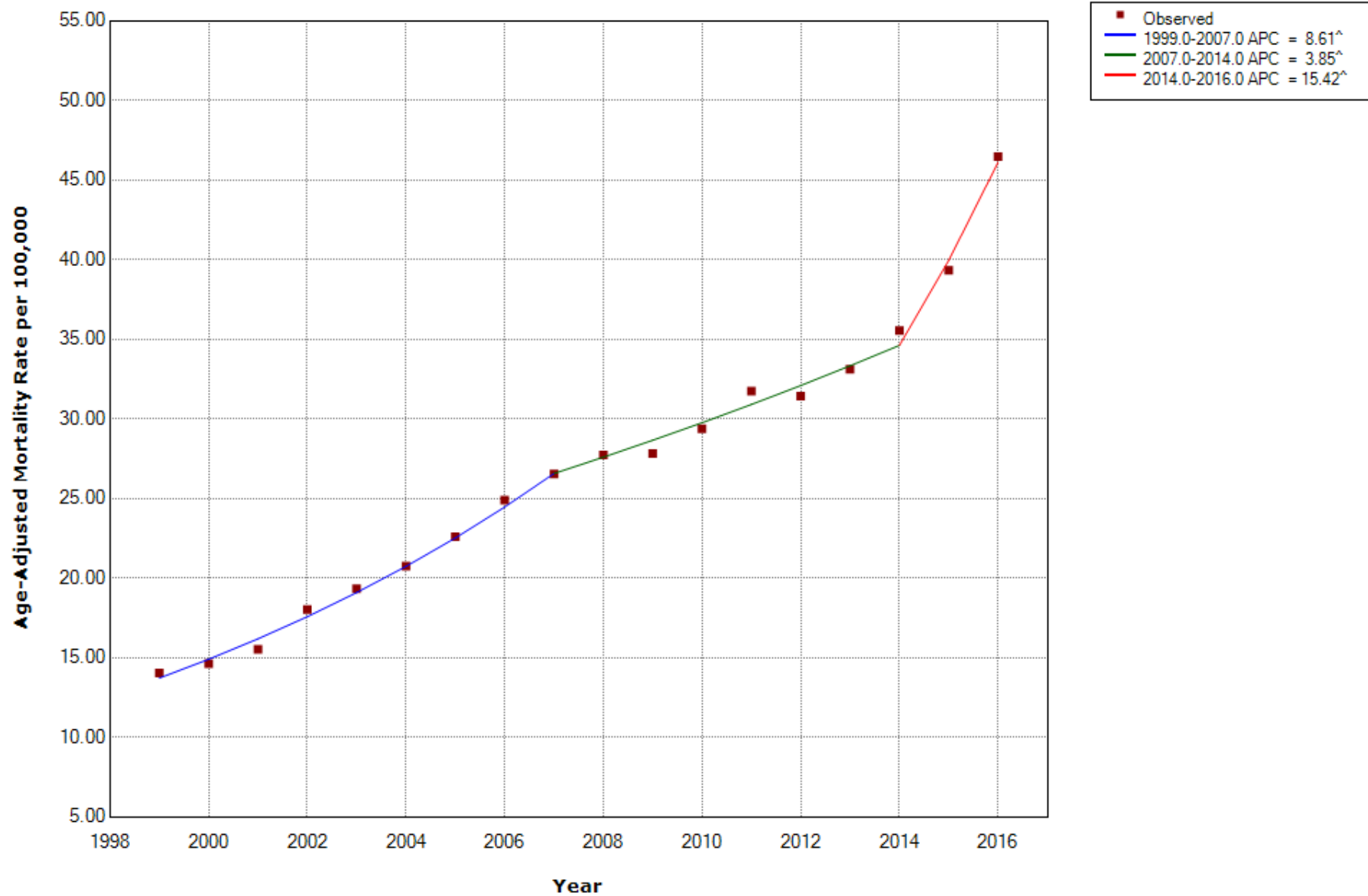
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

Other external causes of accidental injury (W00-X59) / NH Blacks: 3 Joinpoints



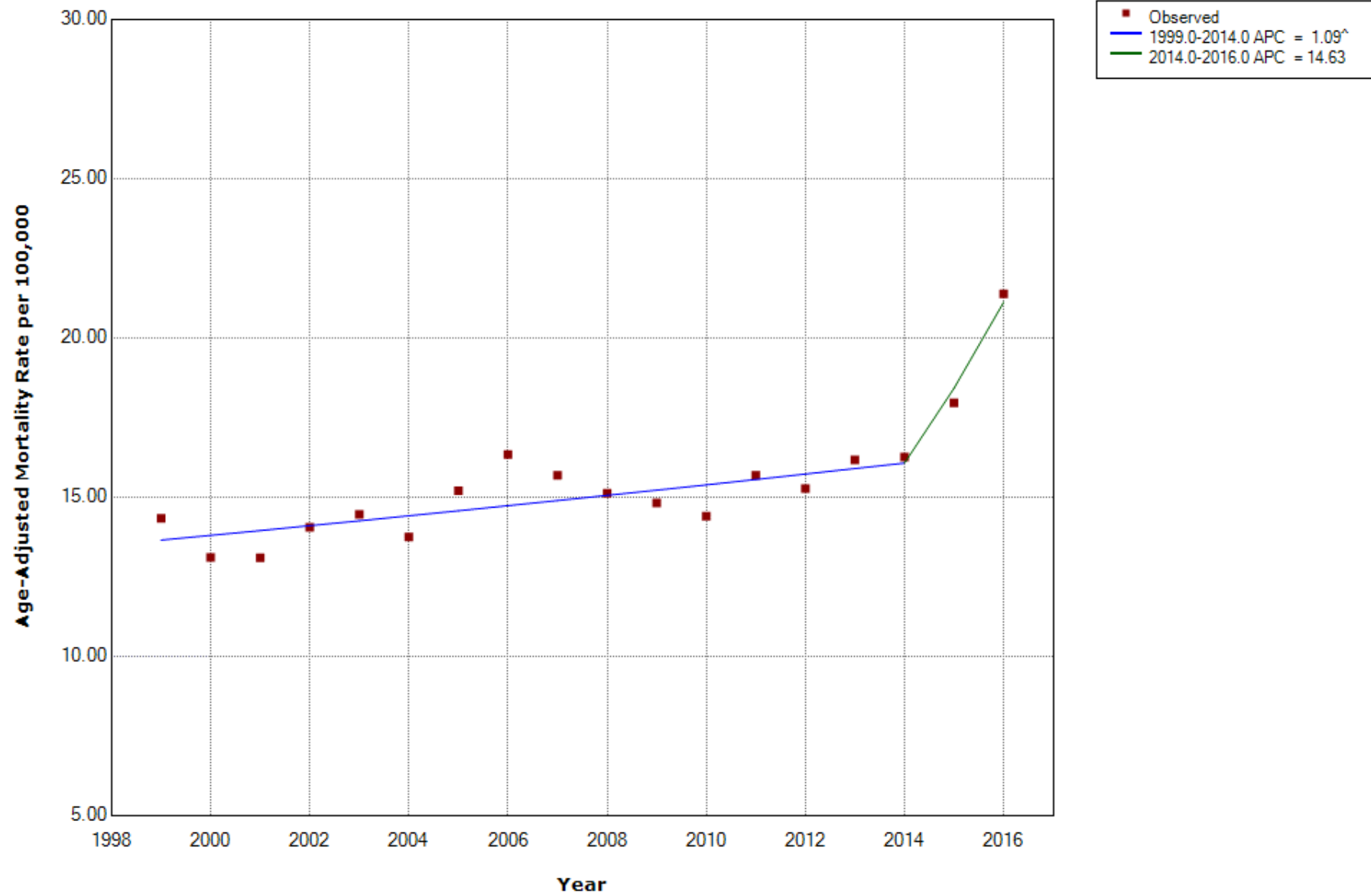
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 3 Joinpoints.

Other external causes of accidental injury (W00-X59) / NH whites: 2 Joinpoints



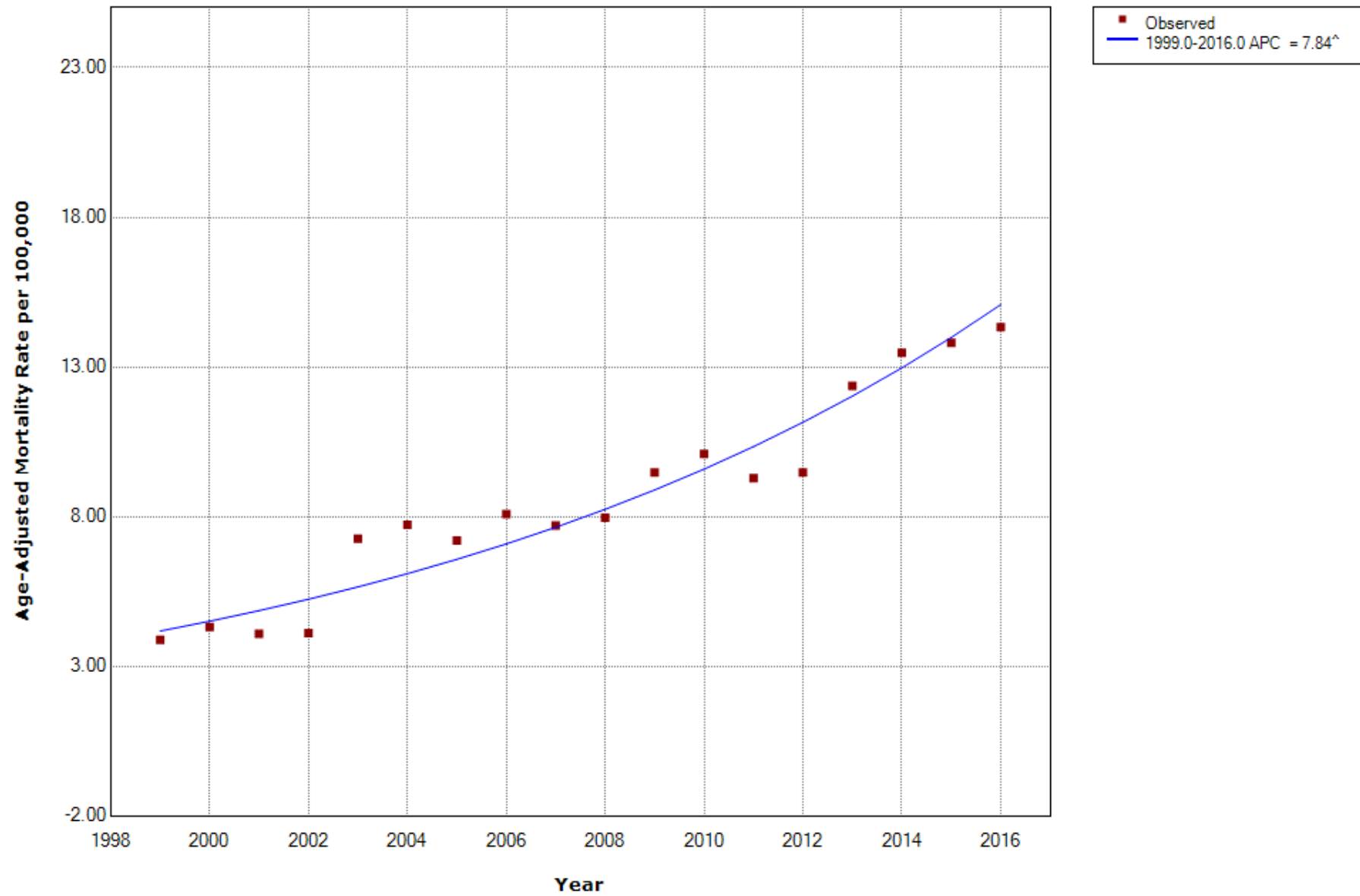
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

Other external causes of accidental injury (W00-X59) / Hispanics: 1 Joinpoint



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

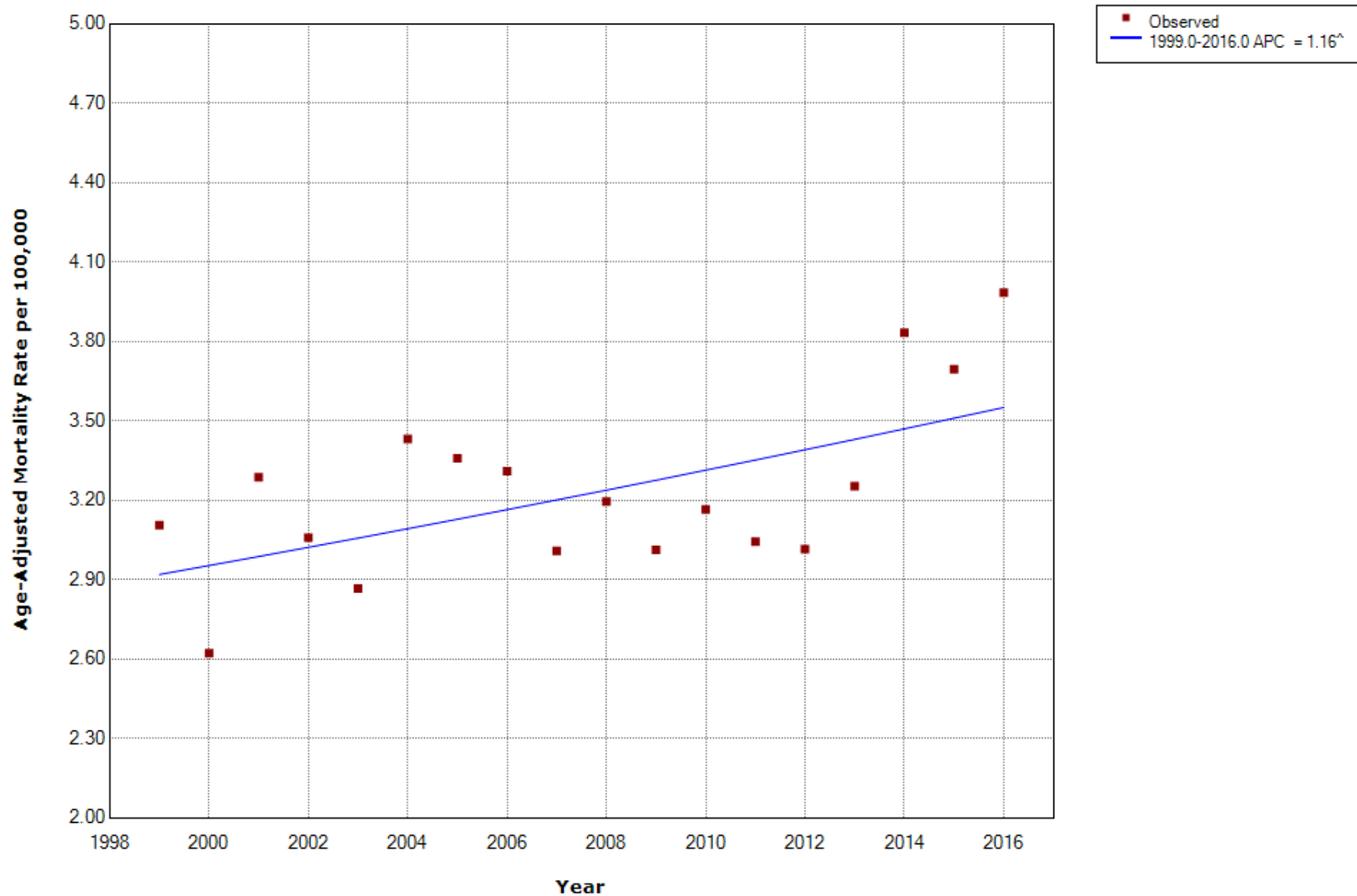
### Hypertensive diseases (I10-I15) / NH AIAN: 0 Joinpoints



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

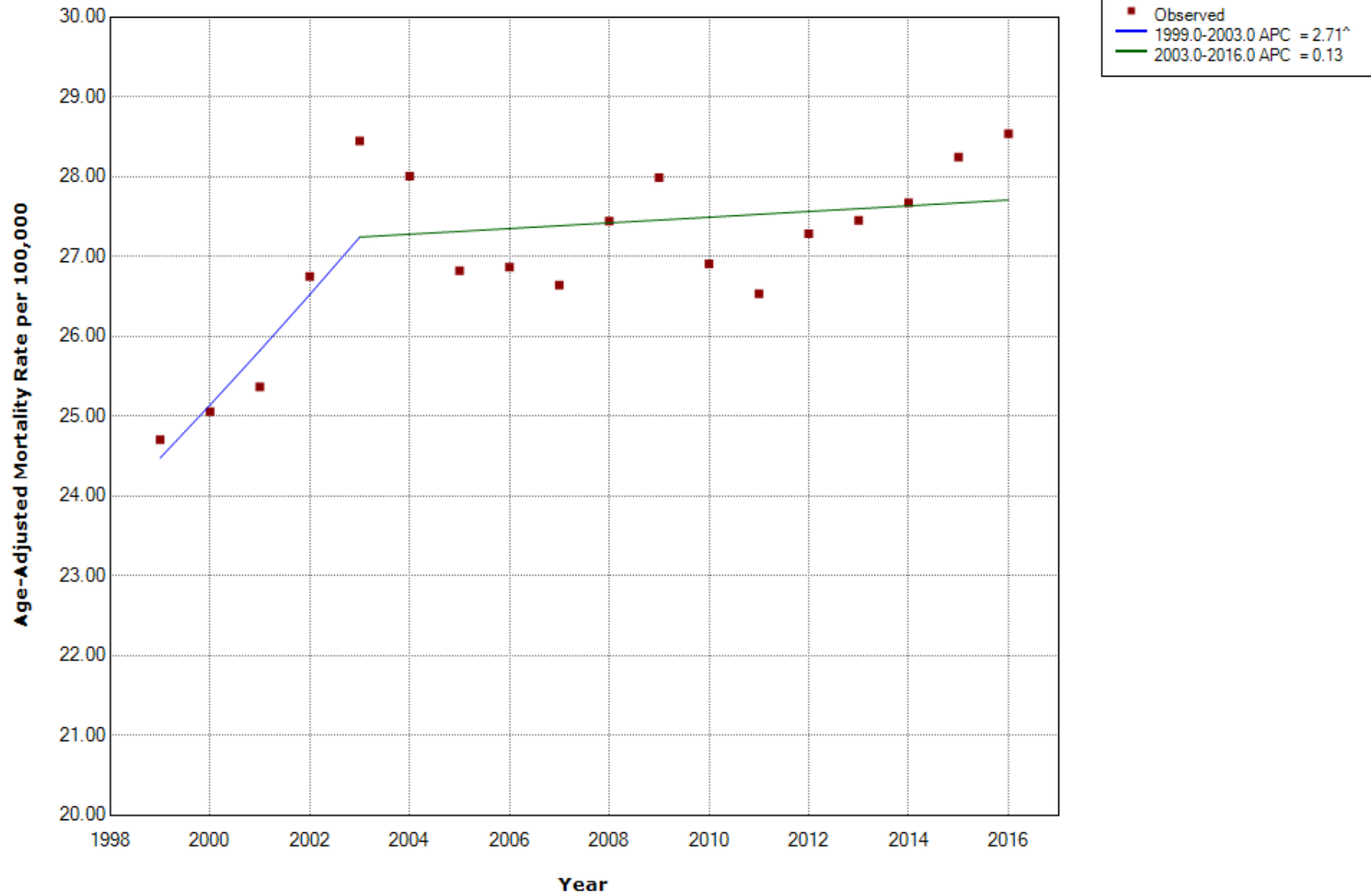


### Hypertensive diseases (I10-I15) / NH API: 0 Joinpoints



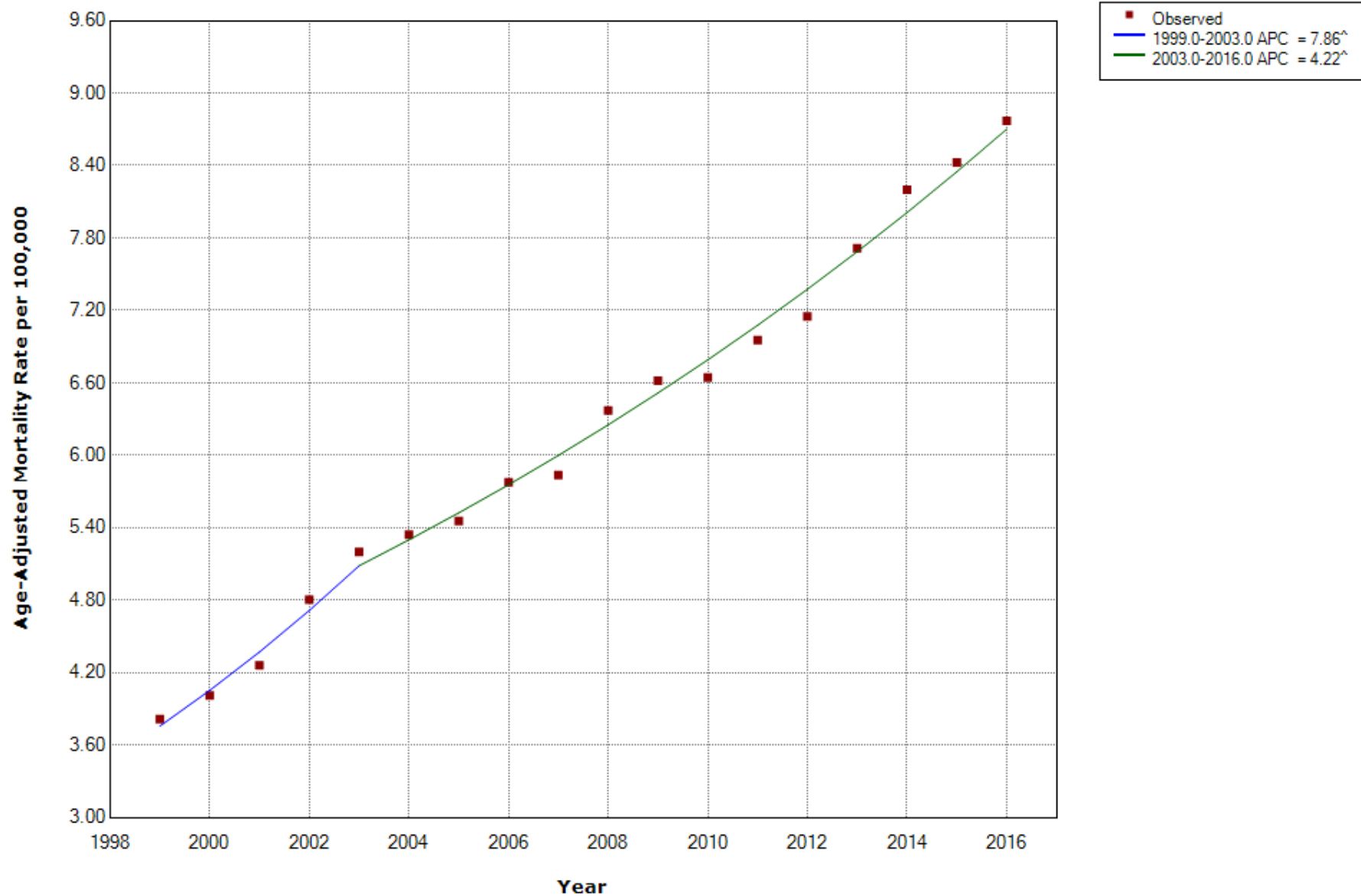
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

### Hypertensive diseases (I10-I15) / NH Blacks: 1 Joinpoint



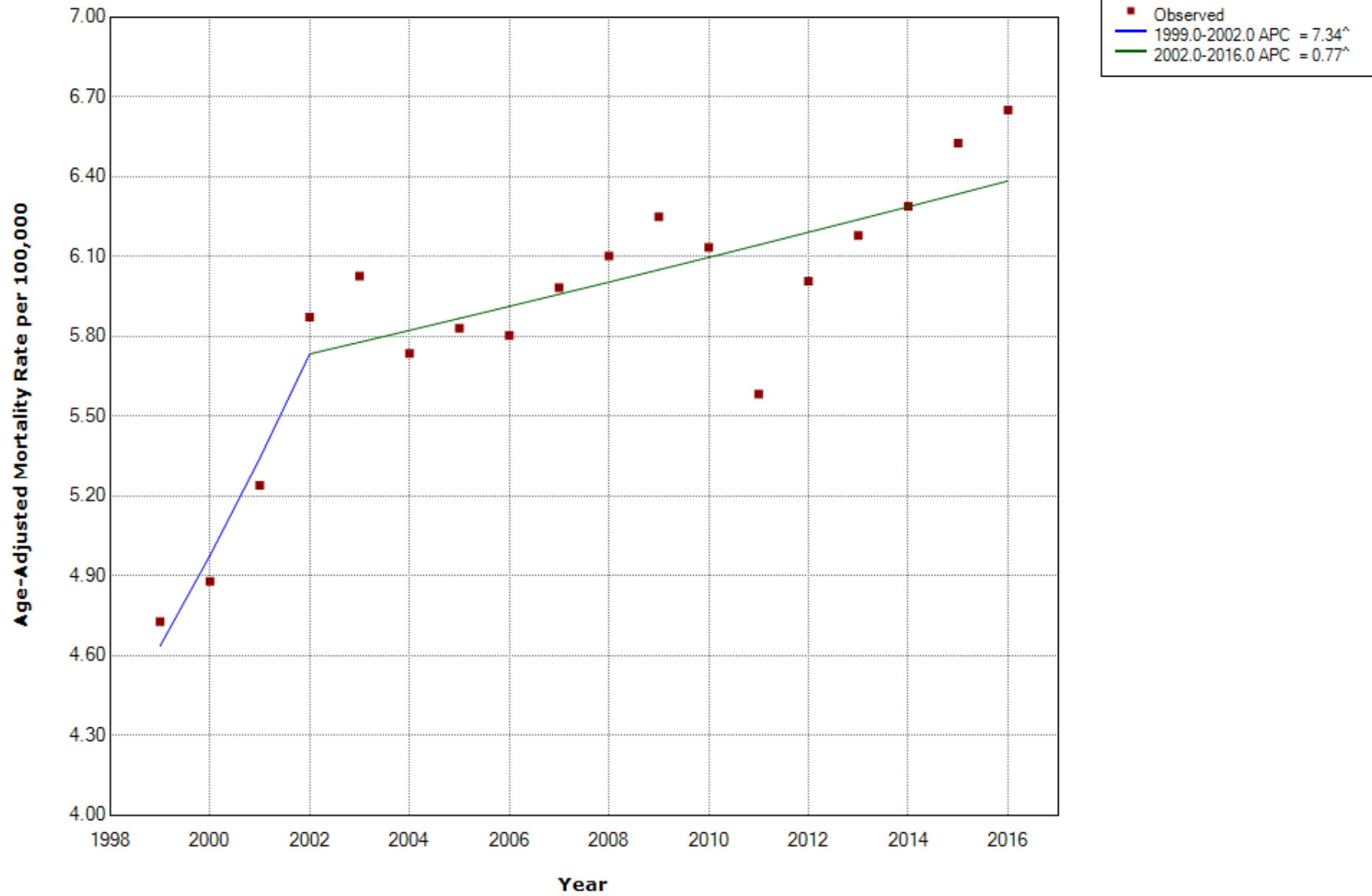
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

### Hypertensive diseases (I10-I15) / NH whites: 1 Joinpoint



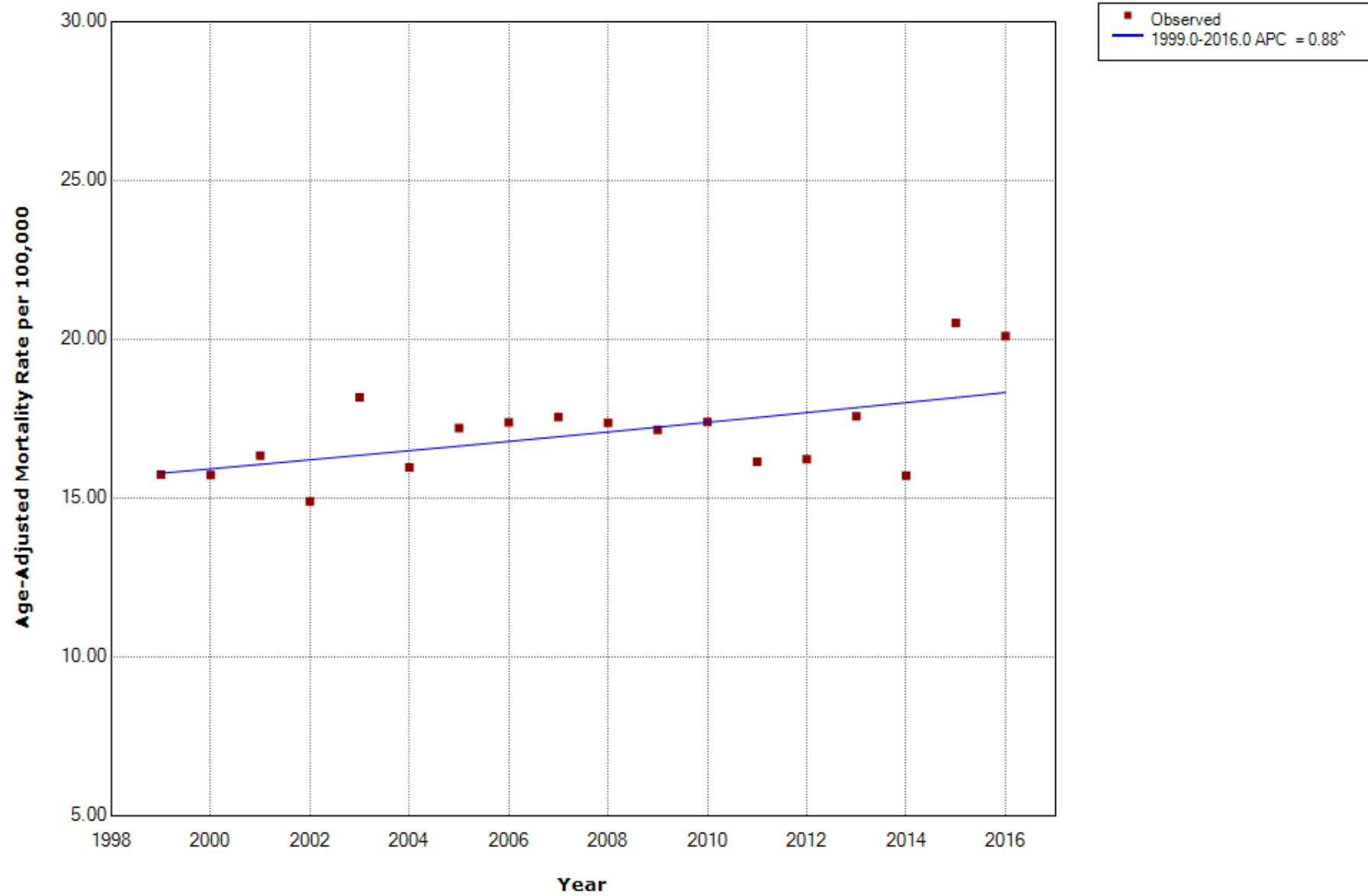
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

### Hypertensive diseases (I10-I15) / Hispanics: 1 Joinpoint



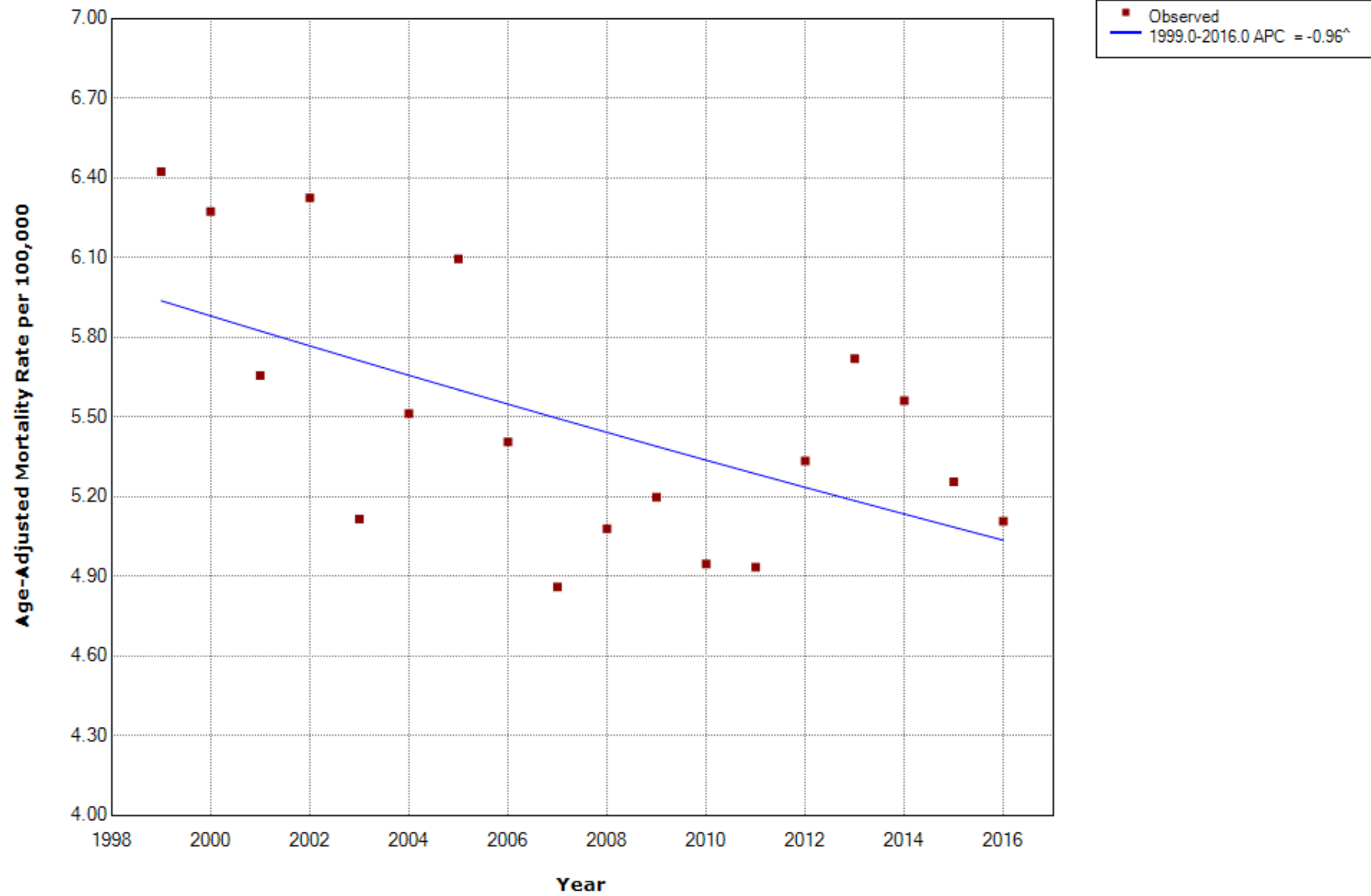
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

### Arrhythmias, heart failure, and other forms of heart disease (I30-I51) / NH AIAN: 0 Joinpoints



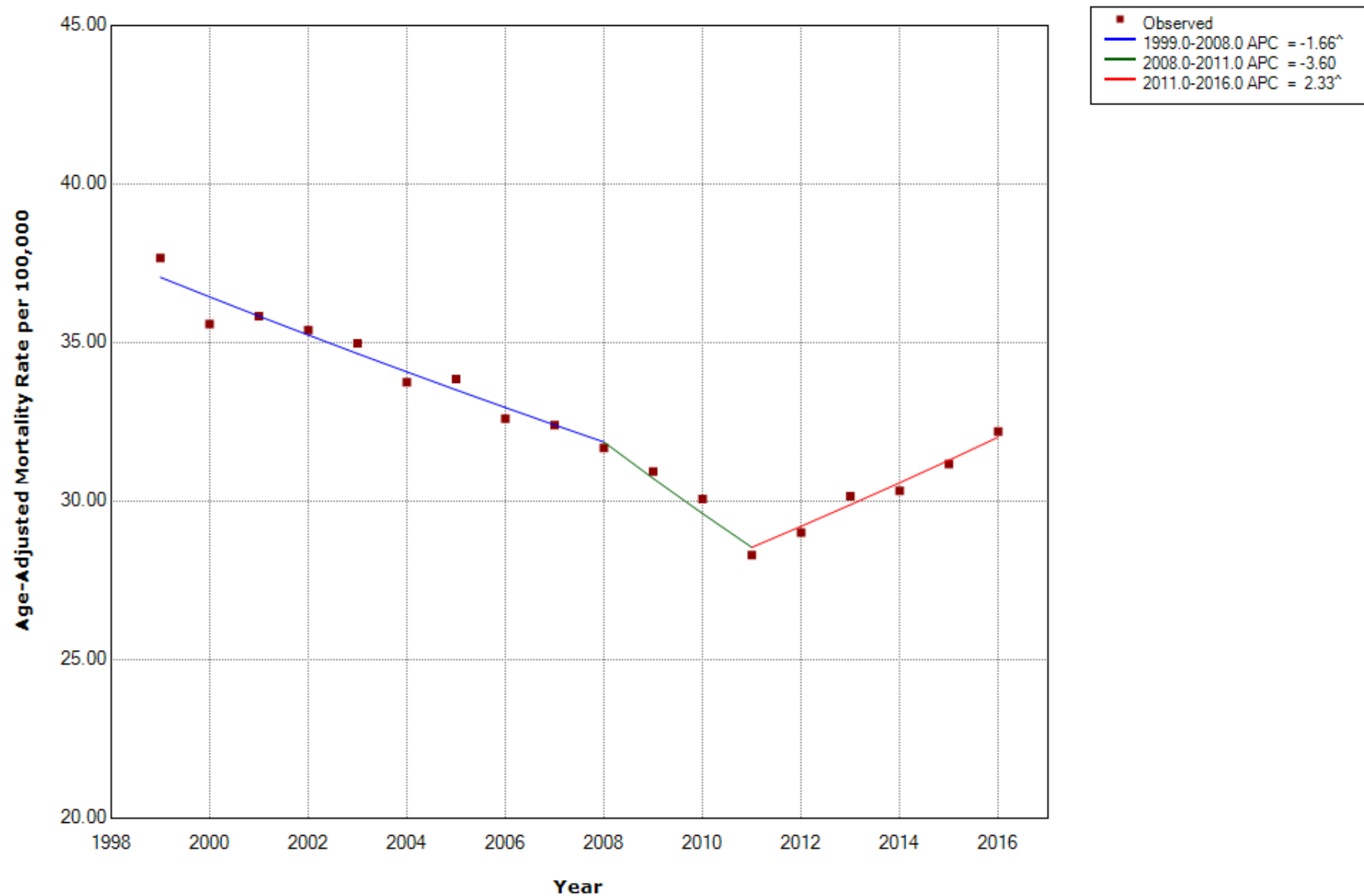
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

### Arrhythmias, heart failure, and other forms of heart disease (I30-I51) / NH API: 0 Joinpoints



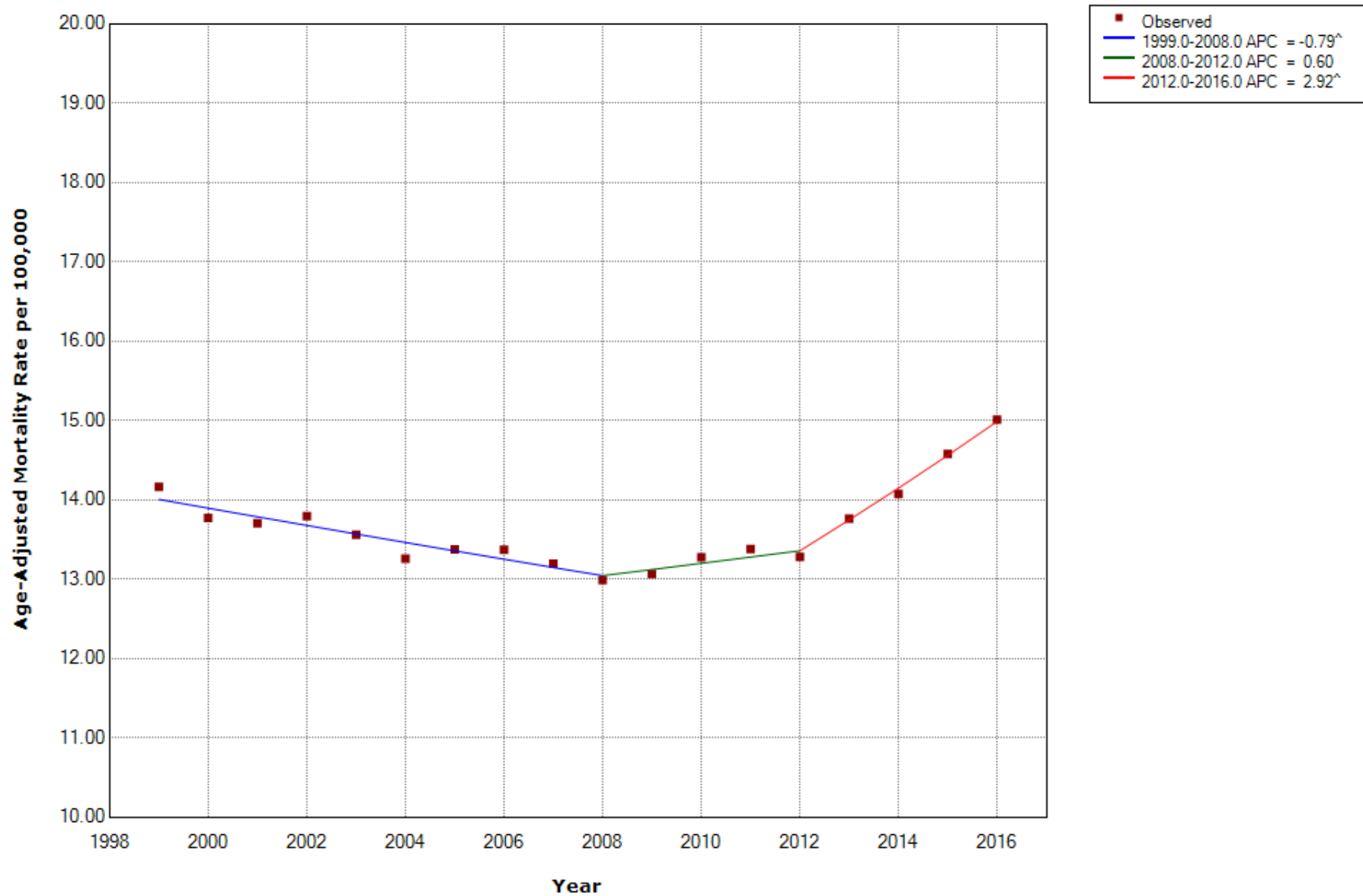
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

### Arrhythmias, heart failure, and other forms of heart disease (I30-I51) / NH Blacks: 2 Joinpoints



<sup>^</sup> Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

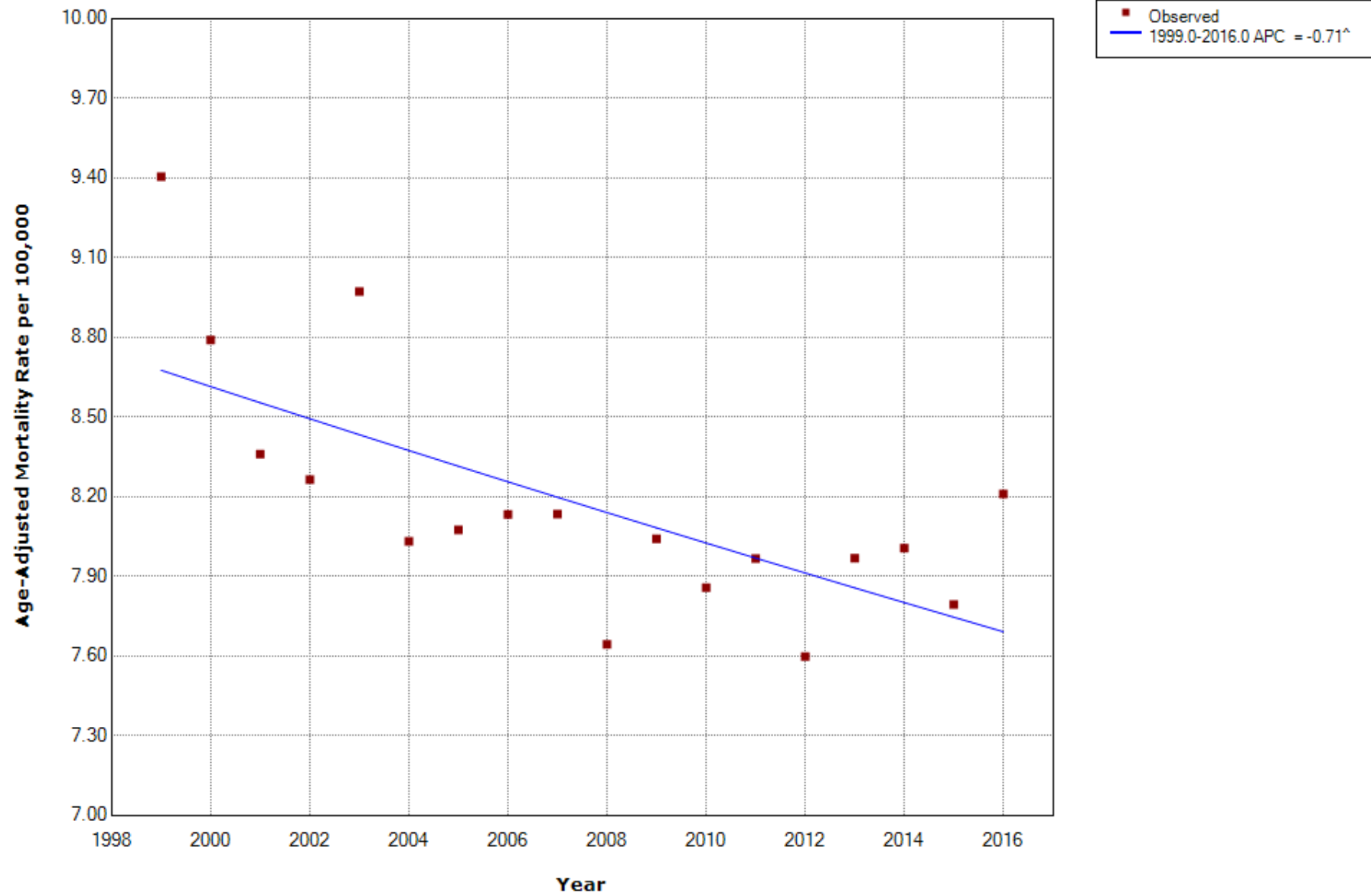
### Arrhythmias, heart failure, and other forms of heart disease (I30-I51) / NH whites: 2 Joinpoints



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

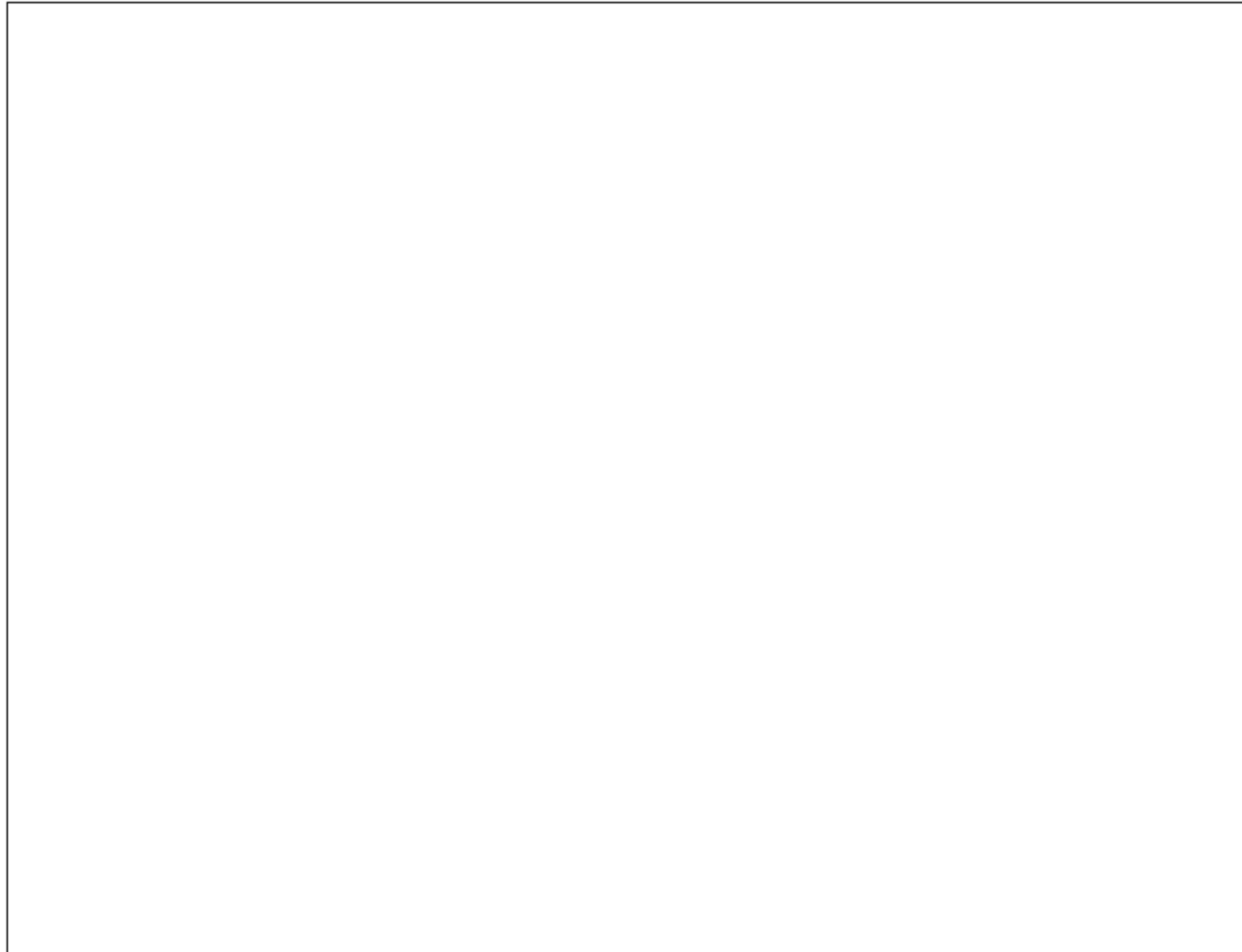


### Arrhythmias, heart failure, and other forms of heart disease (I30-I51) / Hispanics: 0 Joinpoints



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

Diseases of veins, lymphatic vessels and lymph nodes (I80-I89) / NH AIAN: Observed

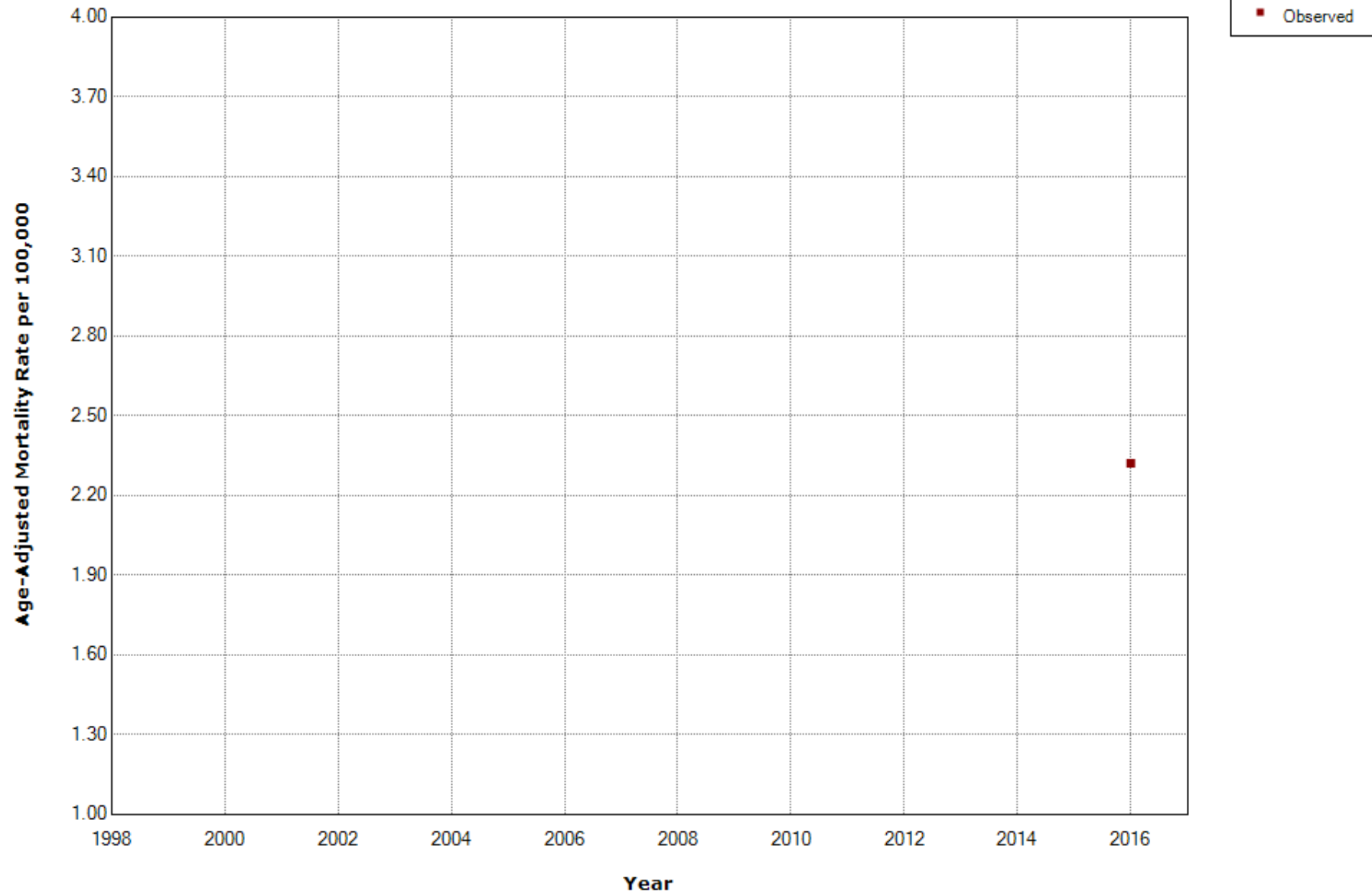


■ Observed

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

\*\* Joinpoint cannot process records with missing dependent variable values. Joinpoint will not analyze by-groups that have this error. (Row = 900, Col = 1)

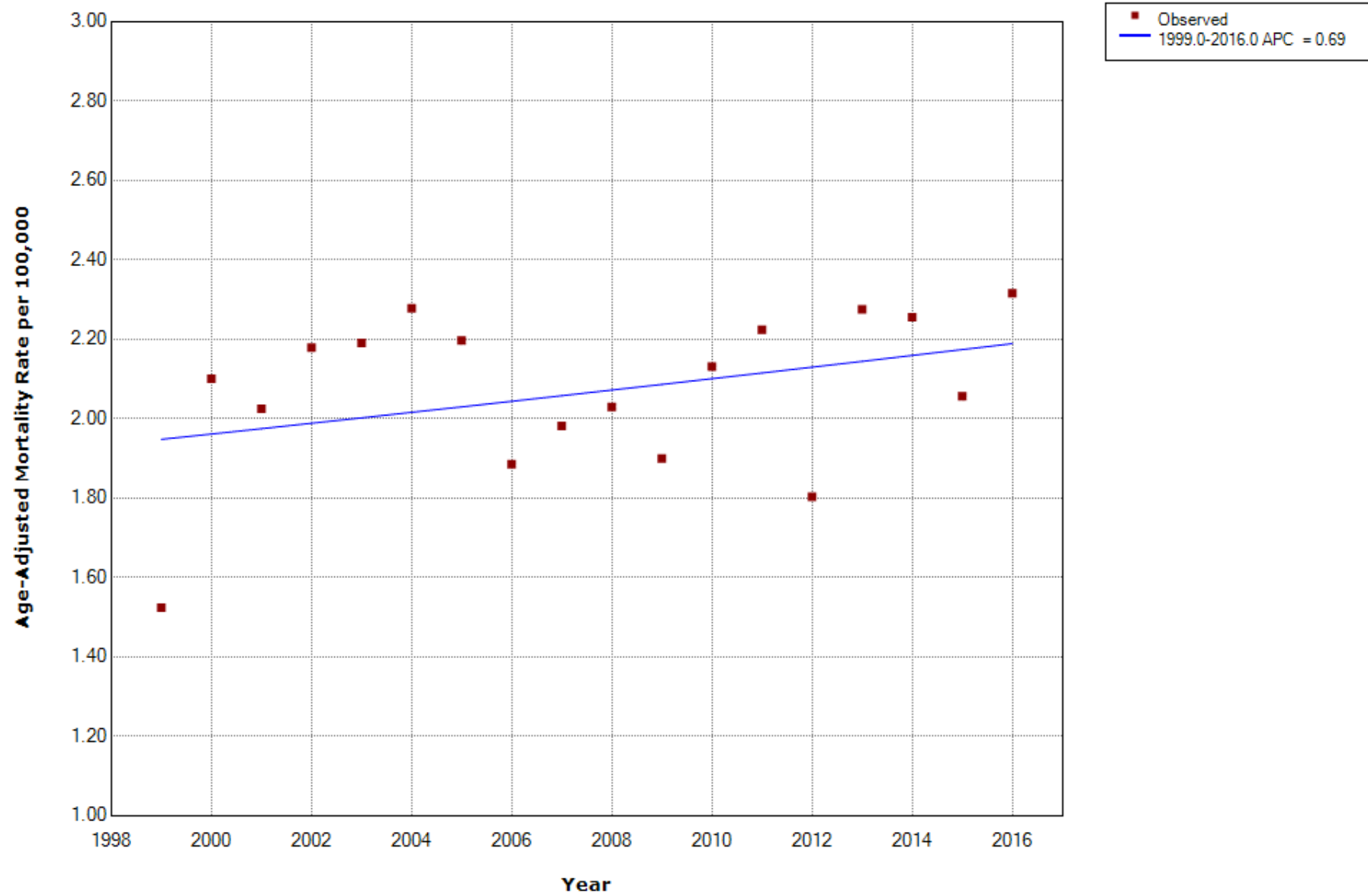
### Diseases of veins, lymphatic vessels and lymph nodes (I80-I89) / NH API: Observed



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

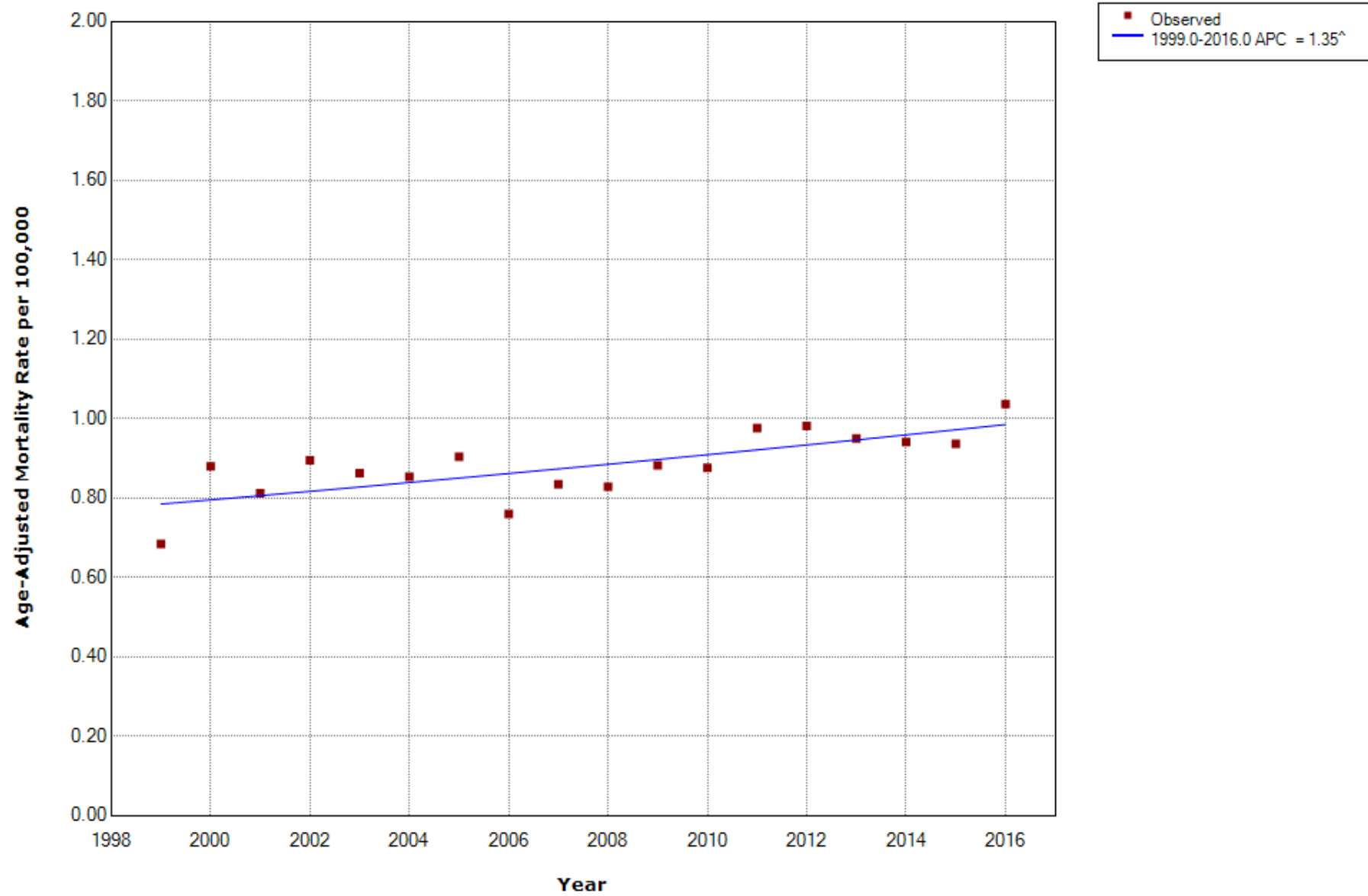
\* Joinpoint cannot process records with missing dependent variable values. Joinpoint will not analyze by-groups that have this error. (Row = 918, Col = 1)

Diseases of veins, lymphatic vessels and lymph nodes (I80-I89) / NH Blacks: 0 Joinpoints



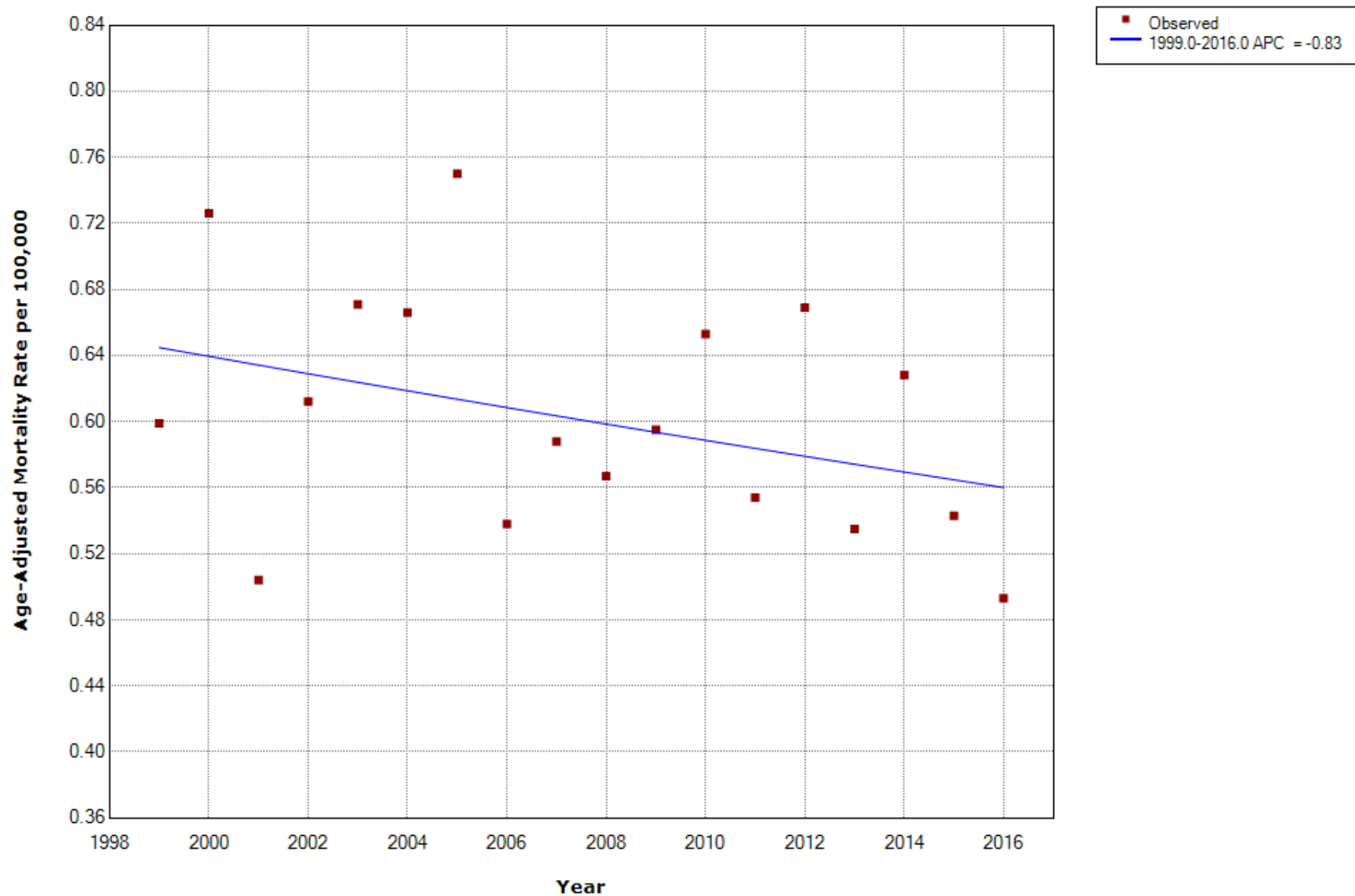
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

Diseases of veins, lymphatic vessels and lymph nodes (I80-I89) / NH whites: 0 Joinpoints



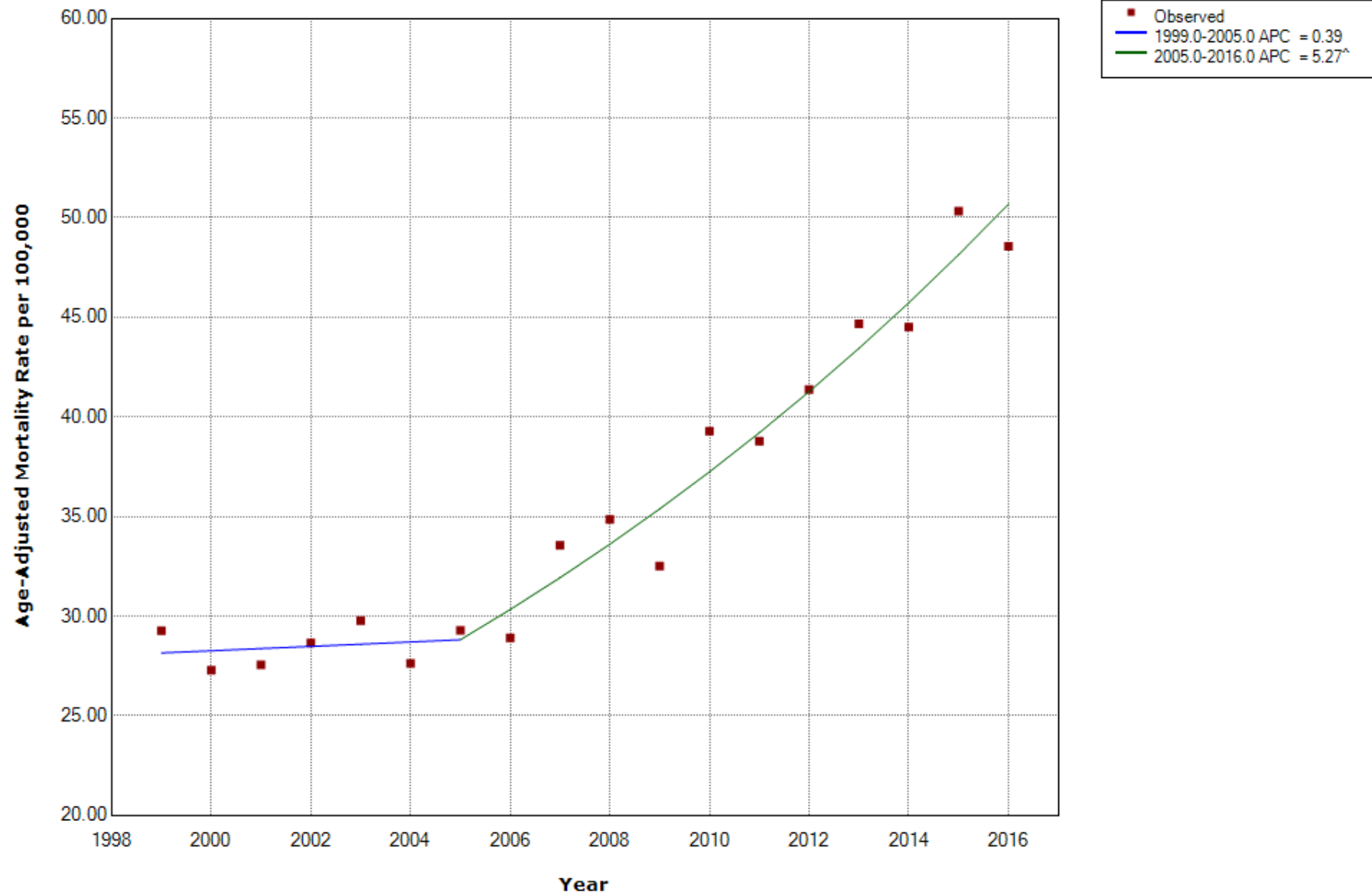
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

Diseases of veins, lymphatic vessels and lymph nodes (I80-I89) / Hispanics: 0 Joinpoints



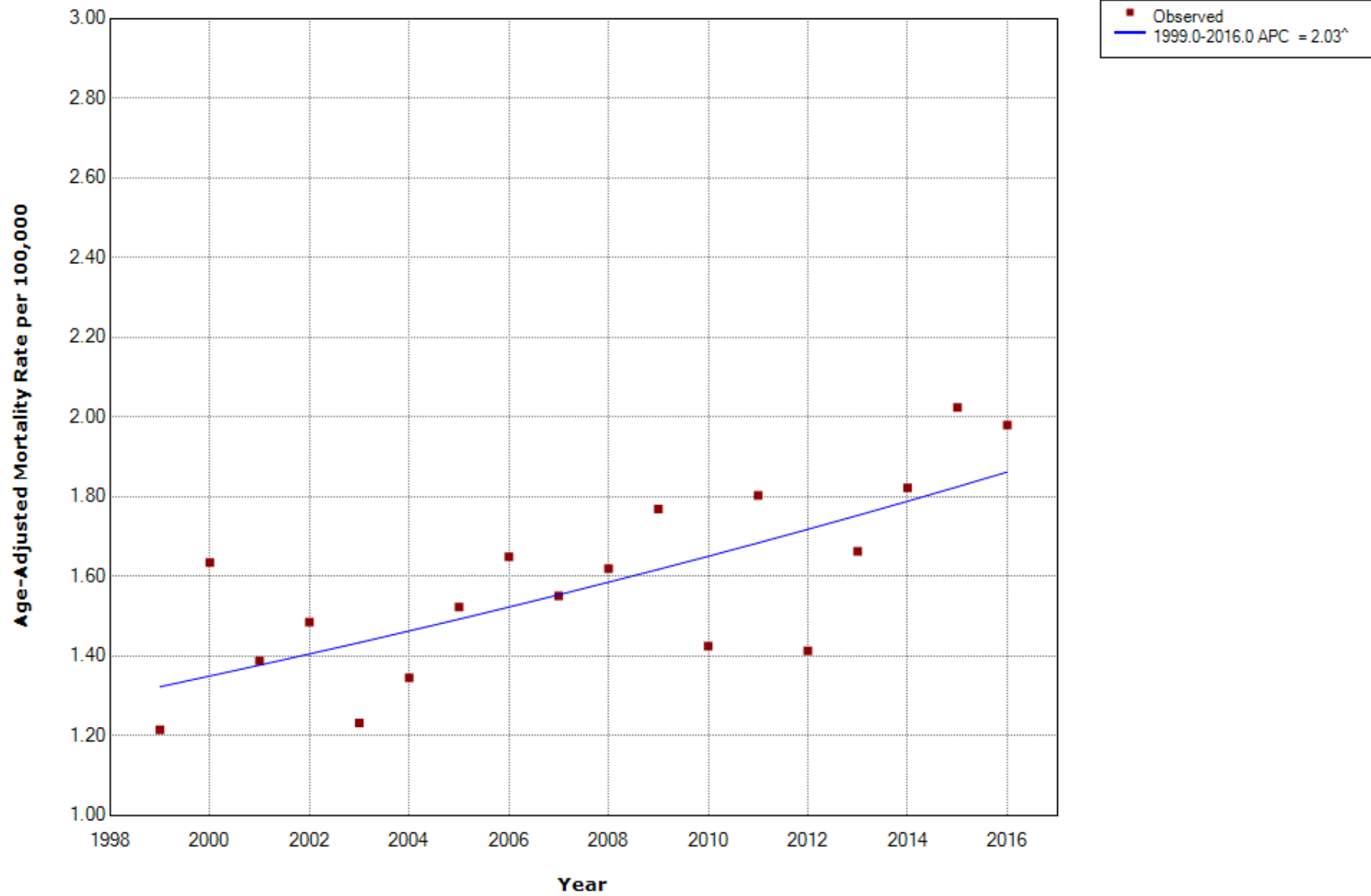
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

### Alcoholic liver disease (K70) / NH AIAN: 1 Joinpoint



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

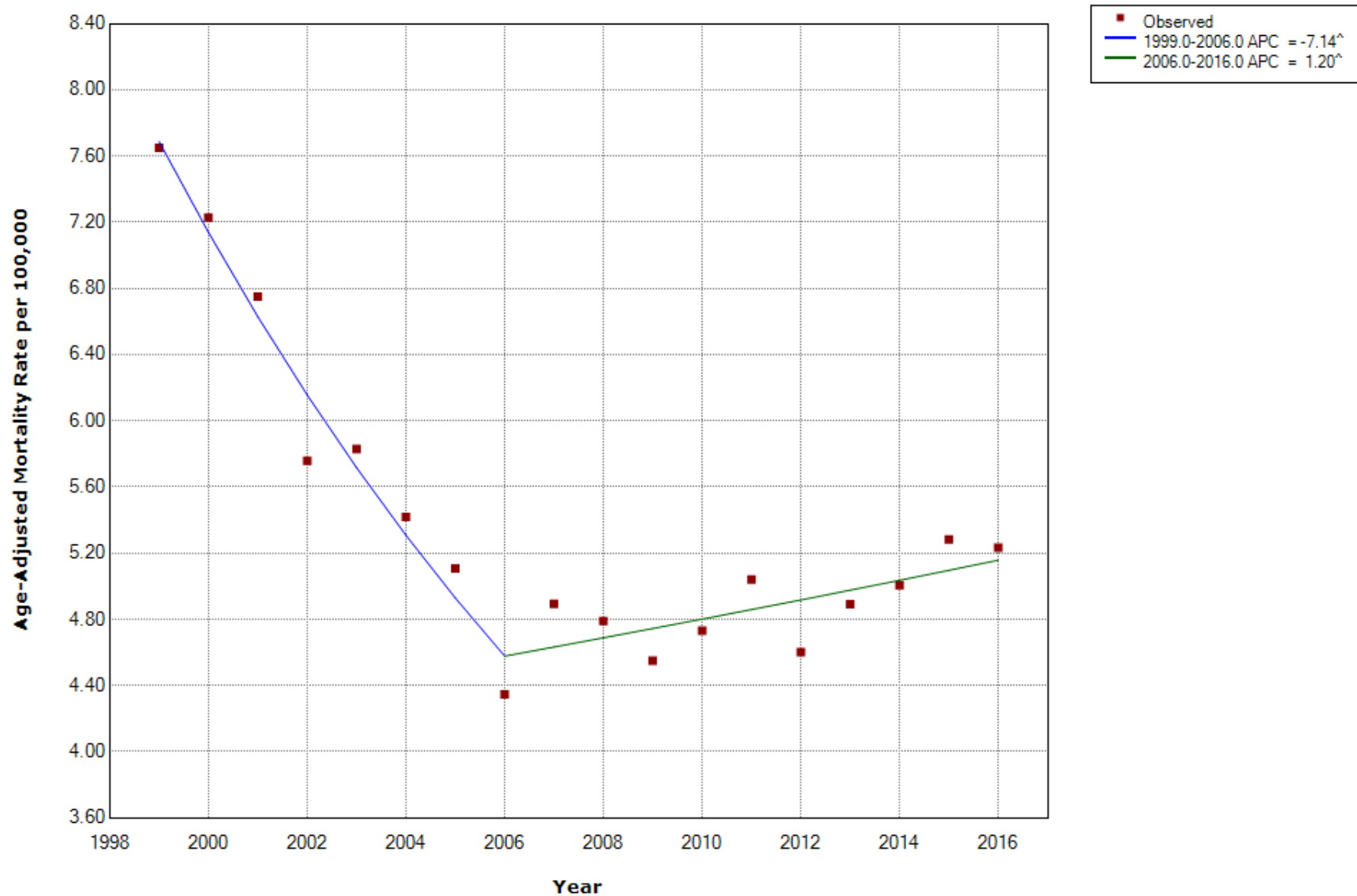
### Alcoholic liver disease (K70) / NH API: 0 Joinpoints



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

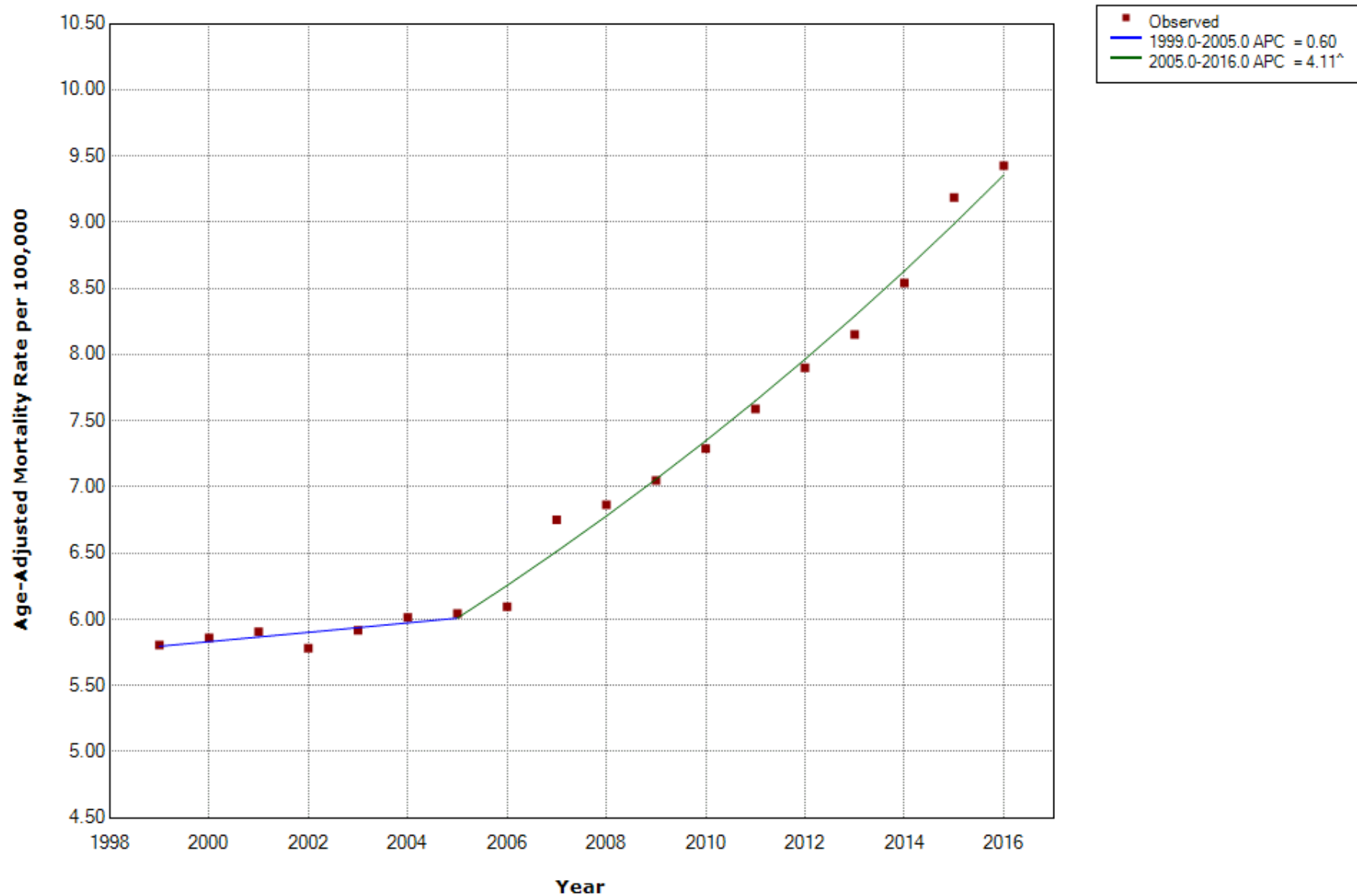


### Alcoholic liver disease (K70) / NH Blacks: 1 Joinpoint



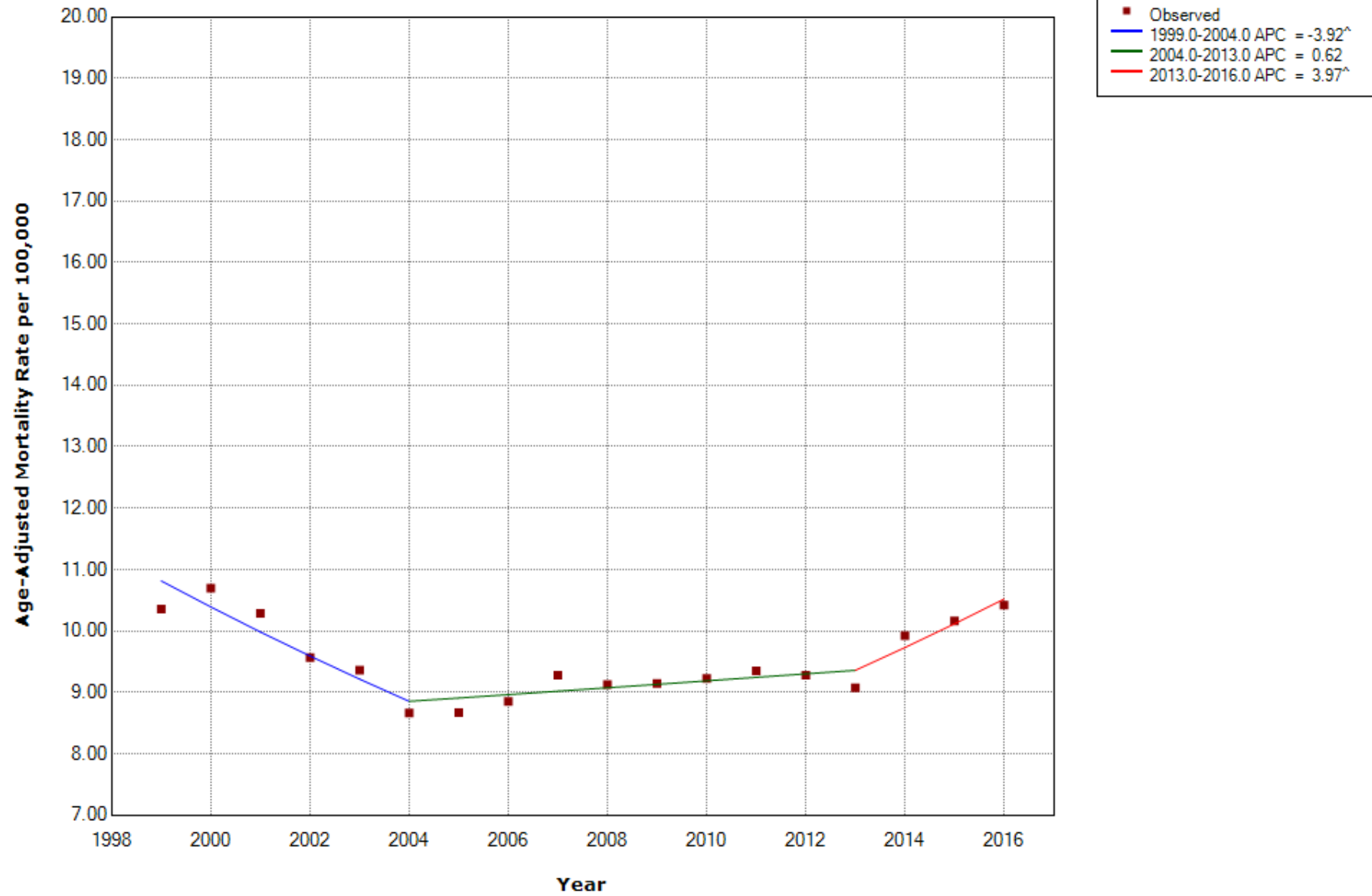
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

### Alcoholic liver disease (K70) / NH whites: 1 Joinpoint



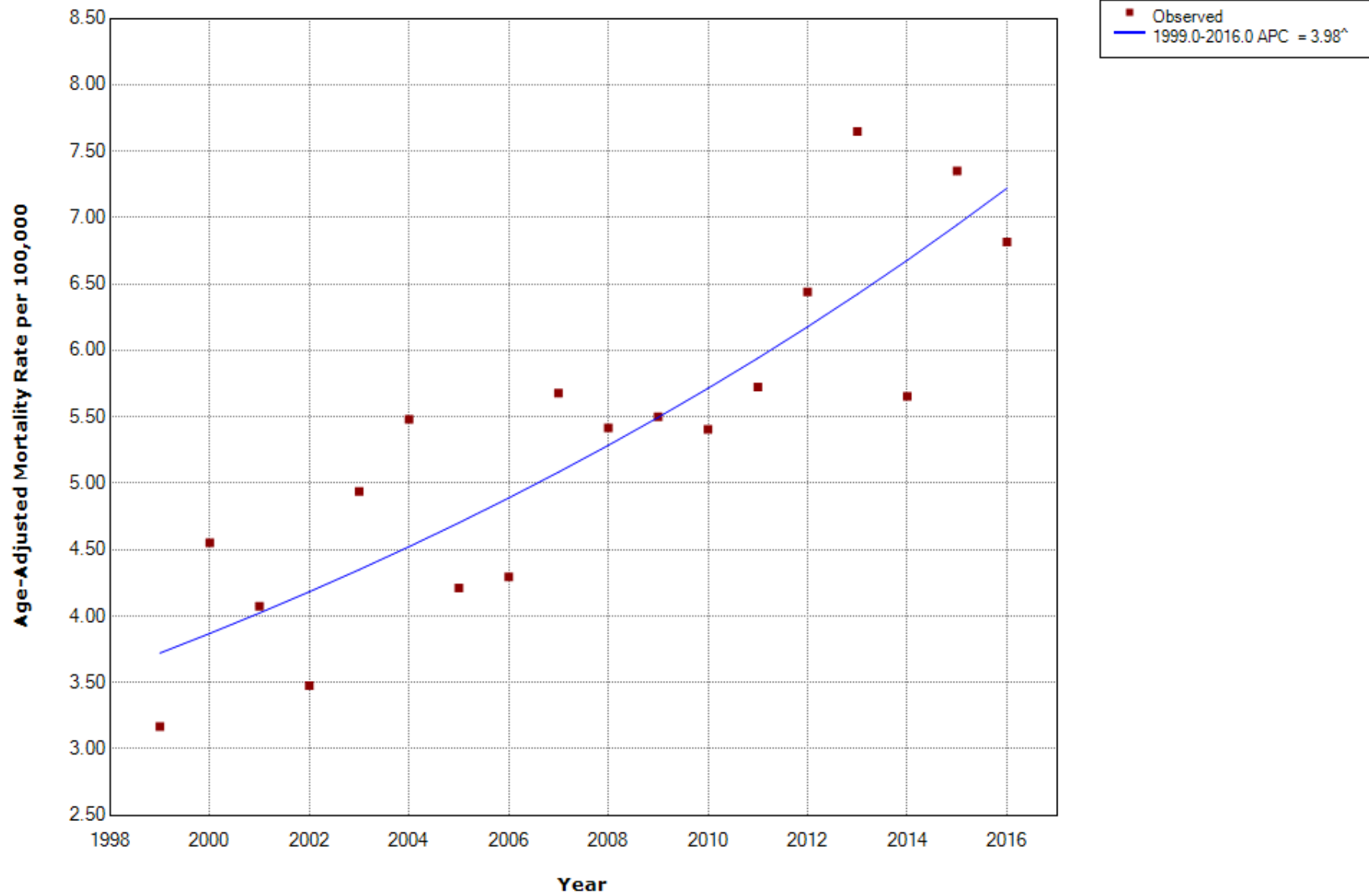
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

### Alcoholic liver disease (K70) / Hispanics: 2 Joinpoints



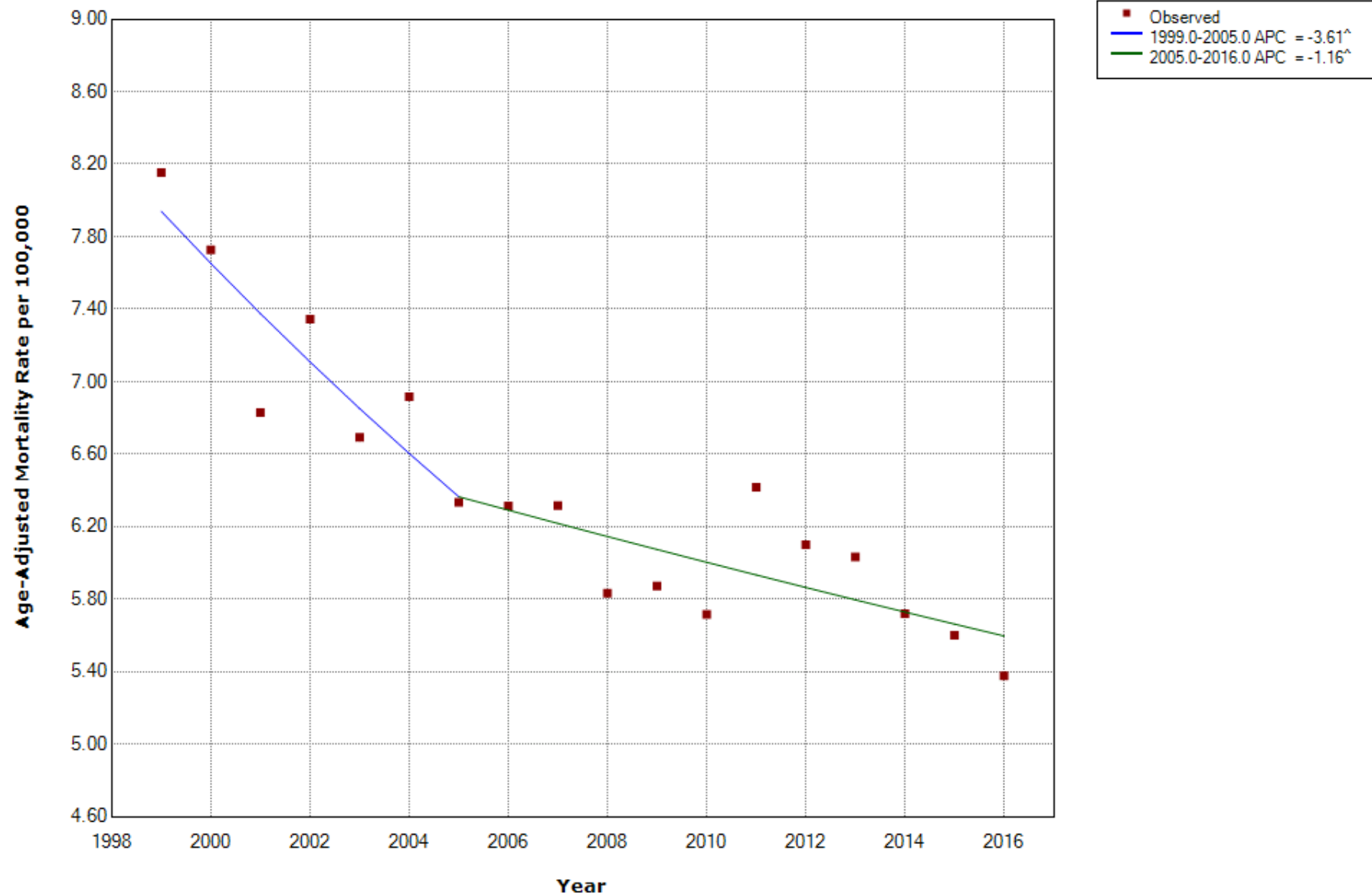
<sup>^</sup> Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

Liver cancer (C22) / NH AIAN: 0 Joinpoints



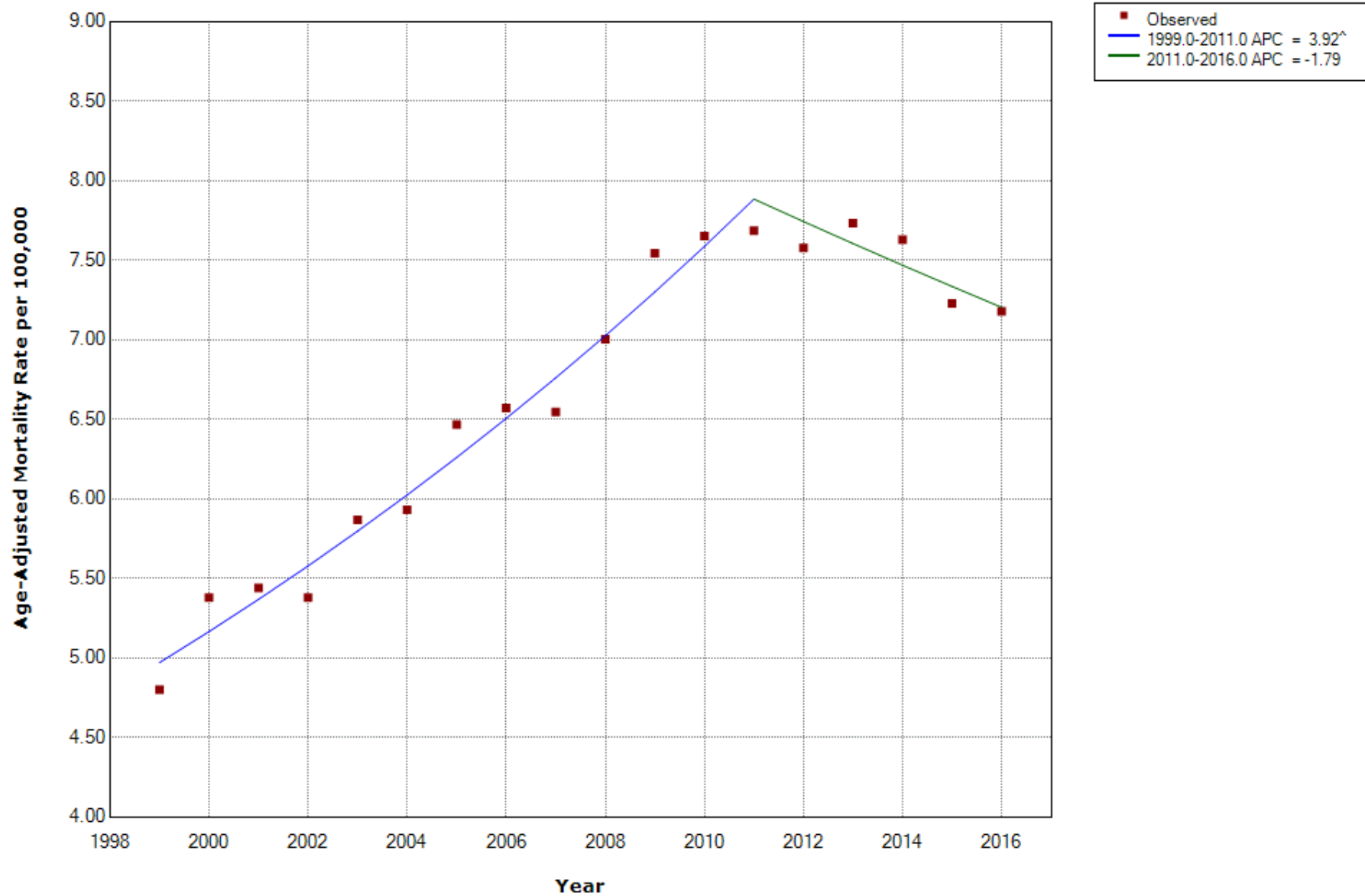
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

### Liver cancer (C22) / NH API: 1 Joinpoint



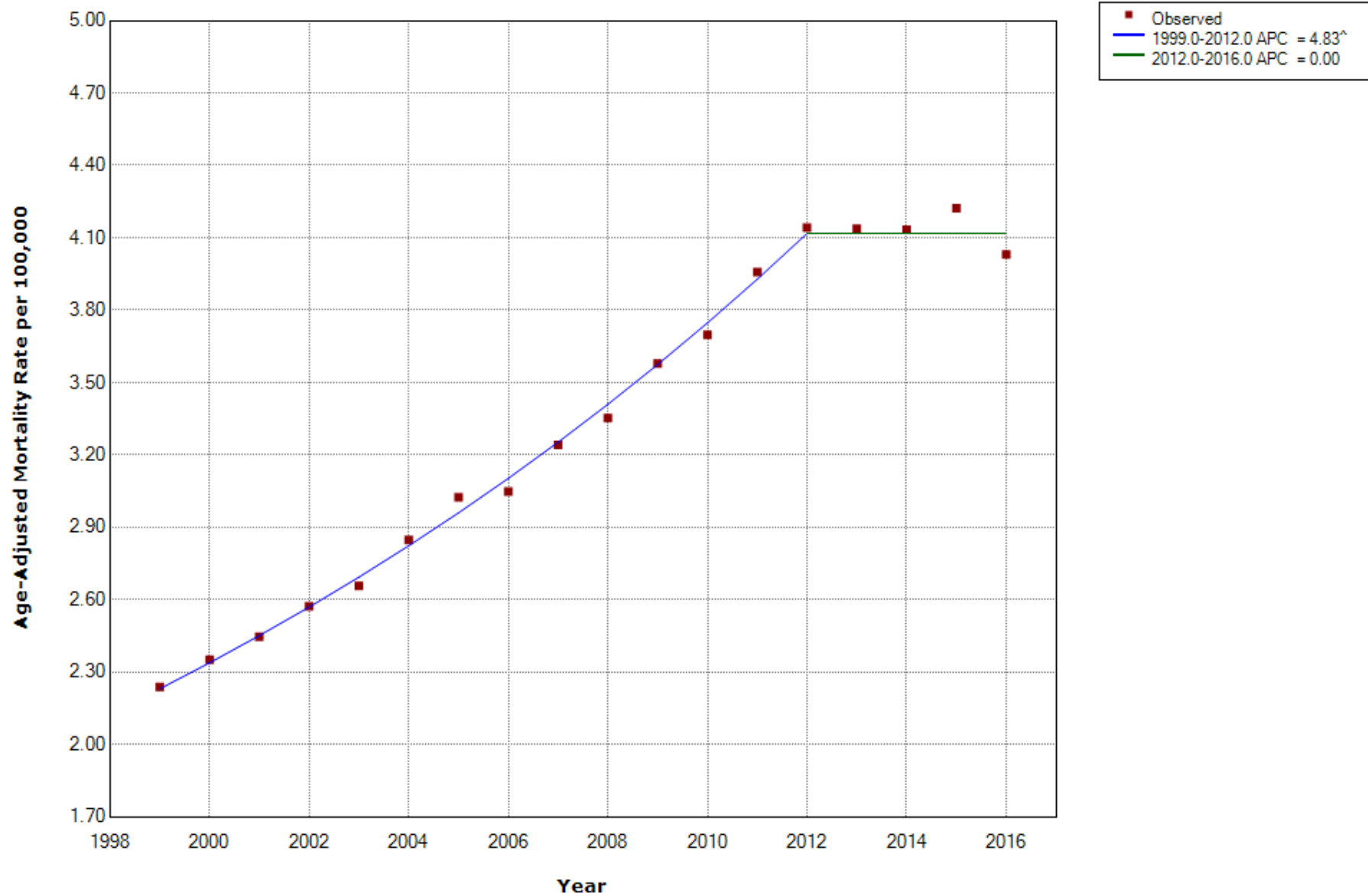
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

### Liver cancer (C22) / NH Blacks: 1 Joinpoint



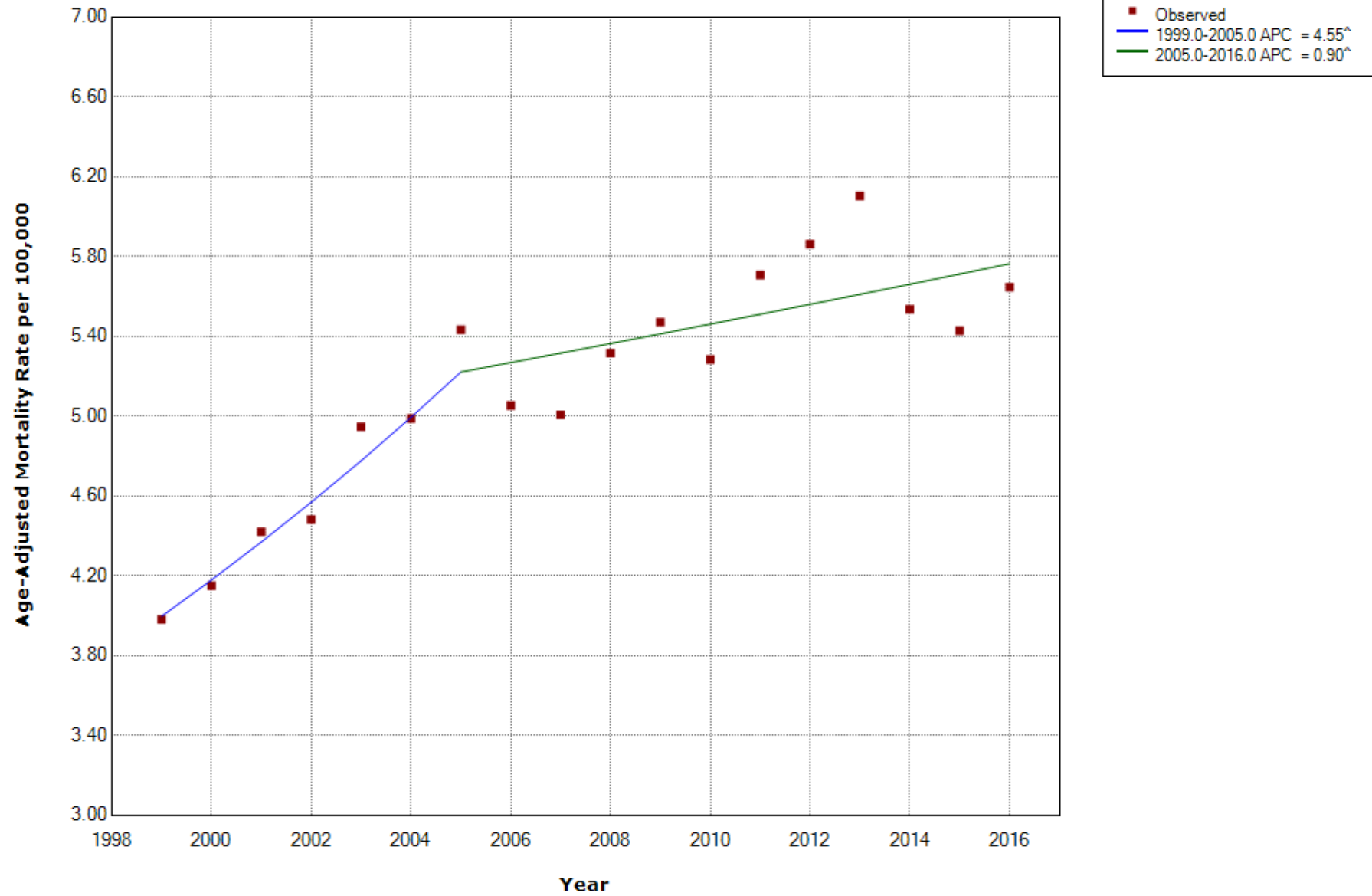
<sup>^</sup> Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

### Liver cancer (C22) / NH whites: 1 Joinpoint



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

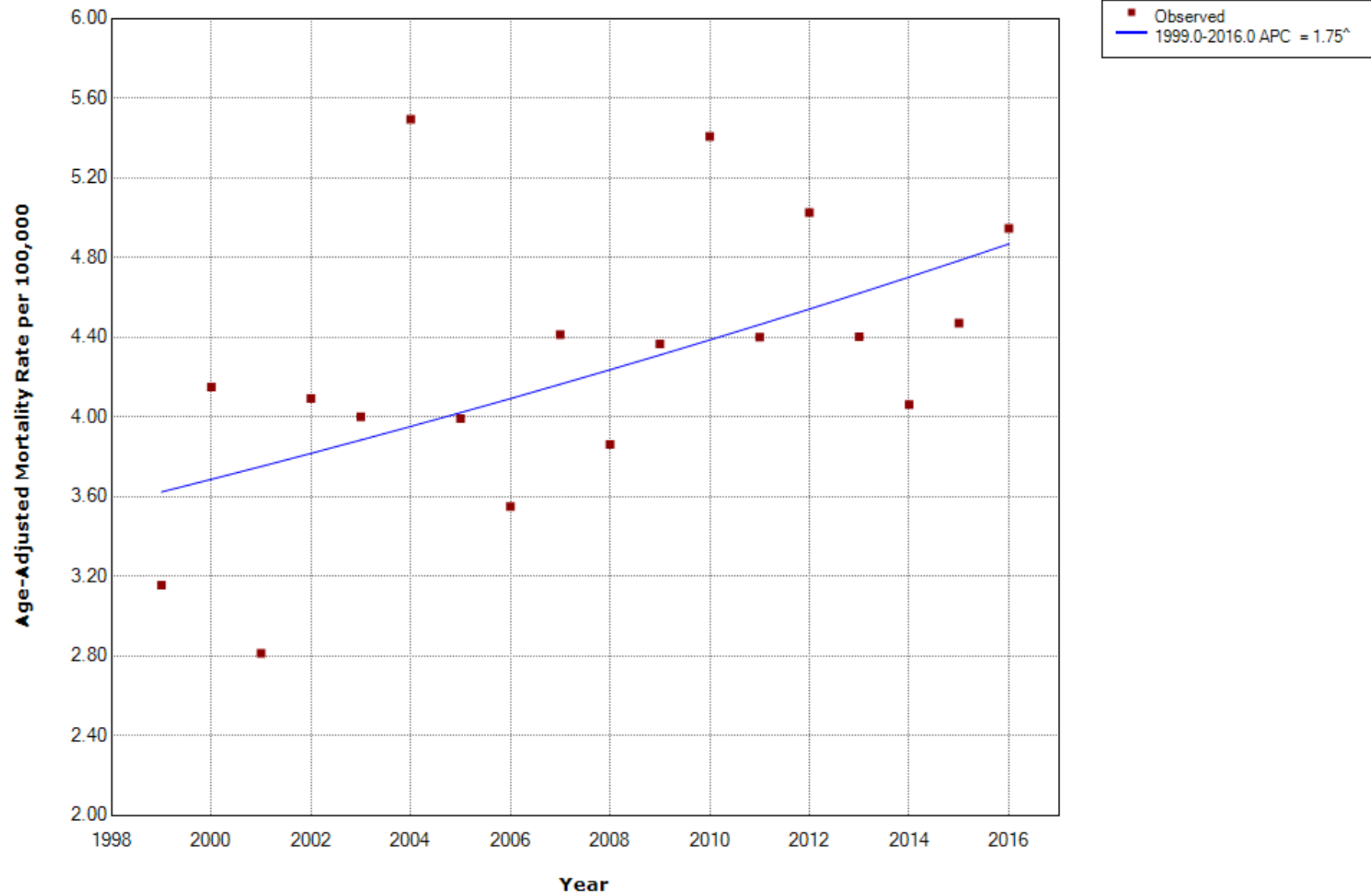
### Liver cancer (C22) / Hispanics: 1 Joinpoint



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

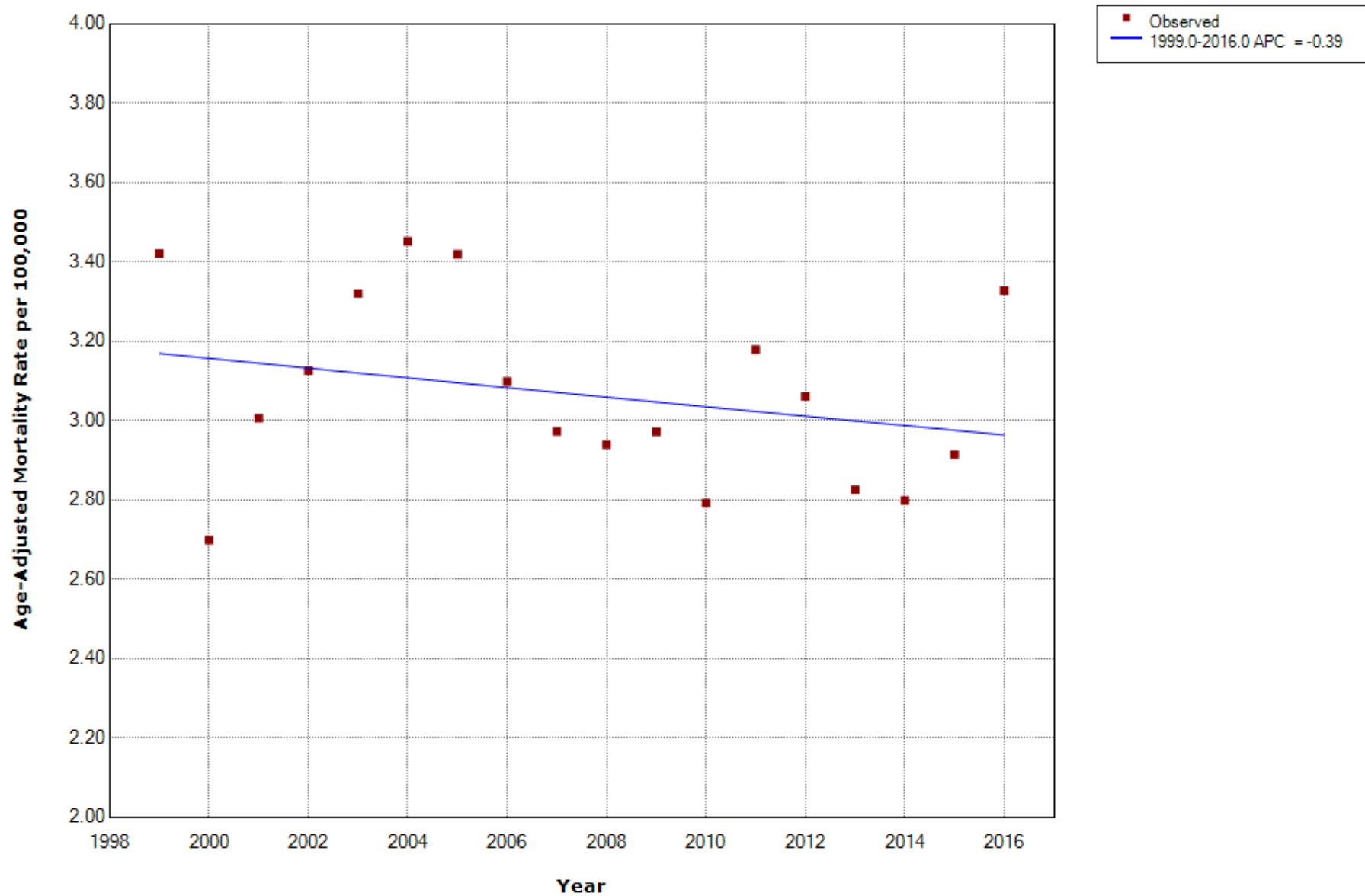


Pancreatic cancer (C25) / NH AIAN: 0 Joinpoints



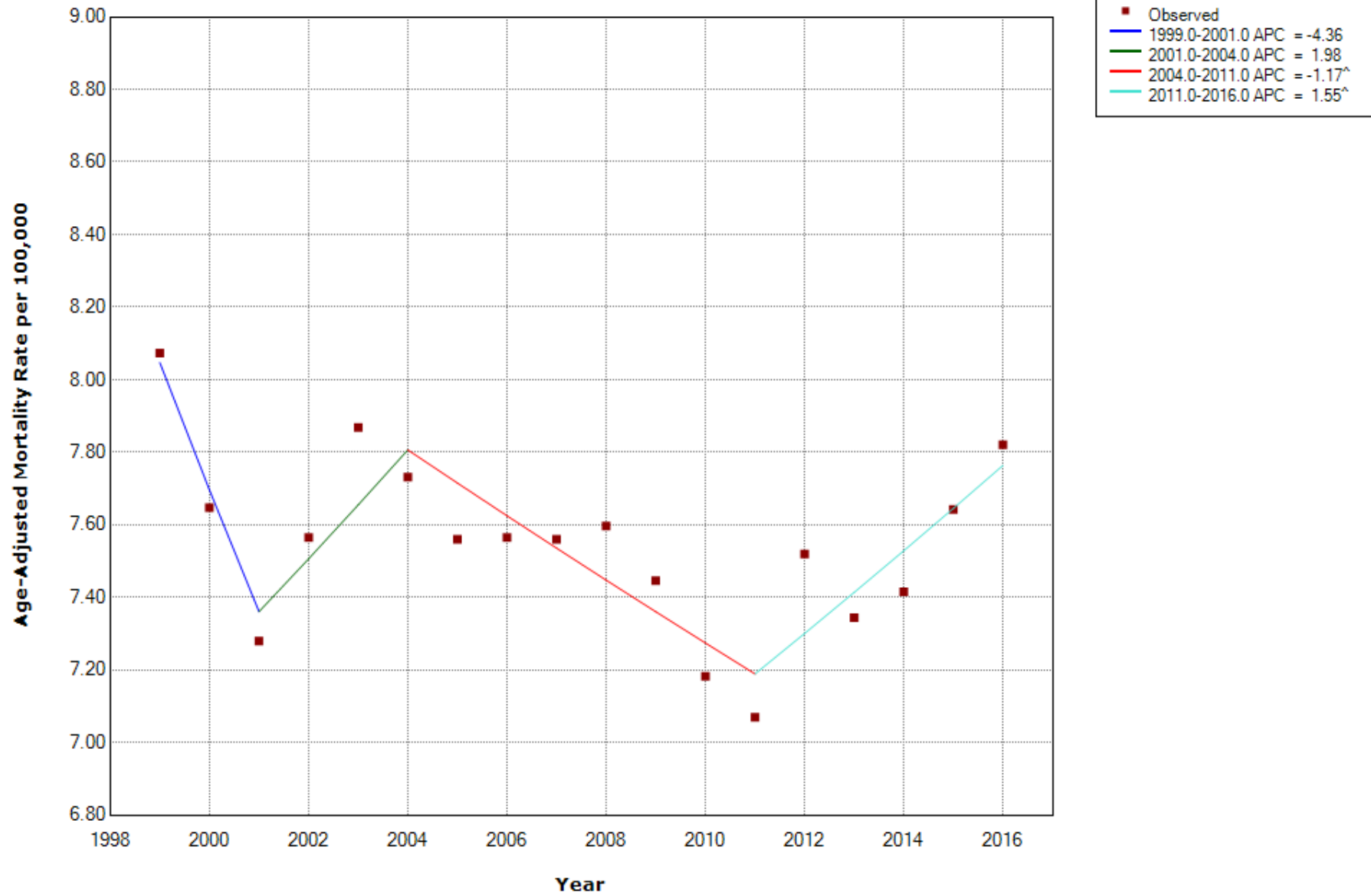
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

Pancreatic cancer (C25) / NH API: 0 Joinpoints



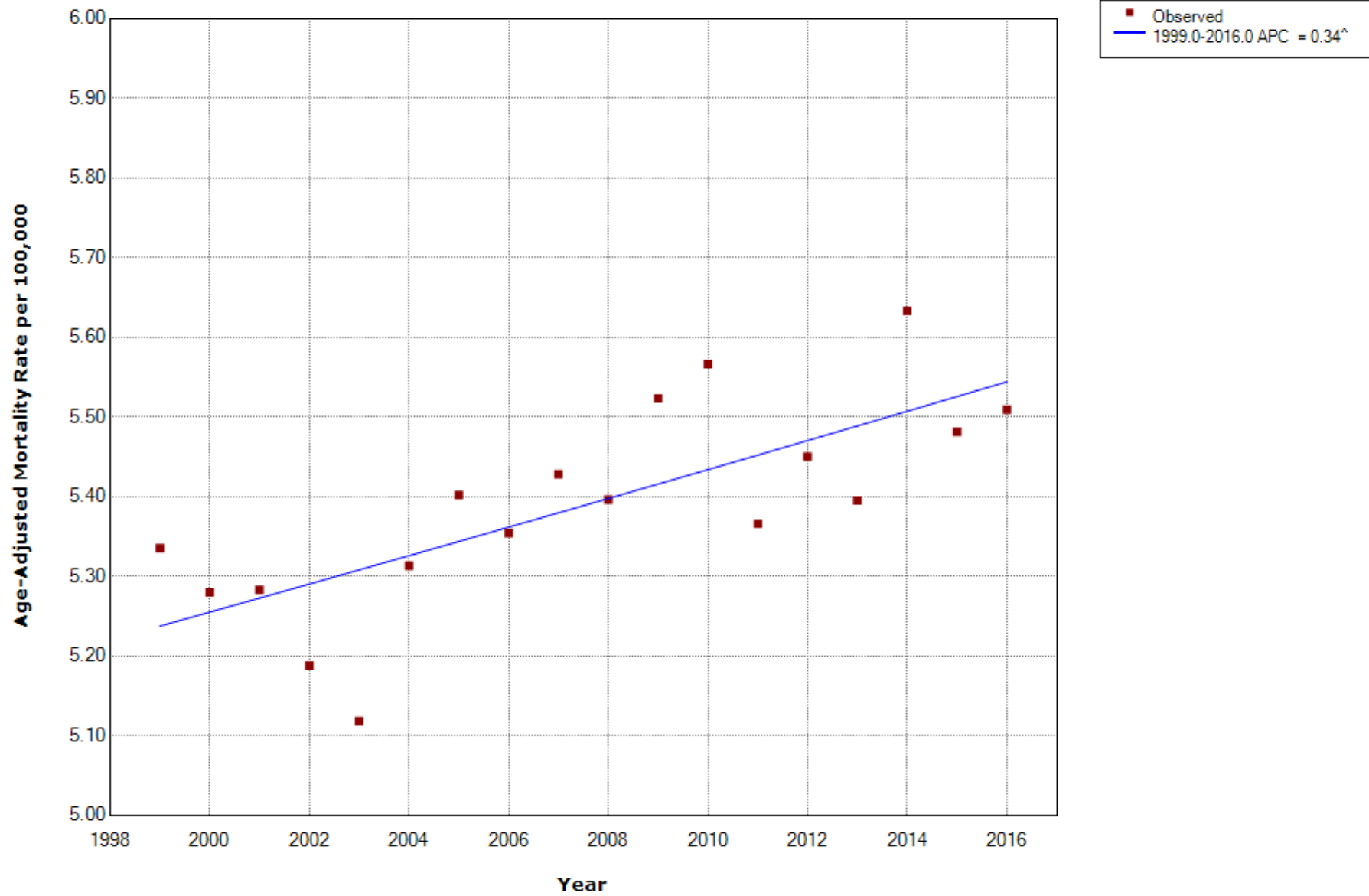
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

### Pancreatic cancer (C25) / NH Blacks: 3 Joinpoints



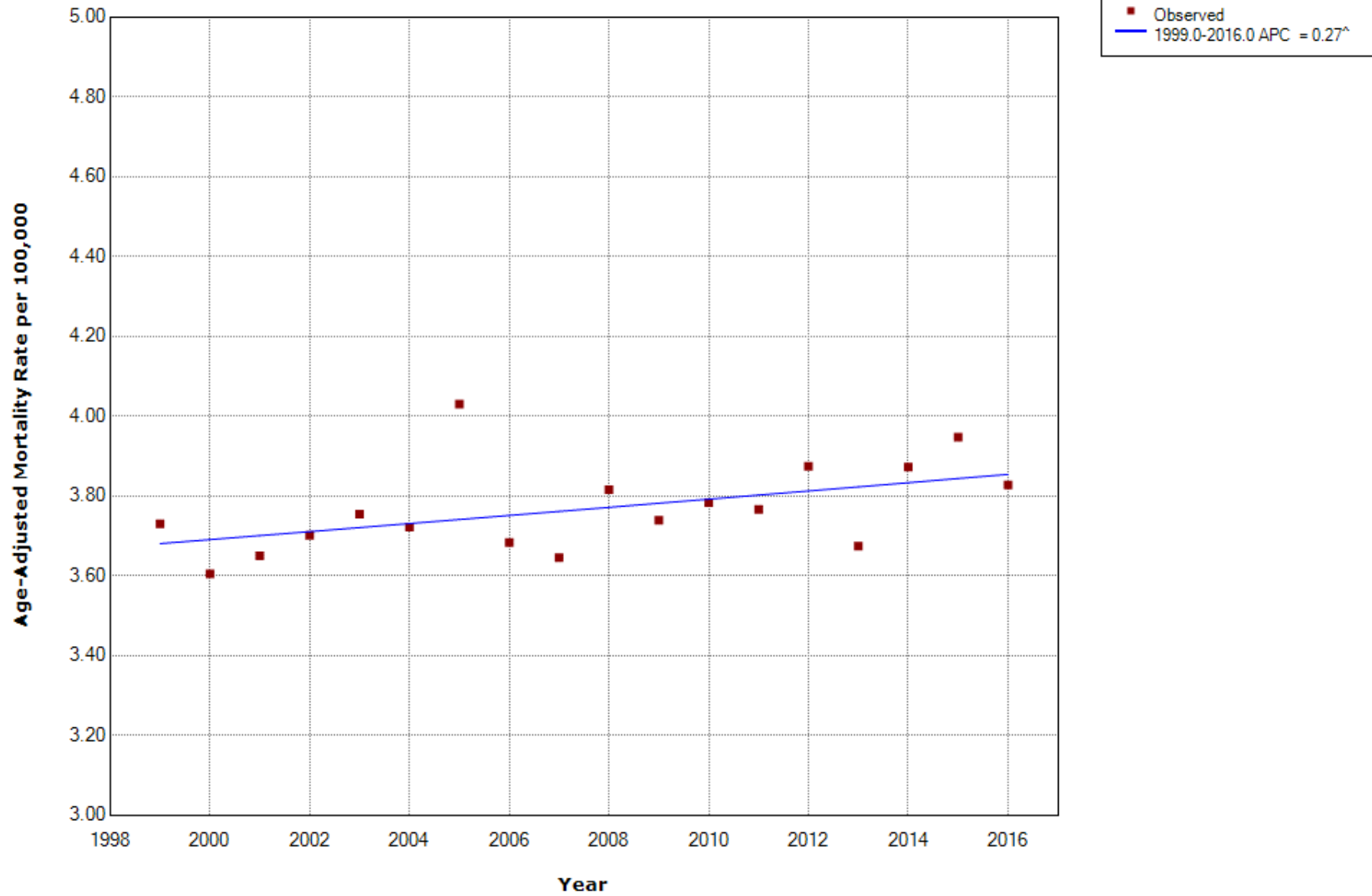
<sup>^</sup> Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 3 Joinpoints.

Pancreatic cancer (C25) / NH whites: 0 Joinpoints



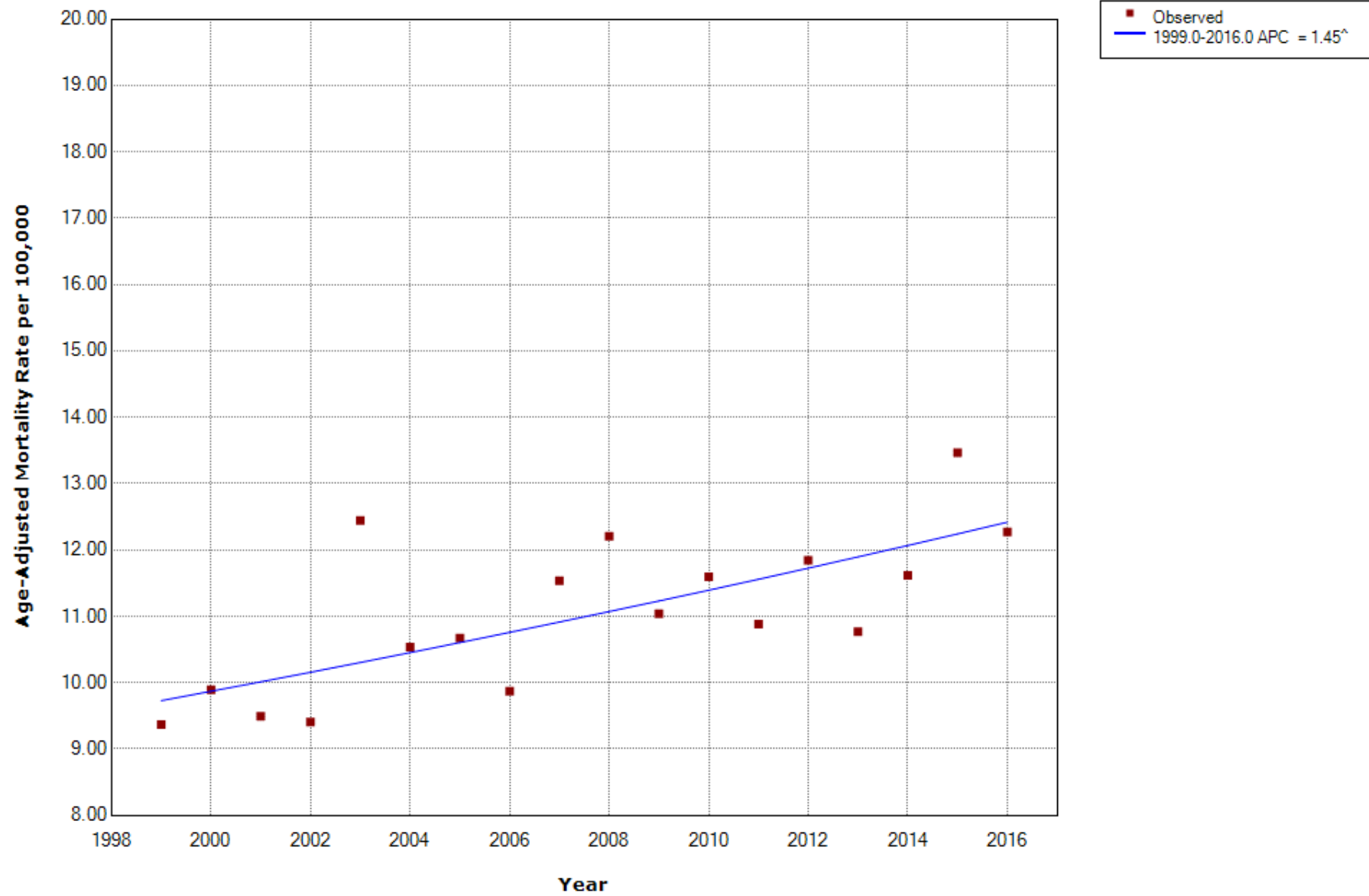
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

Pancreatic cancer (C25) / Hispanics: 0 Joinpoints



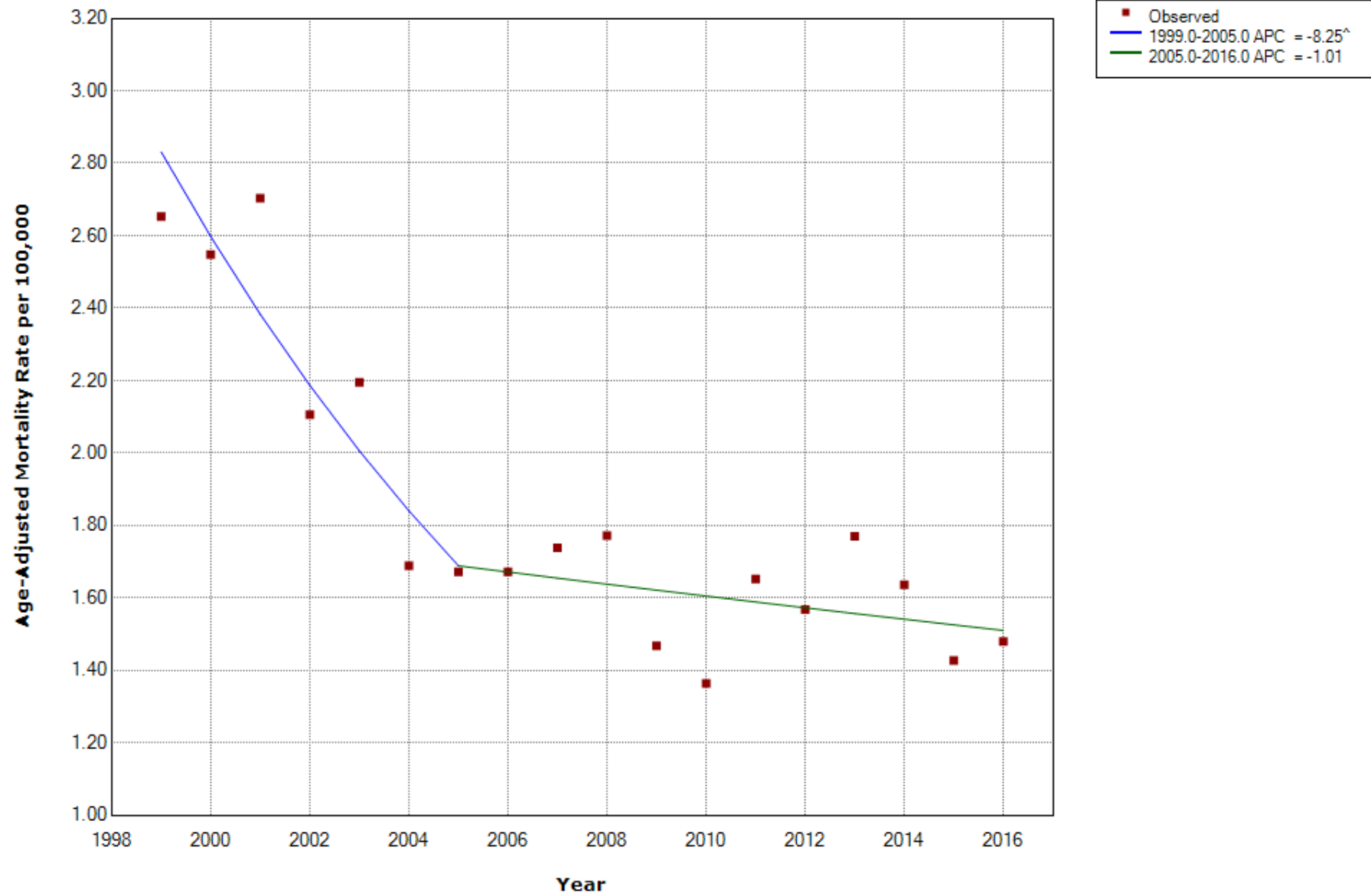
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

### Chronic lower respiratory diseases (J40-J47) / NH AIAN: 0 Joinpoints



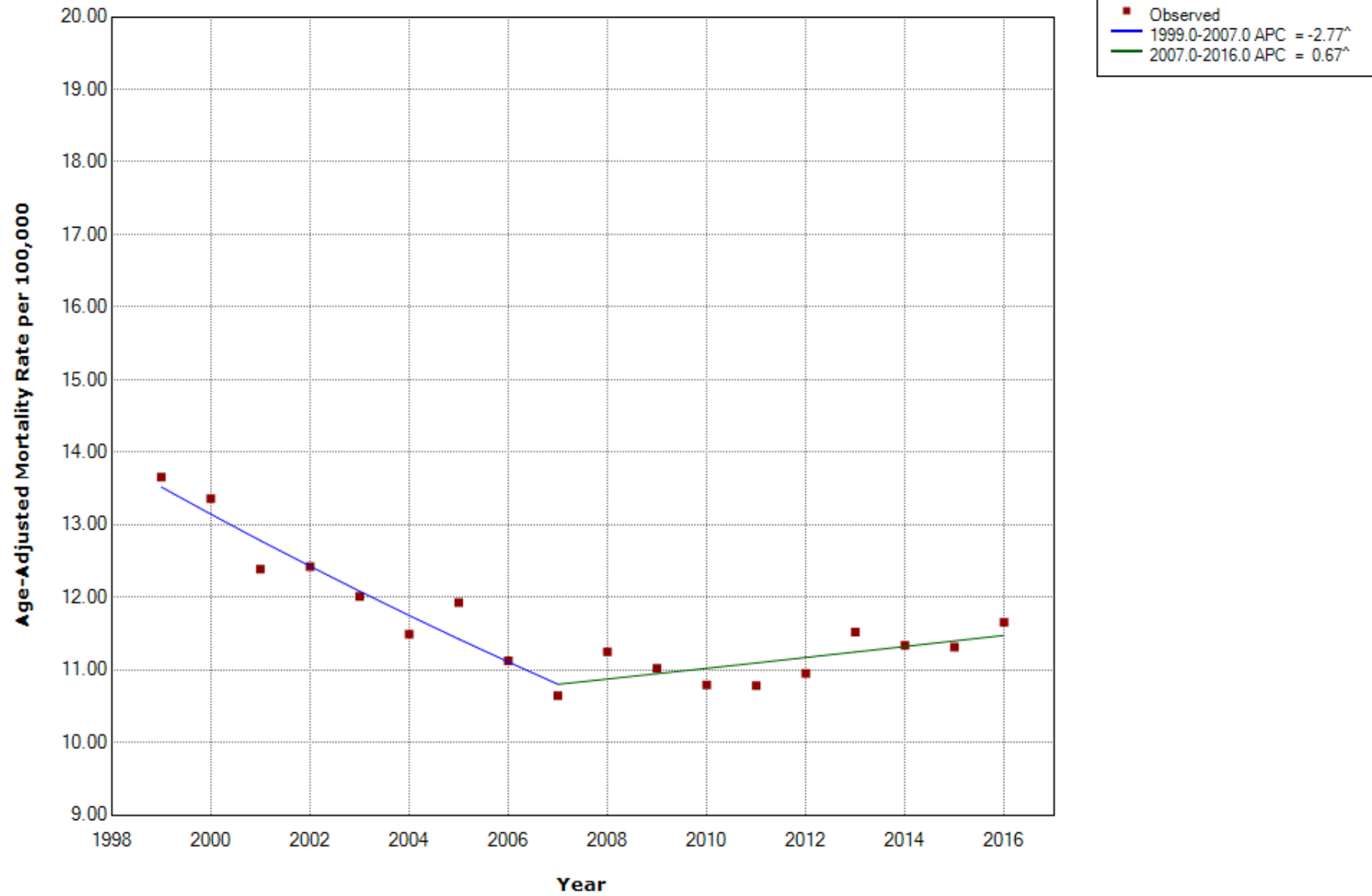
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

### Chronic lower respiratory diseases (J40-J47) / NH API: 1 Joinpoint



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

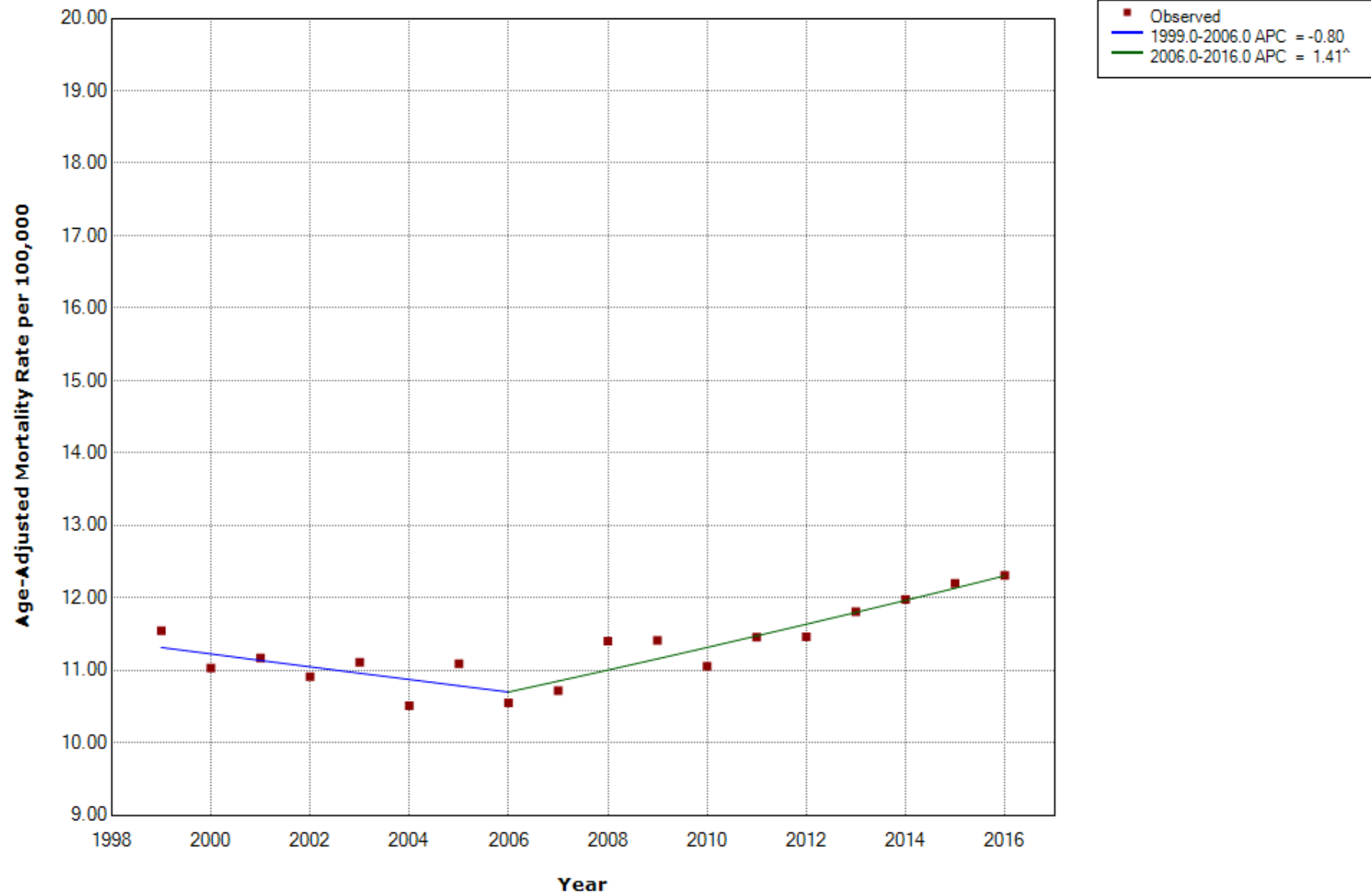
### Chronic lower respiratory diseases (J40-J47) / NH Blacks: 1 Joinpoint



<sup>^</sup> Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

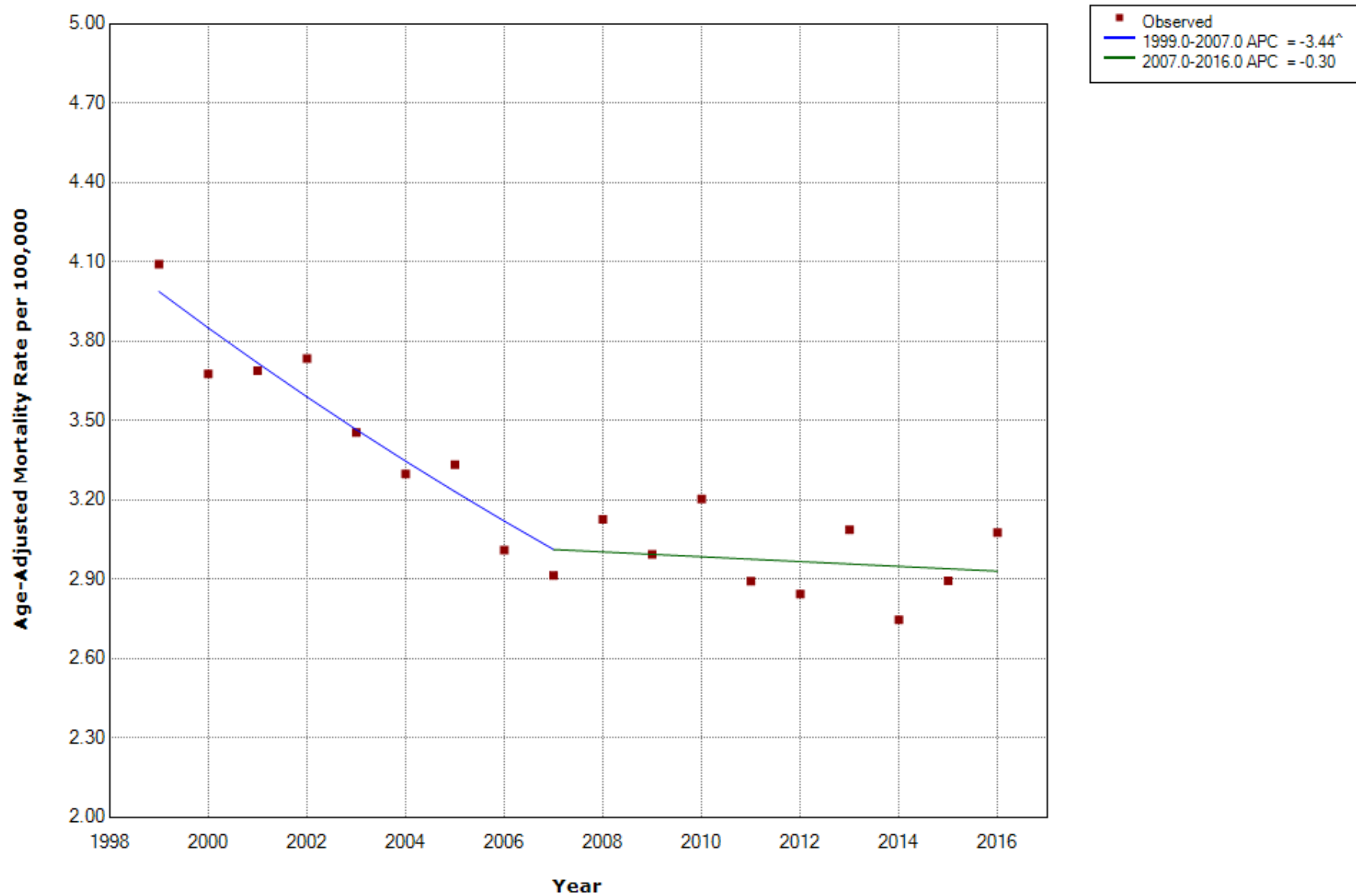


### Chronic lower respiratory diseases (J40-J47) / NH whites: 1 Joinpoint



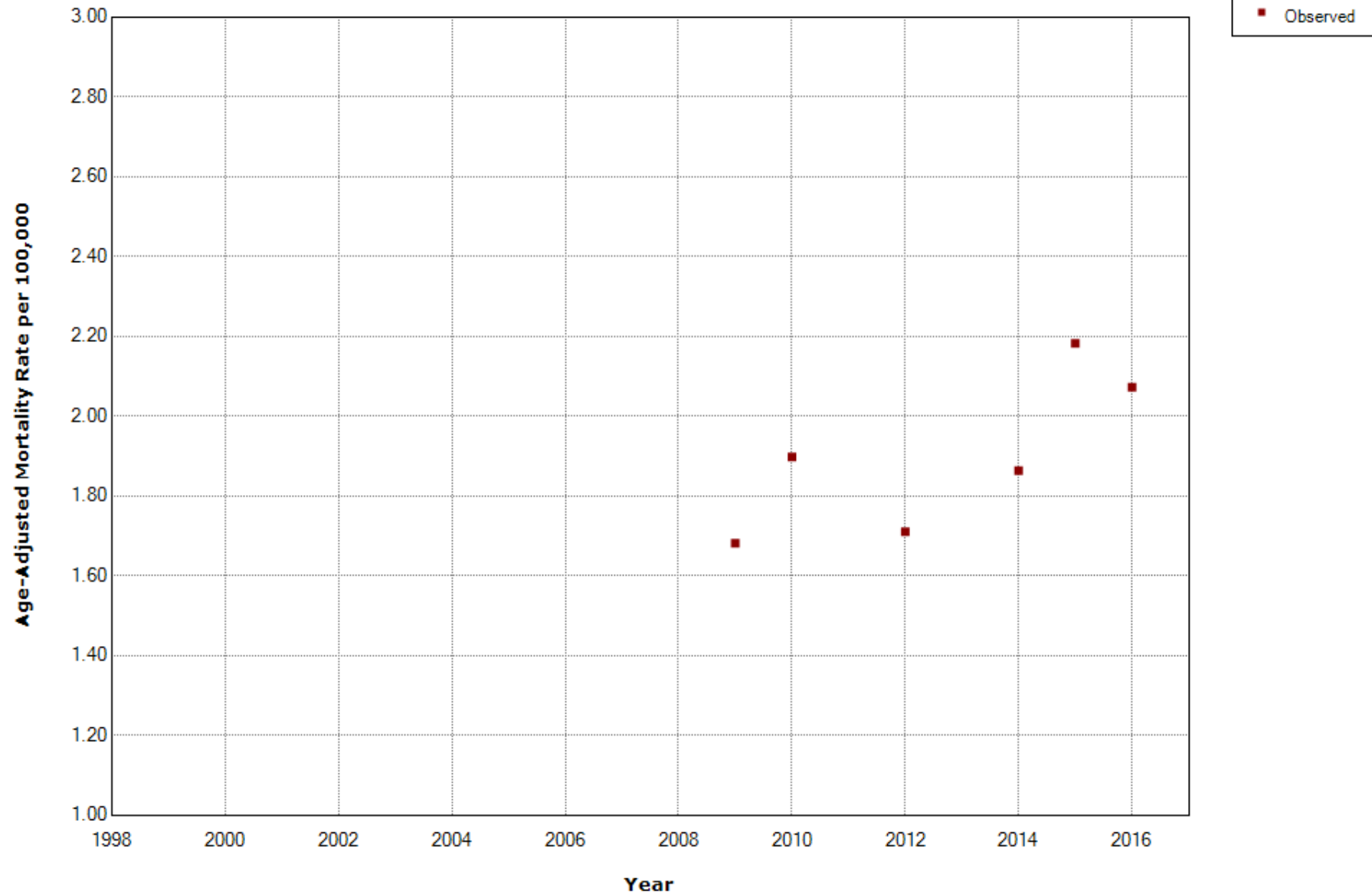
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

### Chronic lower respiratory diseases (J40-J47) / Hispanics: 1 Joinpoint



<sup>\*</sup> Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

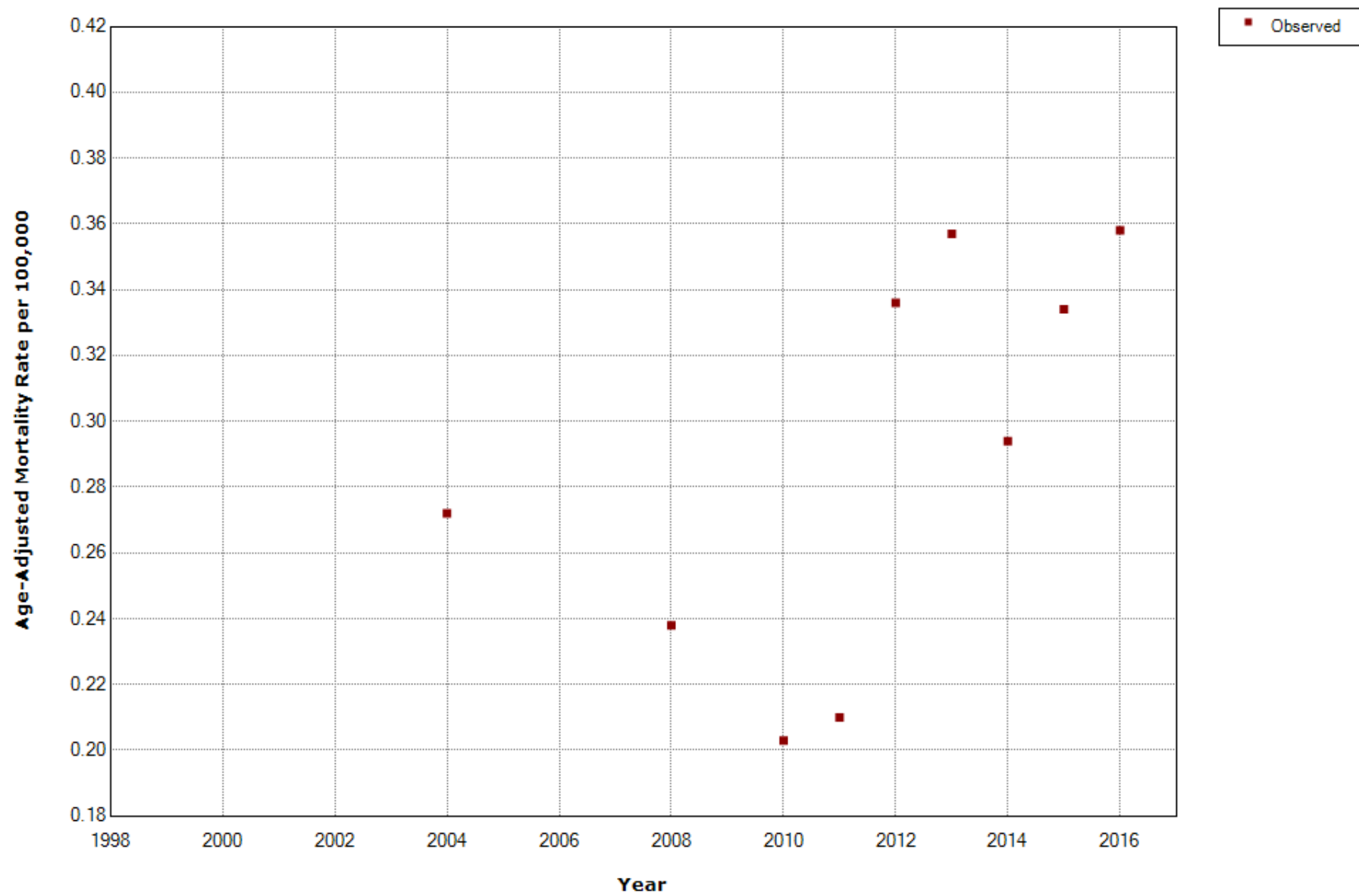
### Lung diseases due to external agents (J60-J70) / NH AIAN: Observed



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

\* Joinpoint cannot process records with missing dependent variable values. Joinpoint will not analyze by-groups that have this error. (Row = 1350, Col = 1)

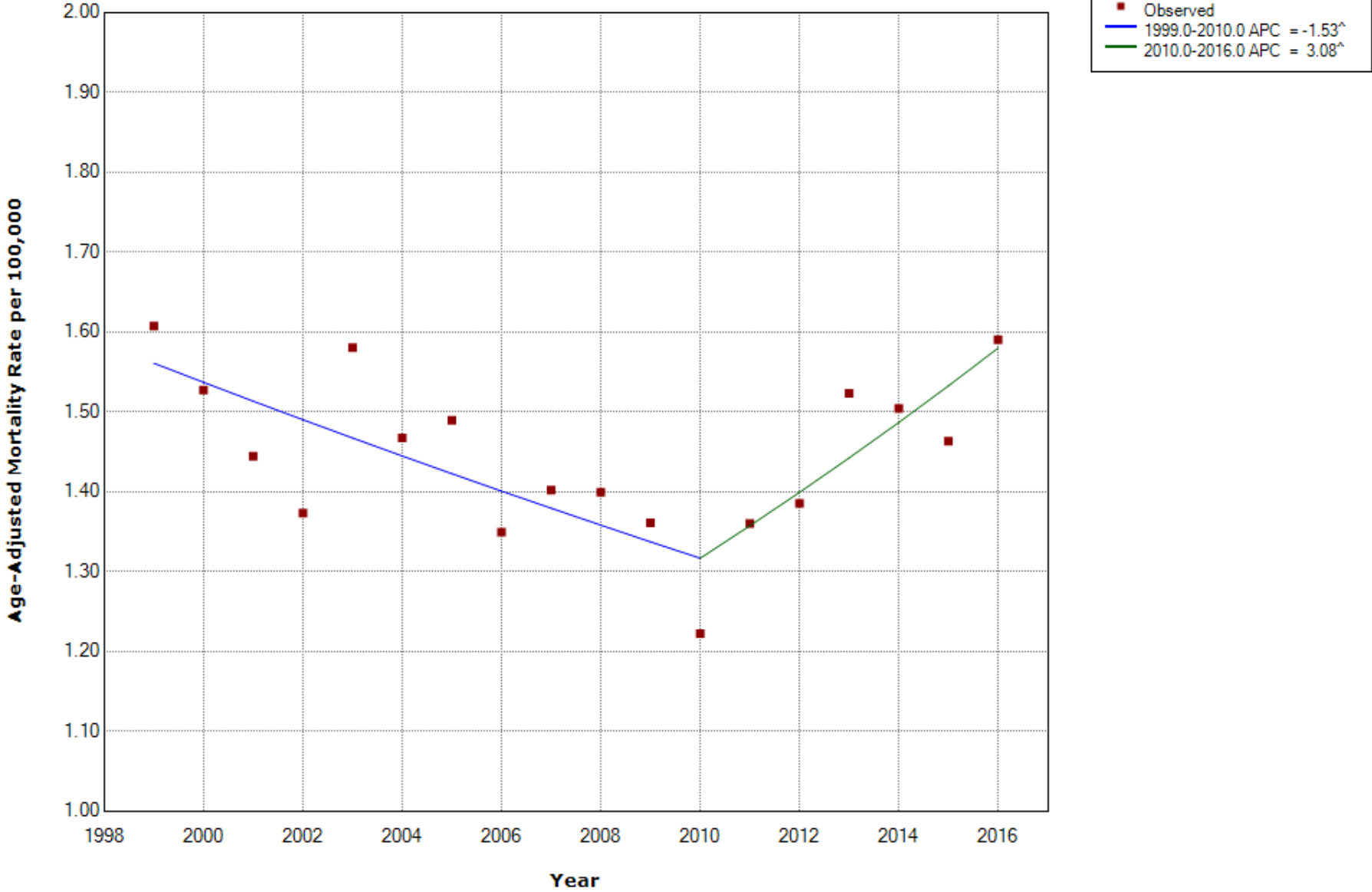
### Lung diseases due to external agents (J60-J70) / NH API: Observed



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

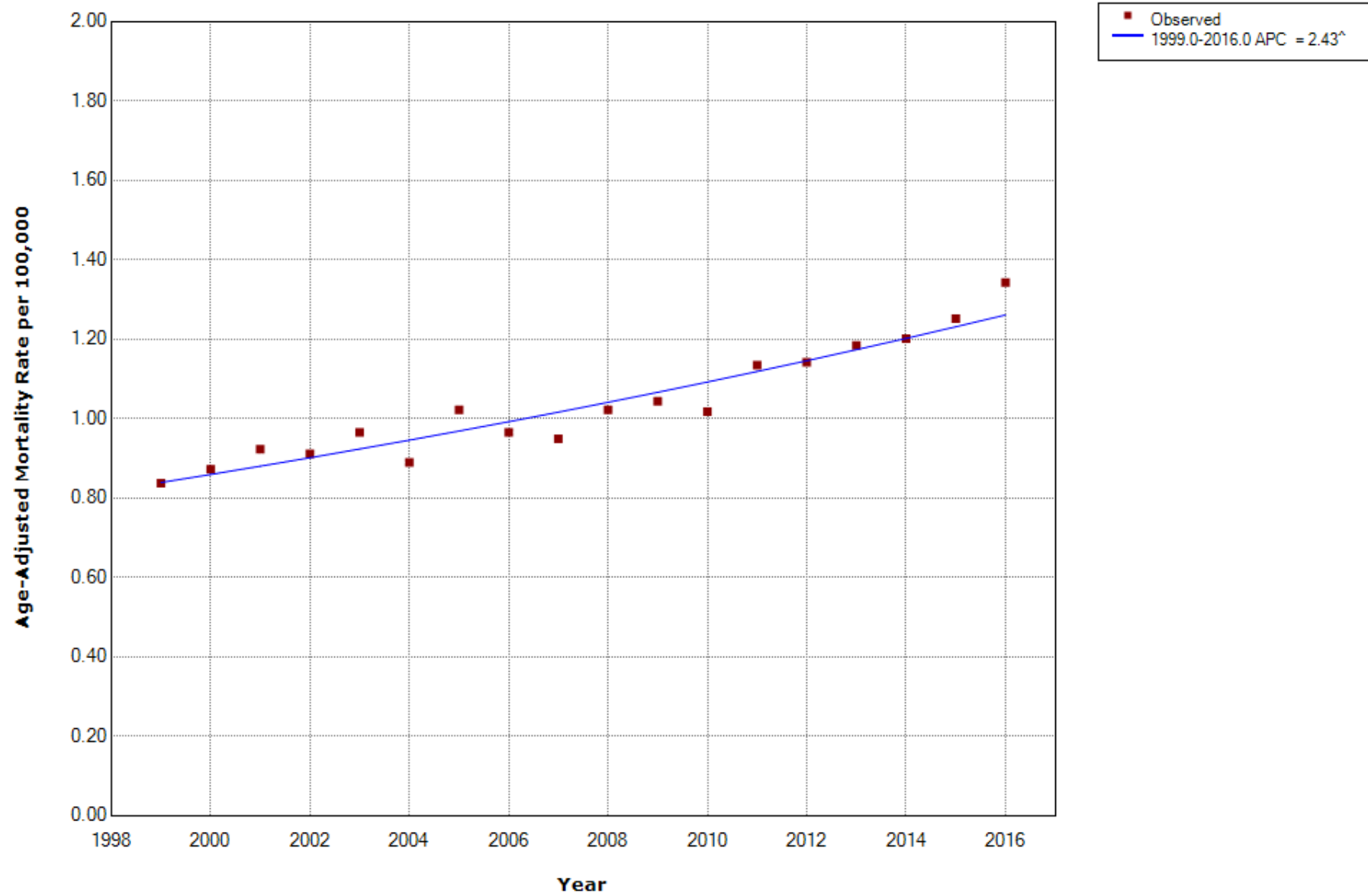
\* Joinpoint cannot process records with missing dependent variable values. Joinpoint will not analyze by-groups that have this error. (Row = 1368, Col = 1)

Lung diseases due to external agents (J60-J70) / NH Blacks: 1 Joinpoint



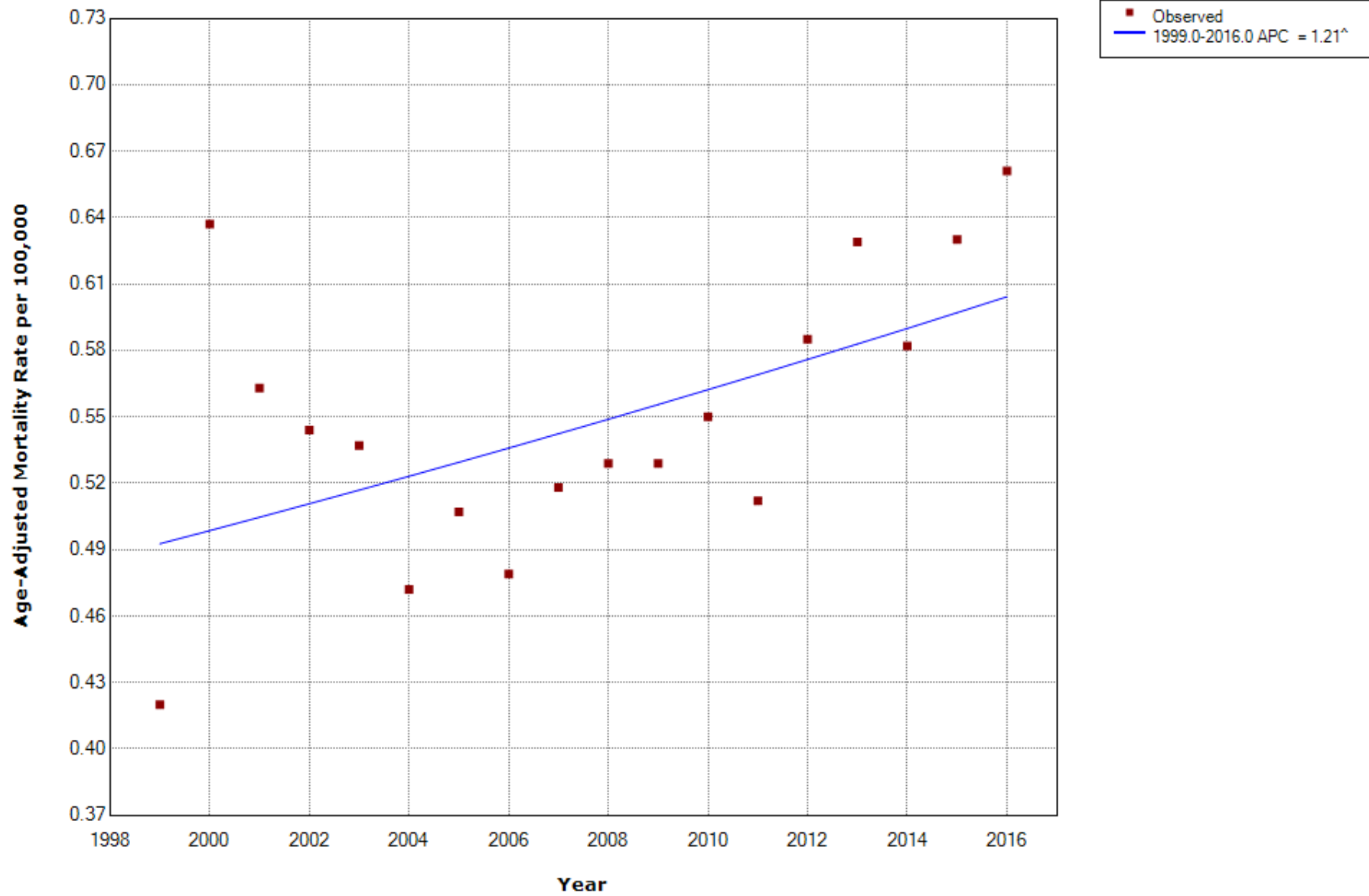
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

Lung diseases due to external agents (J60-J70) / NH whites: 0 Joinpoints



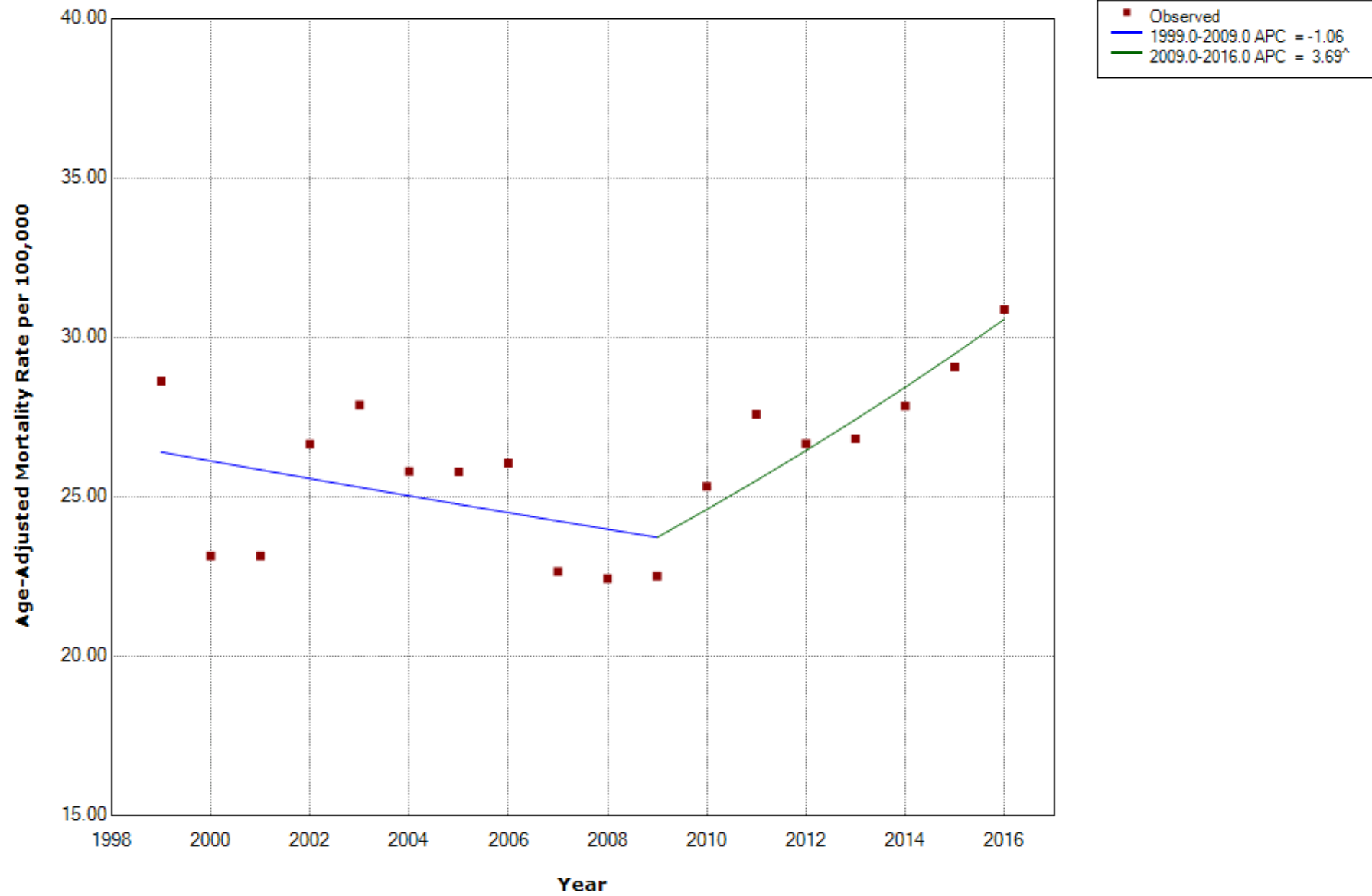
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

Lung diseases due to external agents (J60-J70) / Hispanics: 0 Joinpoints



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

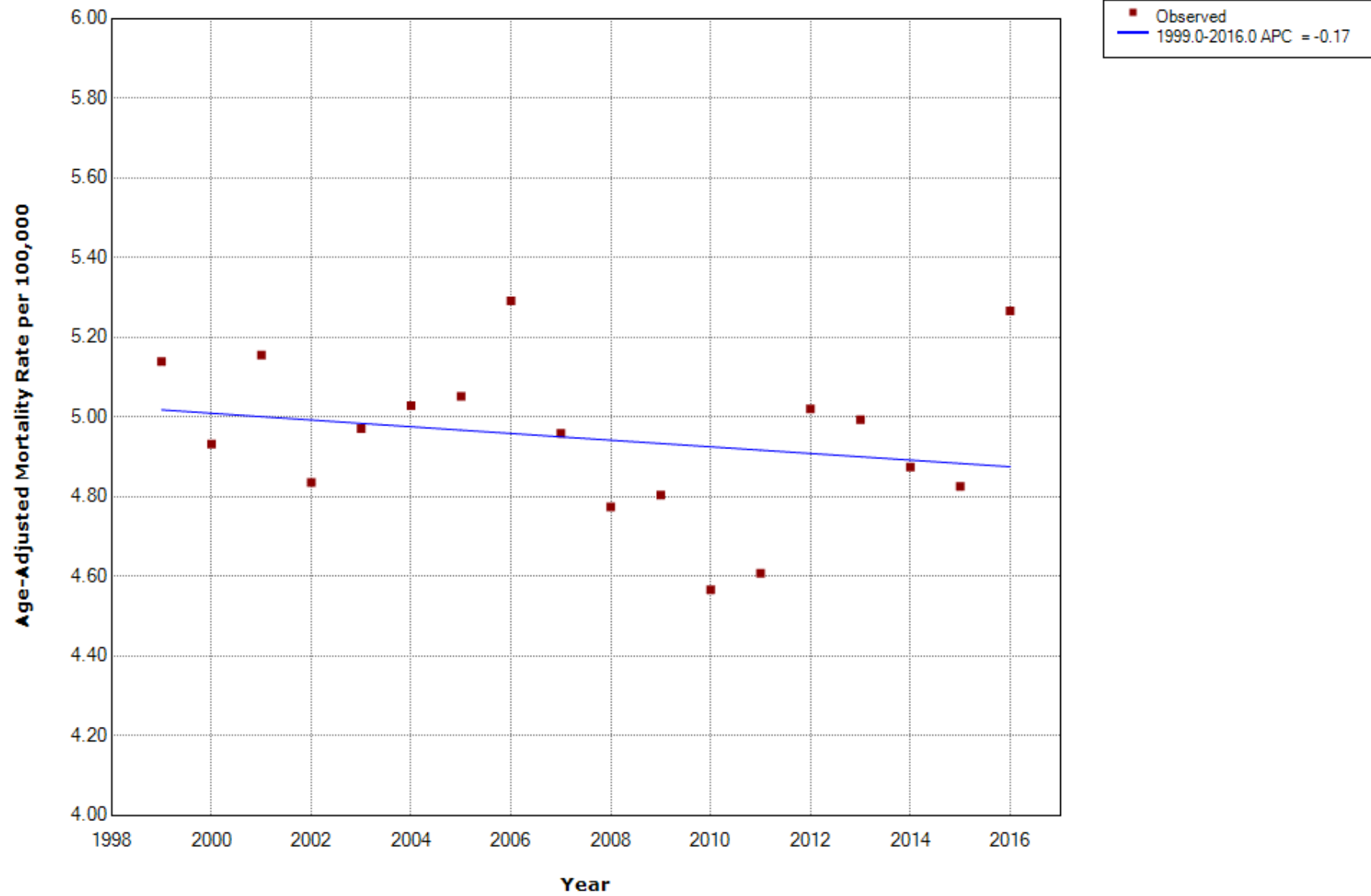
### Diabetes mellitus (E10-E14) / NH AIAN: 1 Joinpoint



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

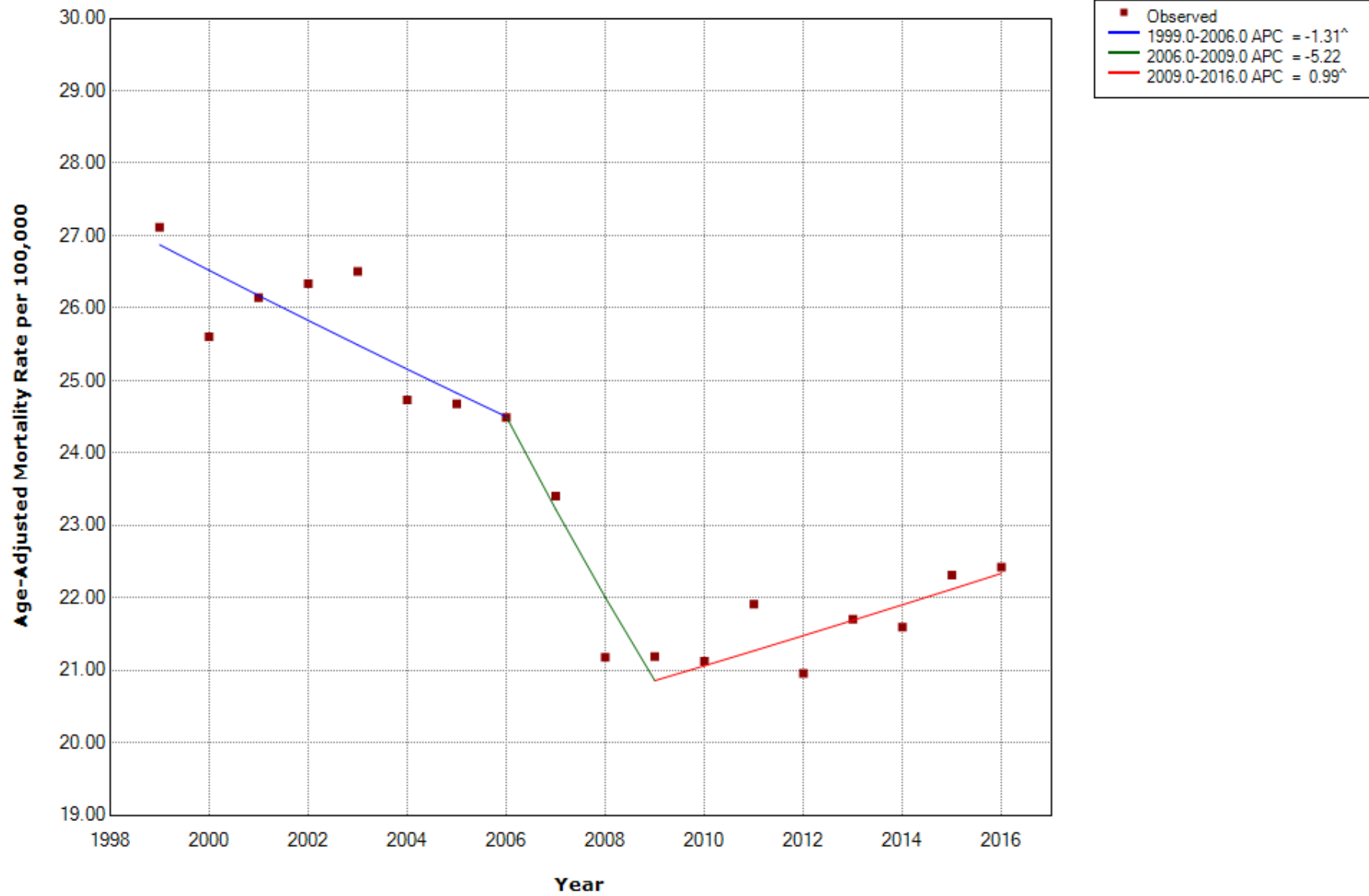


### Diabetes mellitus (E10-E14) / NH API: 0 Joinpoints



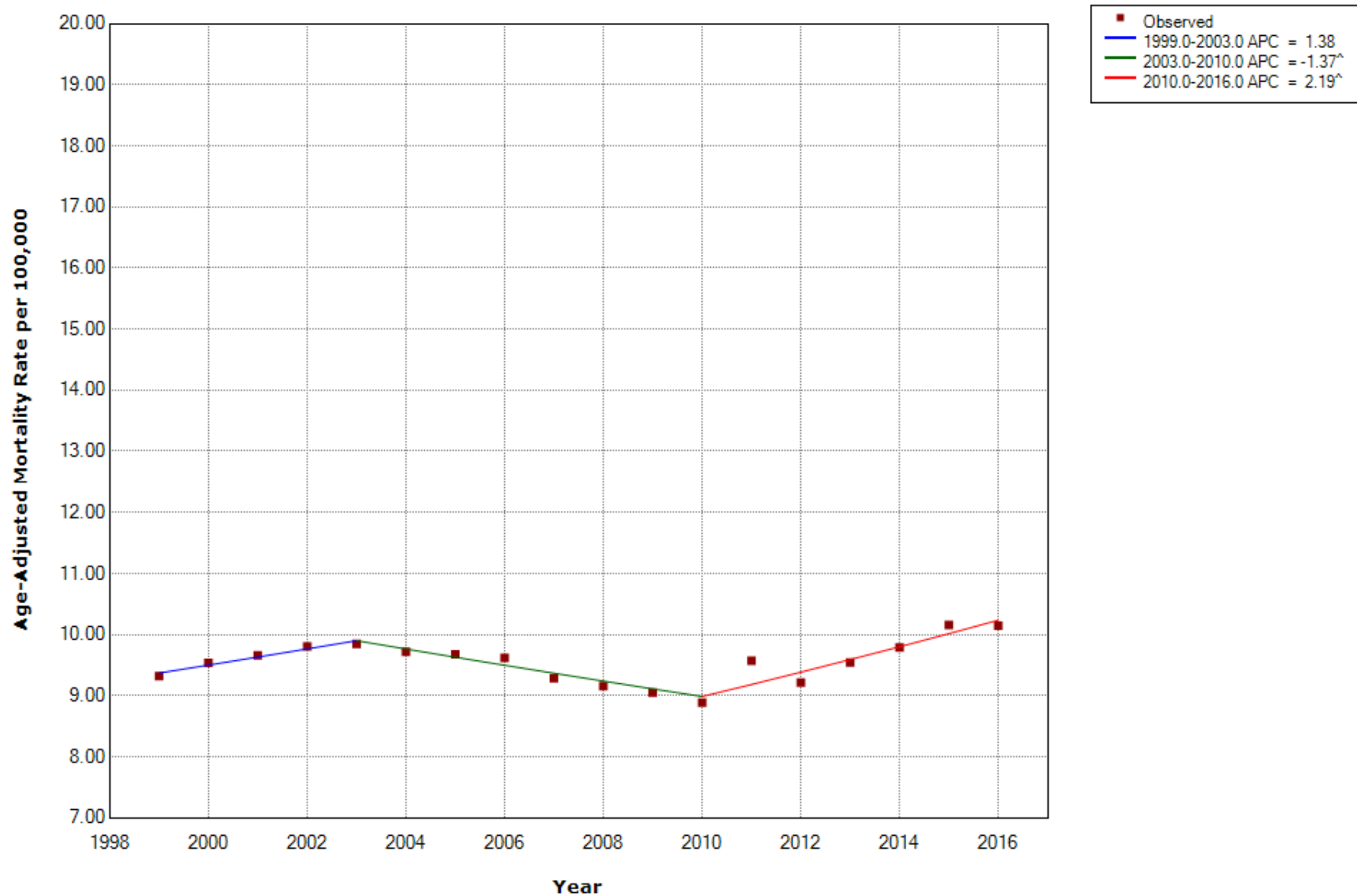
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

### Diabetes mellitus (E10-E14) / NH Blacks: 2 Joinpoints



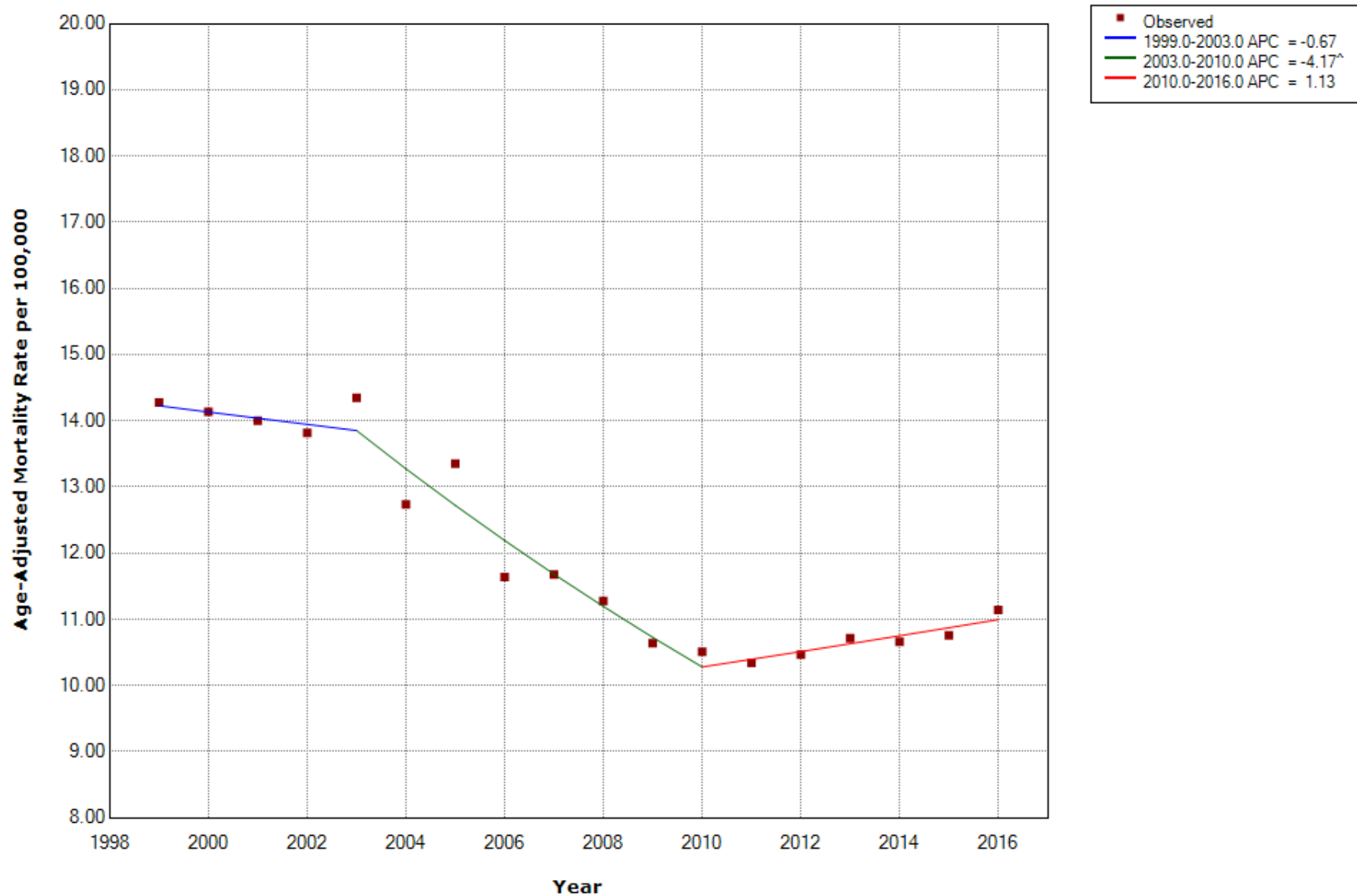
<sup>^</sup> Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

### Diabetes mellitus (E10-E14) / NH whites: 2 Joinpoints



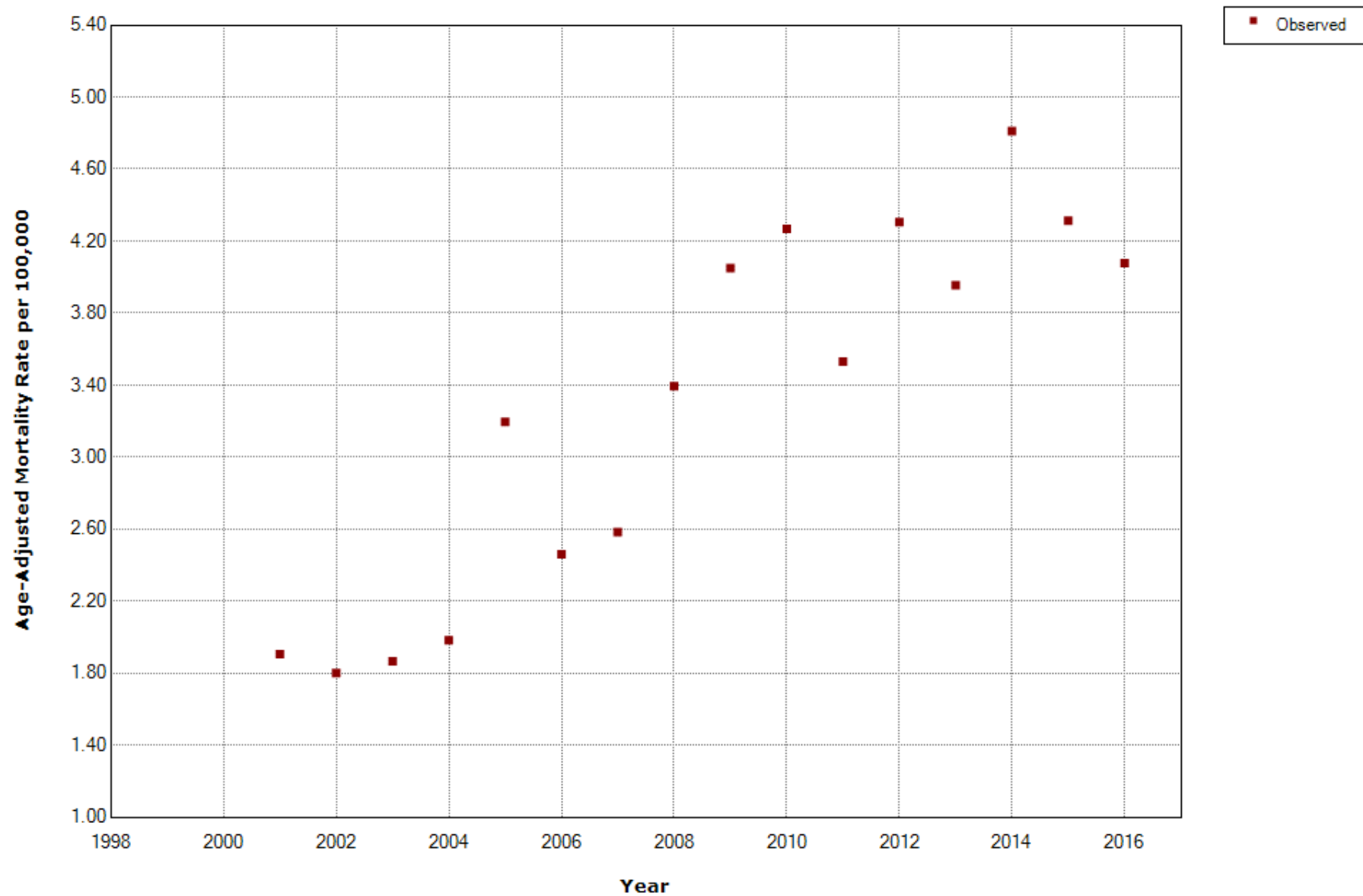
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

### Diabetes mellitus (E10-E14) / Hispanics: 2 Joinpoints



<sup>^</sup> Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

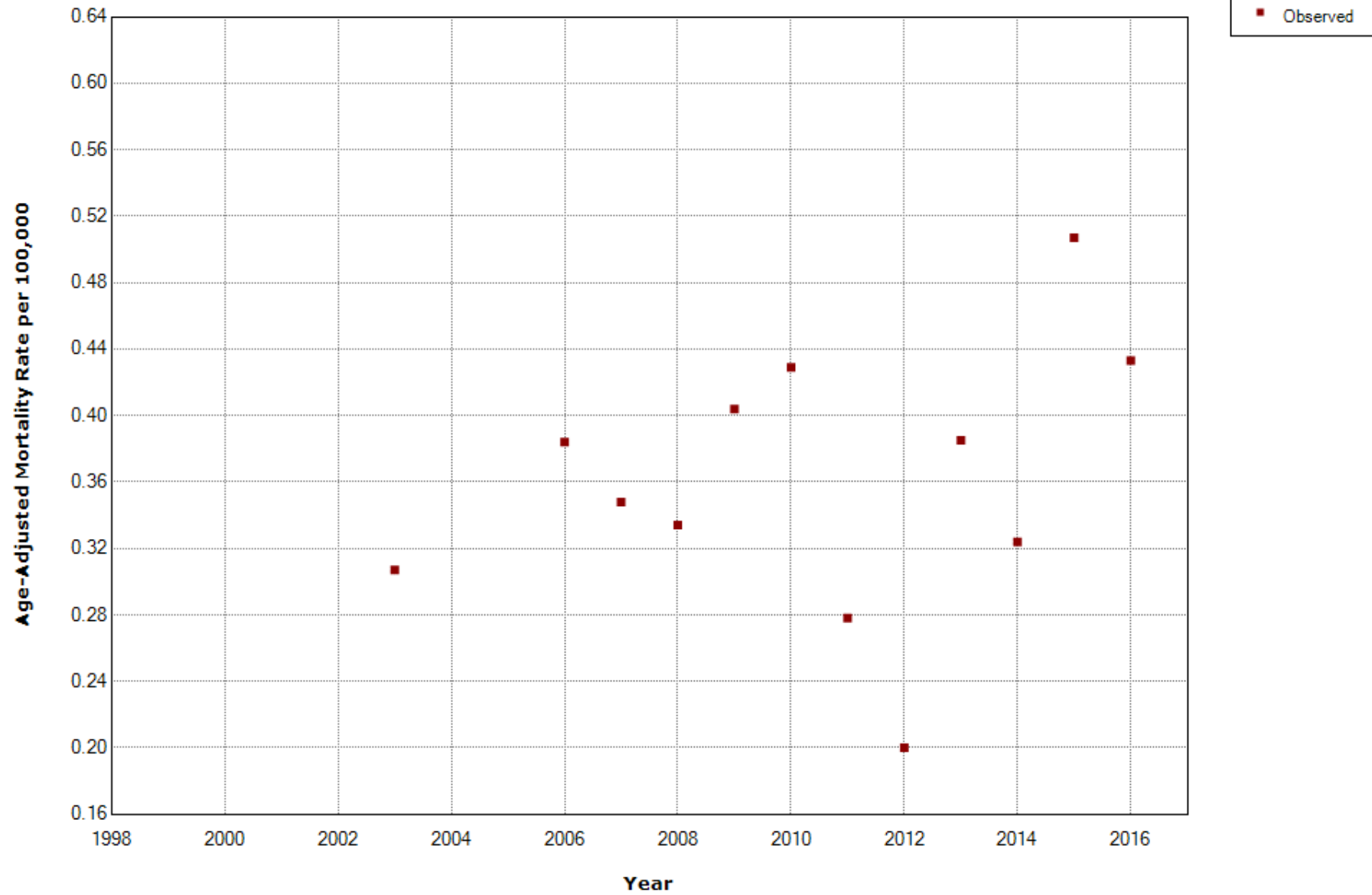
### Obesity (E65-E68) / NH AIAN: Observed



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

\* Joinpoint cannot process records with missing dependent variable values. Joinpoint will not analyze by-groups that have this error. (Row = 1530, Col = 1)

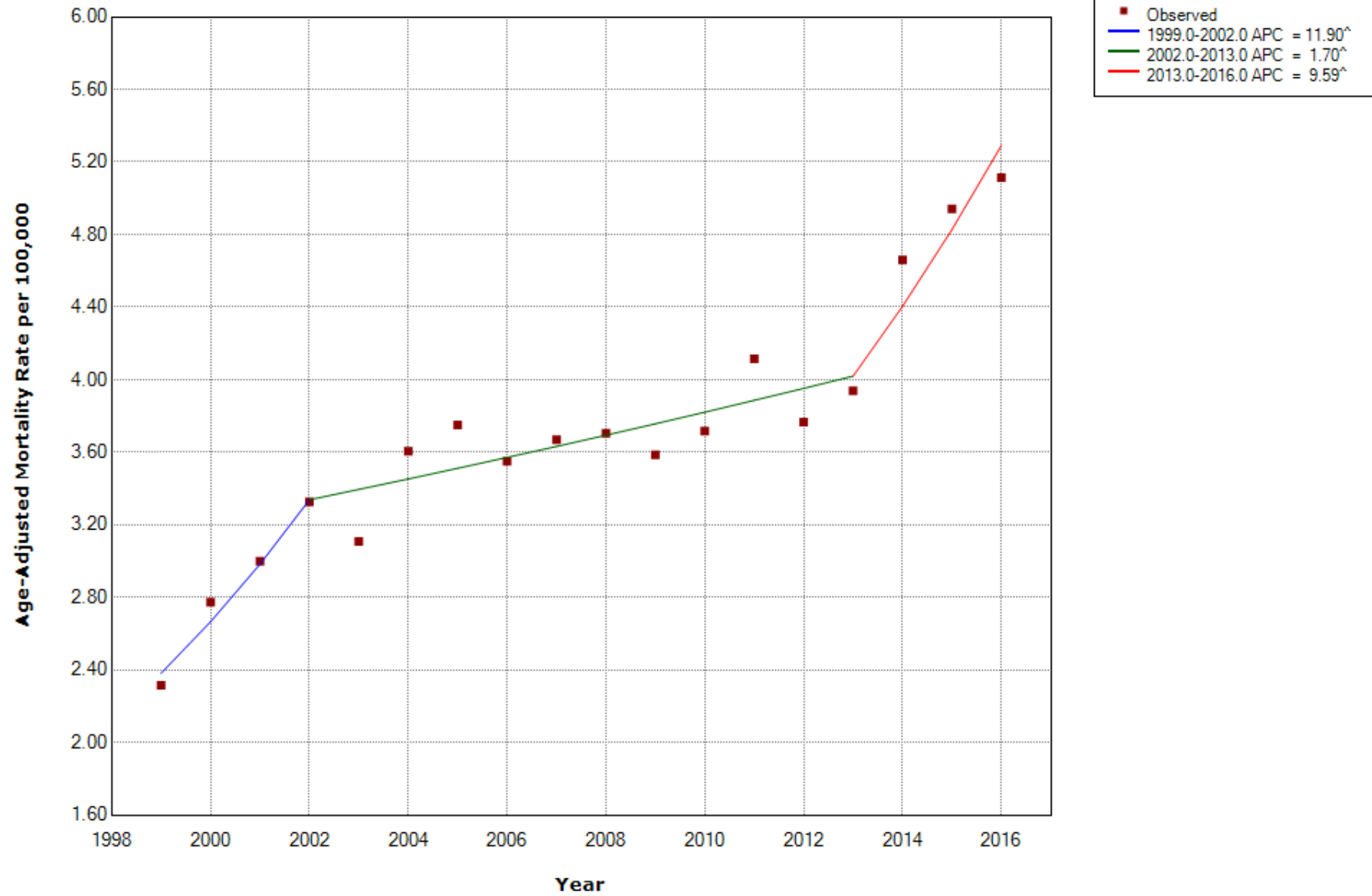
### Obesity (E65-E68) / NH API: Observed



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

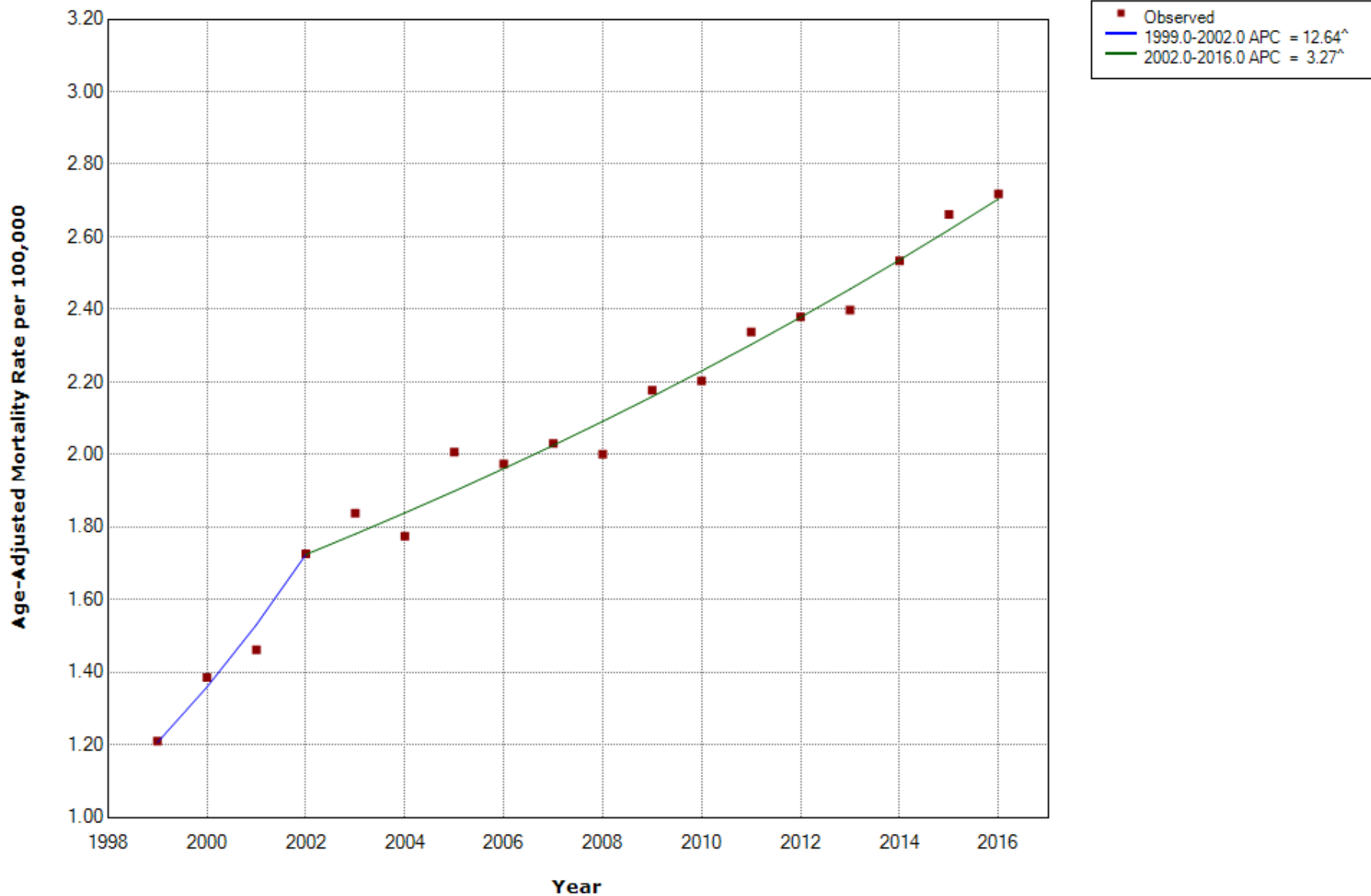
\* Joinpoint cannot process records with missing dependent variable values. Joinpoint will not analyze by-groups that have this error. (Row = 1548, Col = 1)

### Obesity (E65-E68) / NH Blacks: 2 Joinpoints



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

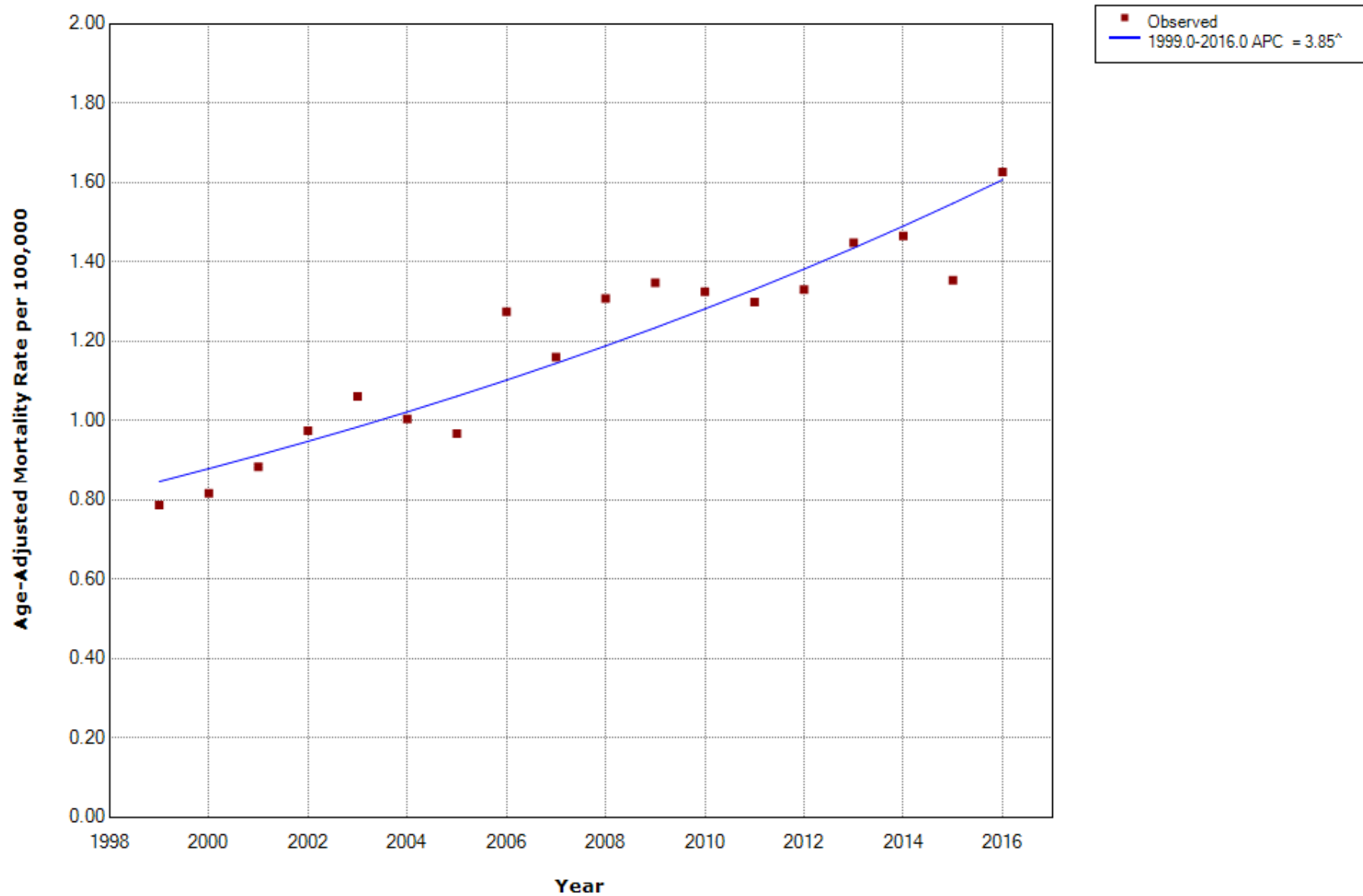
Obesity (E65-E68) / NH whites: 1 Joinpoint



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

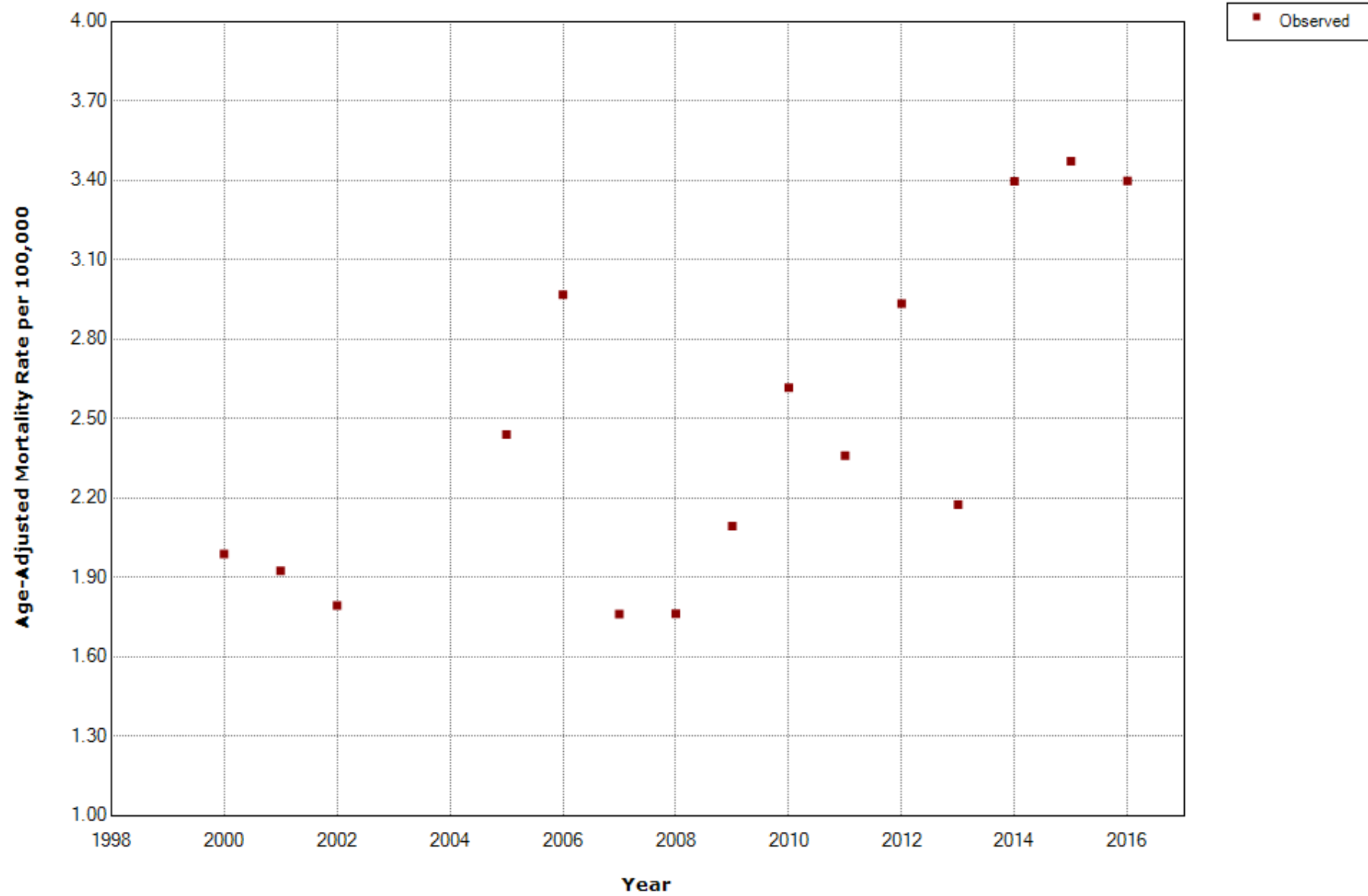


### Obesity (E65-E68) / Hispanics: 0 Joinpoints



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

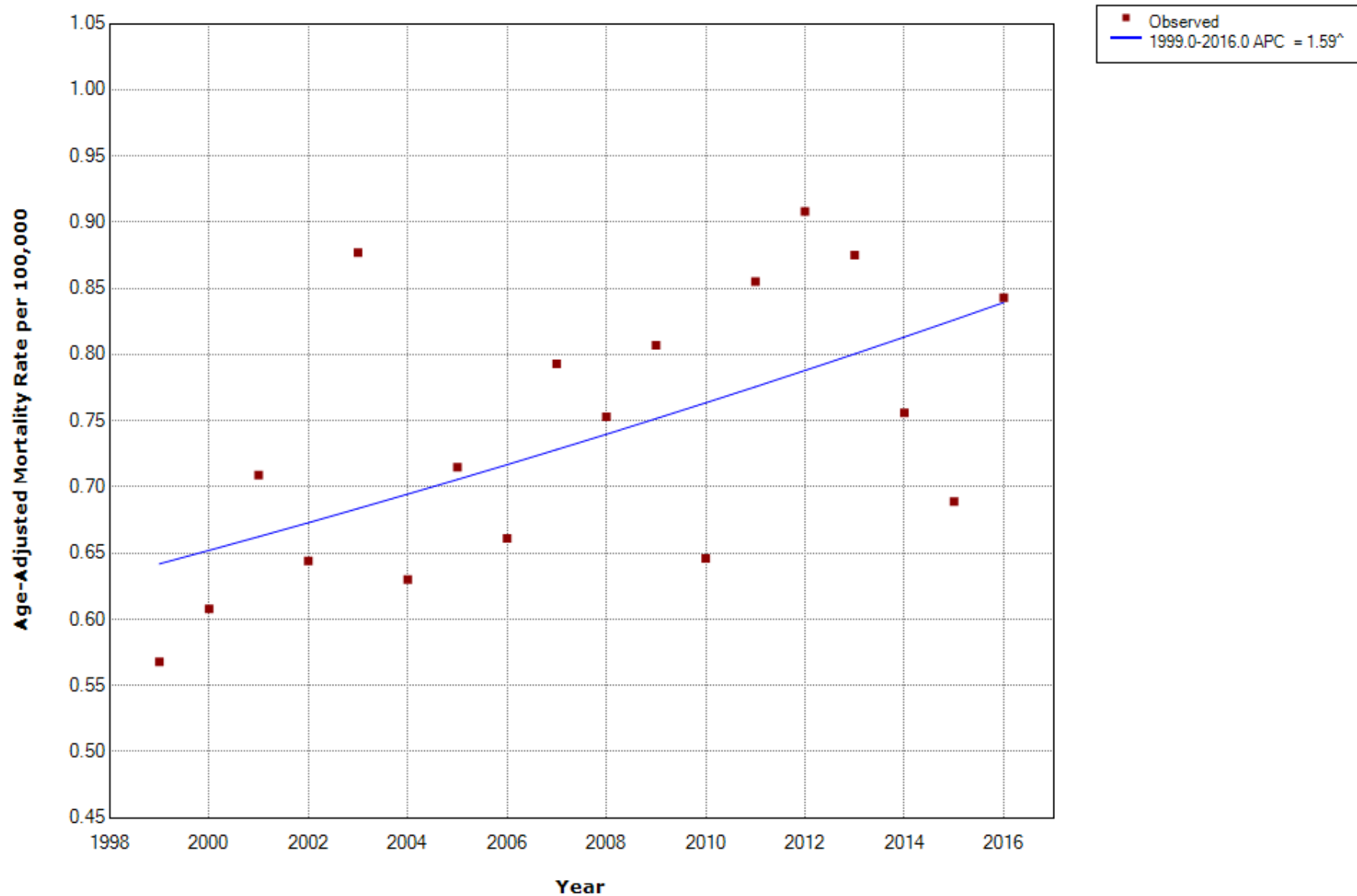
### Metabolic disorders (E70-E88) / NH AIAN: Observed



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

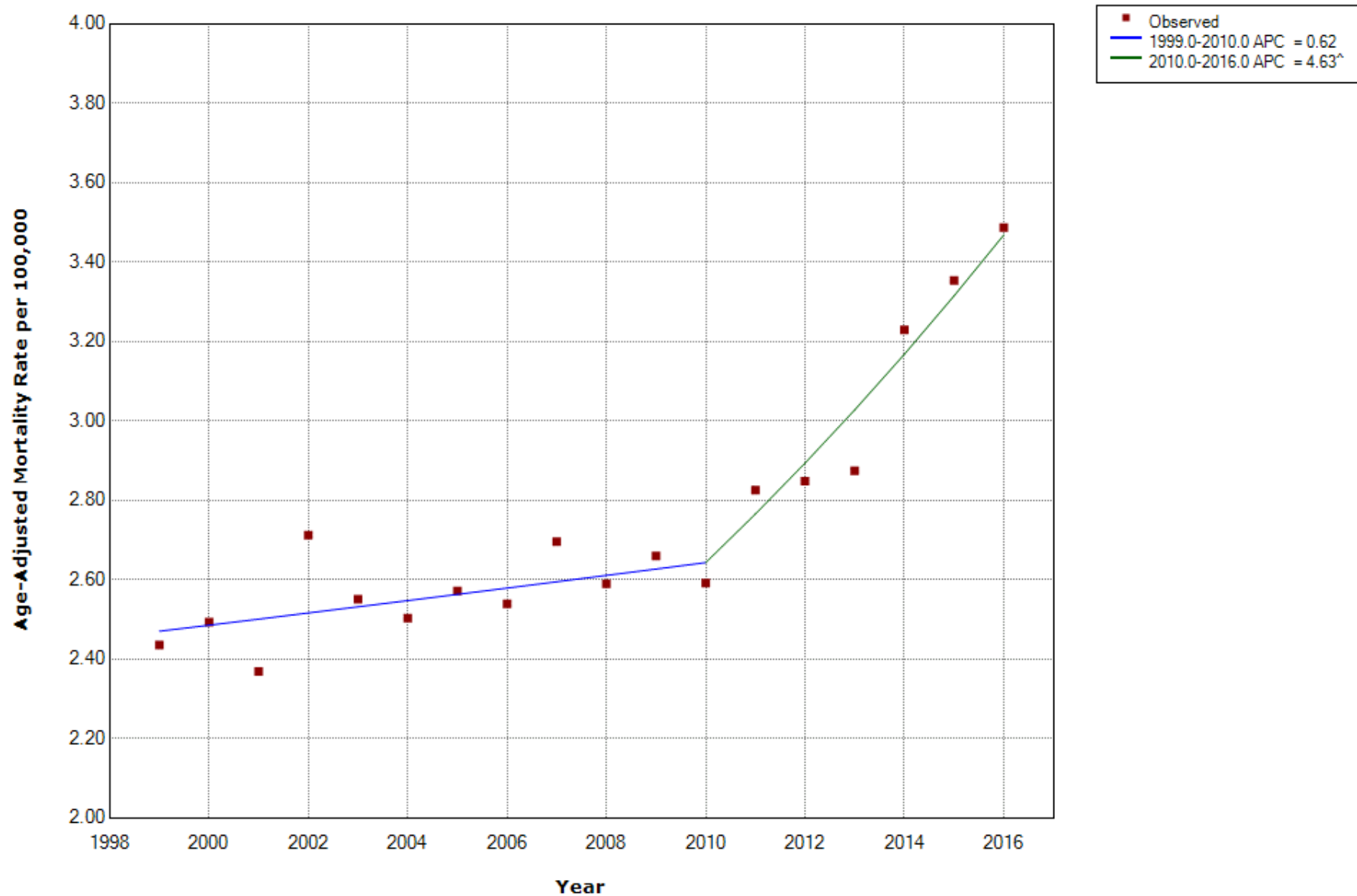
\* Joinpoint cannot process records with missing dependent variable values. Joinpoint will not analyze by-groups that have this error. (Row = 1620, Col = 1)

### Metabolic disorders (E70-E88) / NH API: 0 Joinpoints



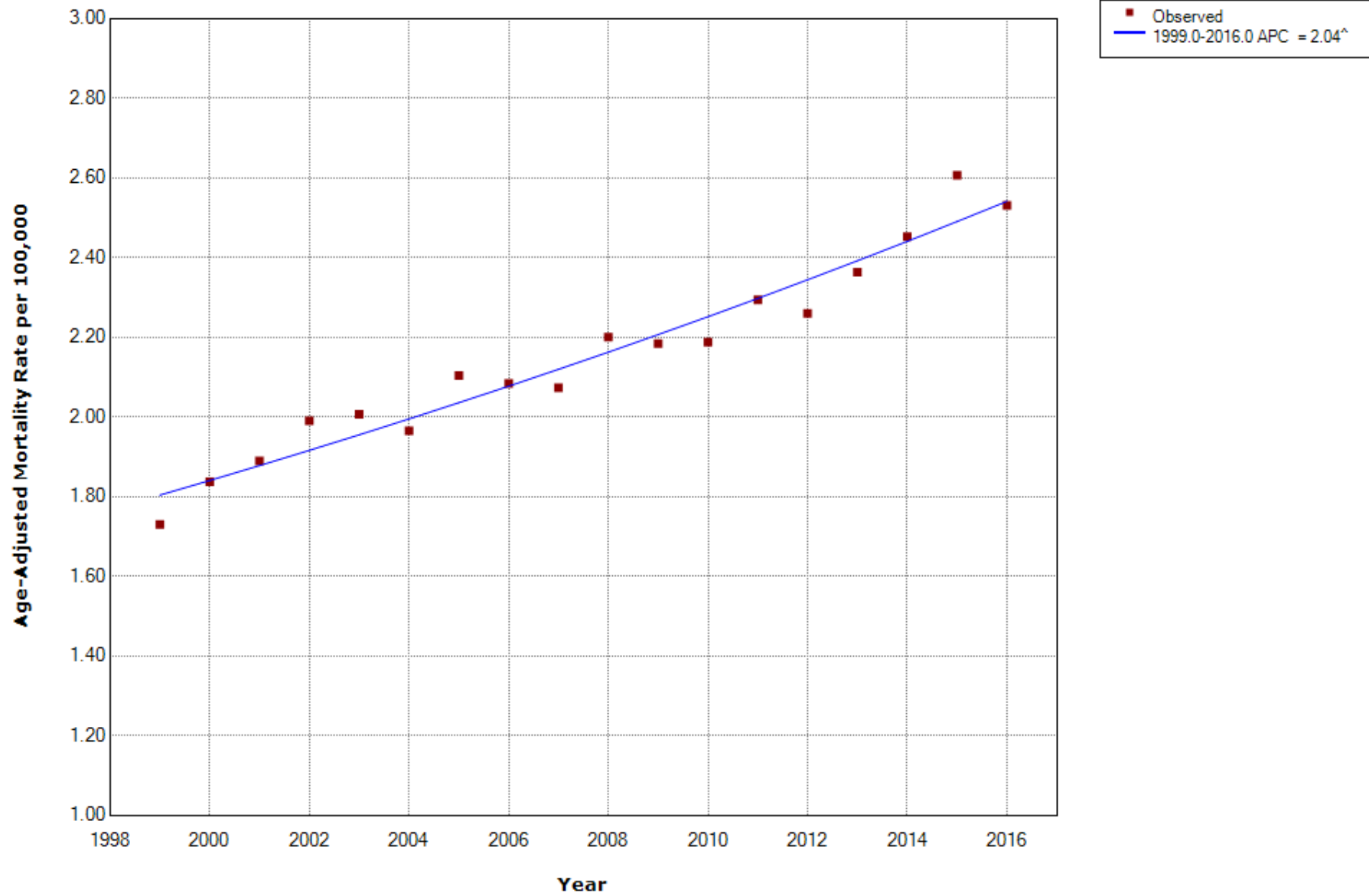
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

### Metabolic disorders (E70-E88) / NH Blacks: 1 Joinpoint



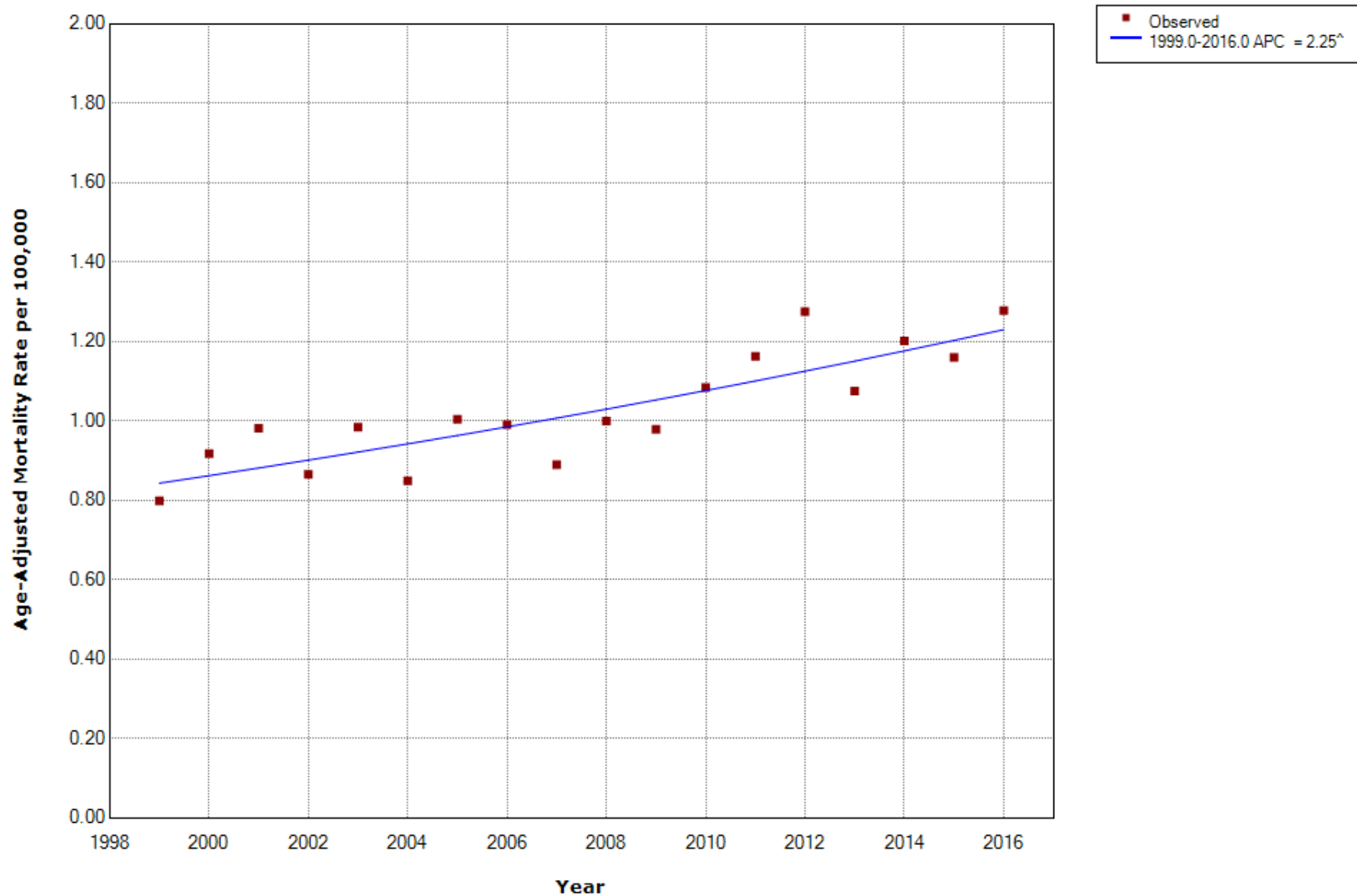
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

Metabolic disorders (E70-E88) / NH whites: 0 Joinpoints



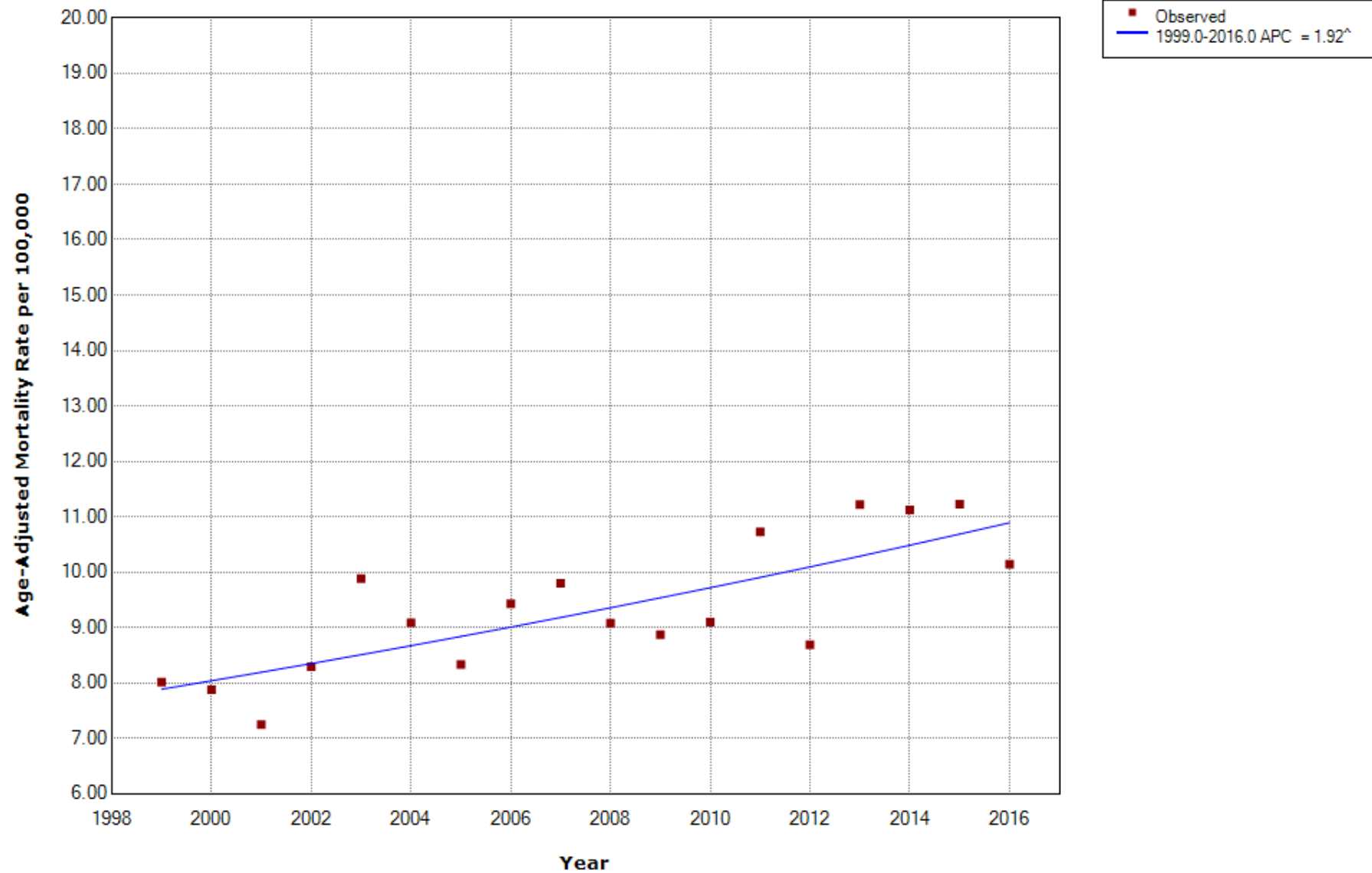
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

Metabolic disorders (E70-E88) / Hispanics: 0 Joinpoints



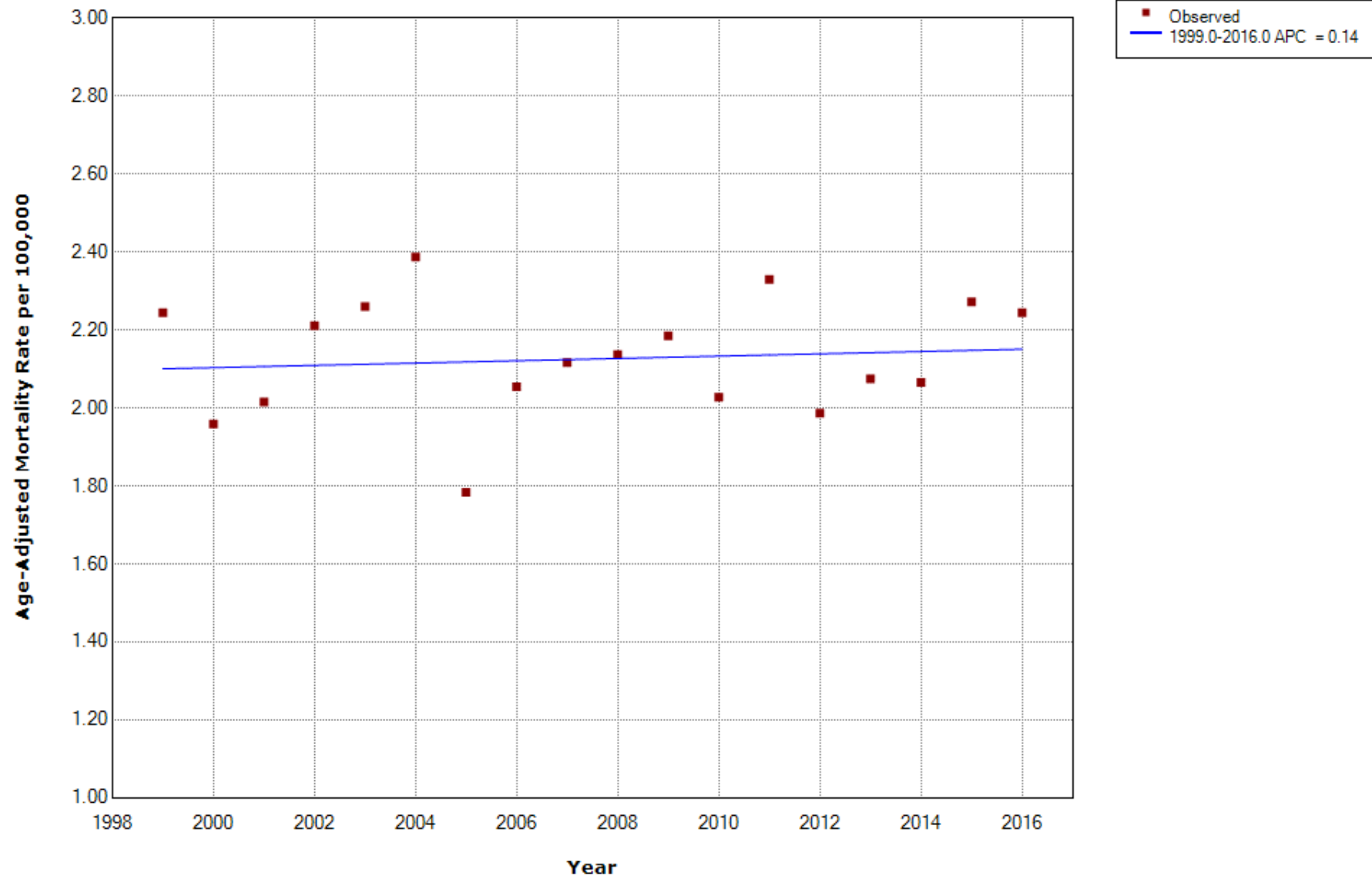
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

Intestinal, tuberculosis, zoonotic and other bacterial, sexually transmitted, spirochaetal, chlamydial, rickettsioses, central nervous system, arthropod-borne, viral hemorrhagic (A00-A99) / NH AIAN: 0 Joinpoints



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

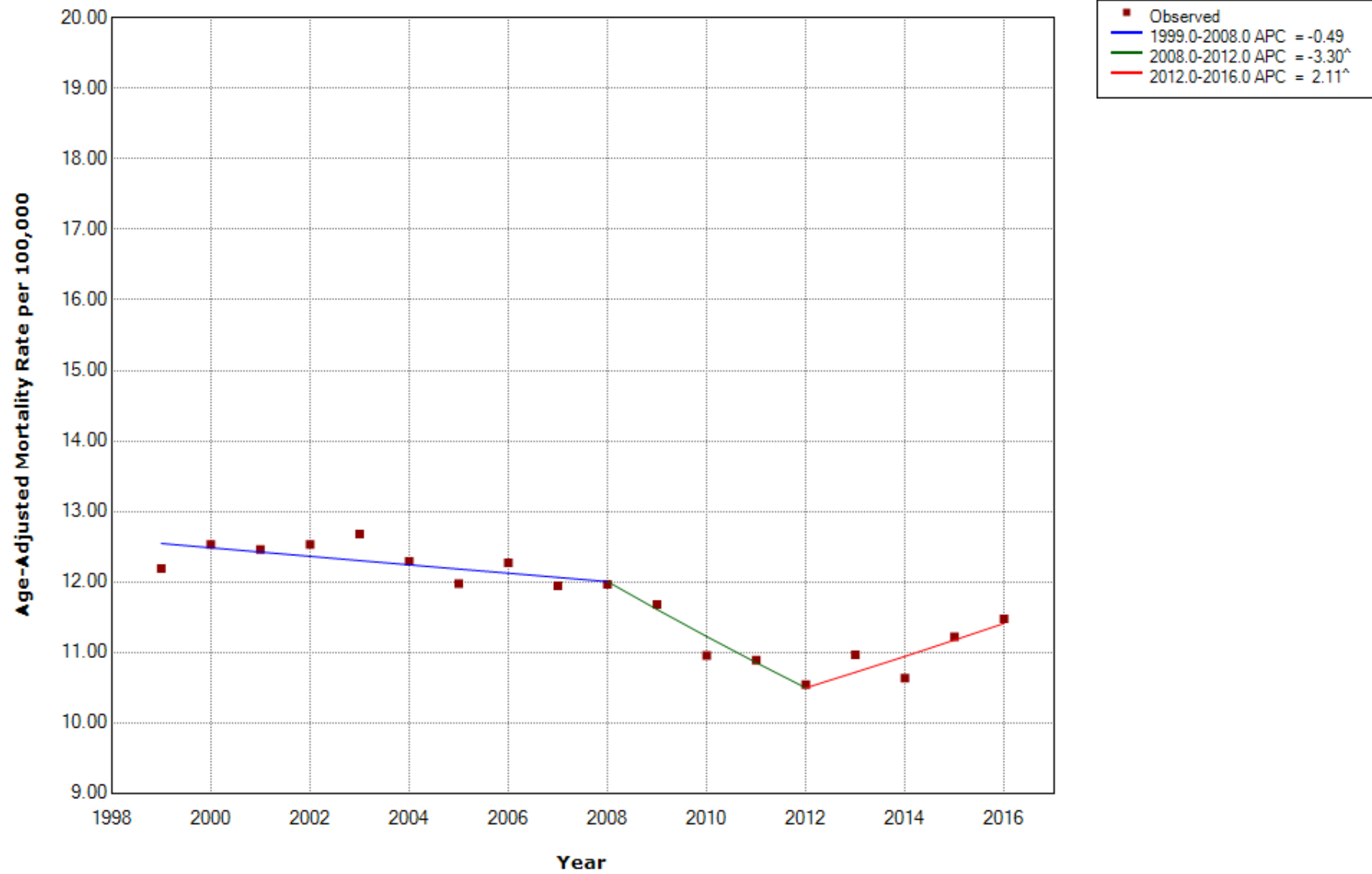
Intestinal, tuberculosis, zoonotic and other bacterial, sexually transmitted, spirochaetal, chlamydial, rickettsioses, central nervous system, arthropod-borne, viral hemorrhagic (A00-A99) / NH API: 0 Joinpoints



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

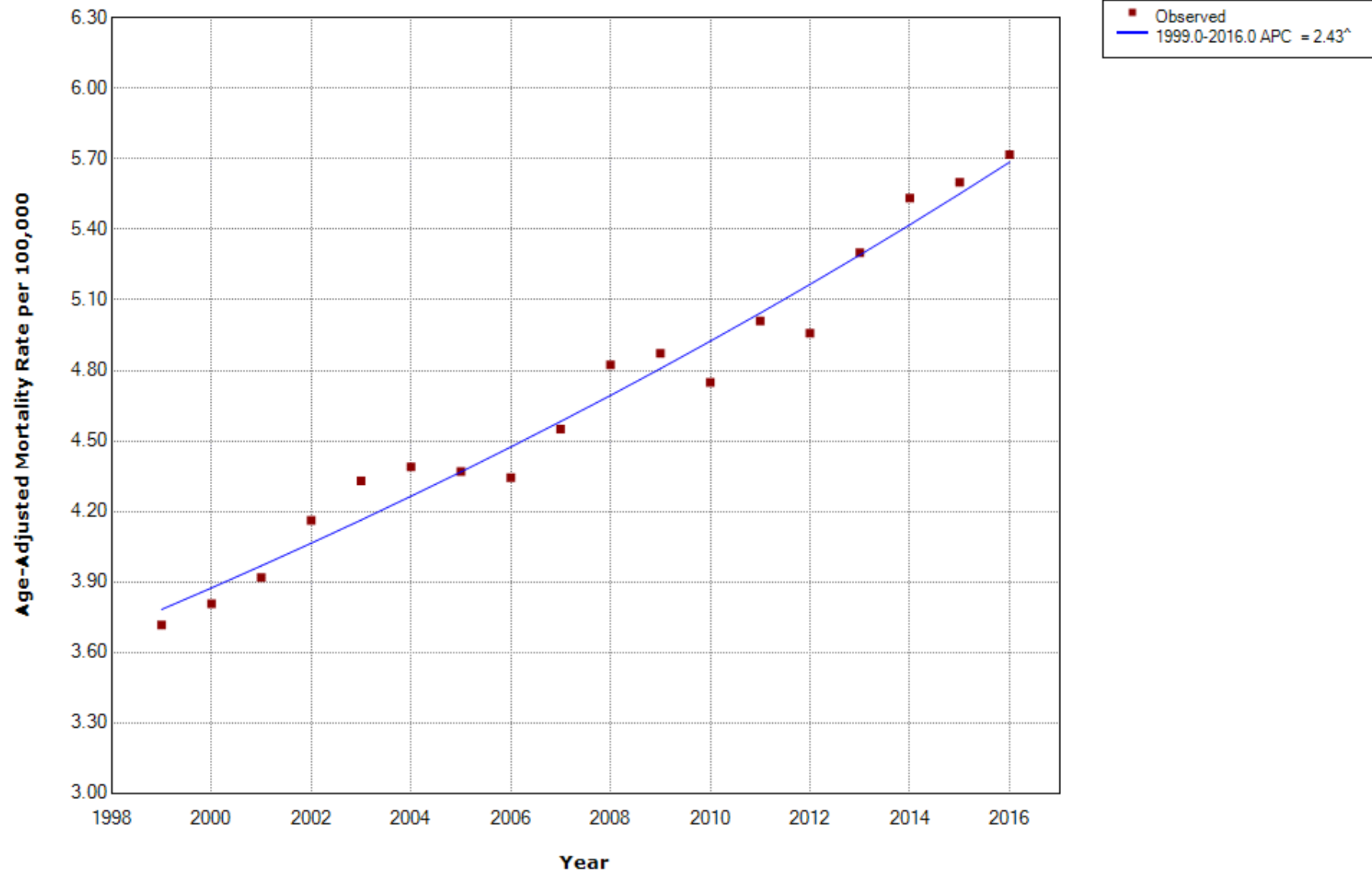


Intestinal, tuberculosis, zoonotic and other bacterial, sexually transmitted, spirochaetal, chlamydial, rickettsioses, central nervous system, arthropod-borne, viral hemorrhagic (A00-A99) / NH Blacks: 2 Joinpoints



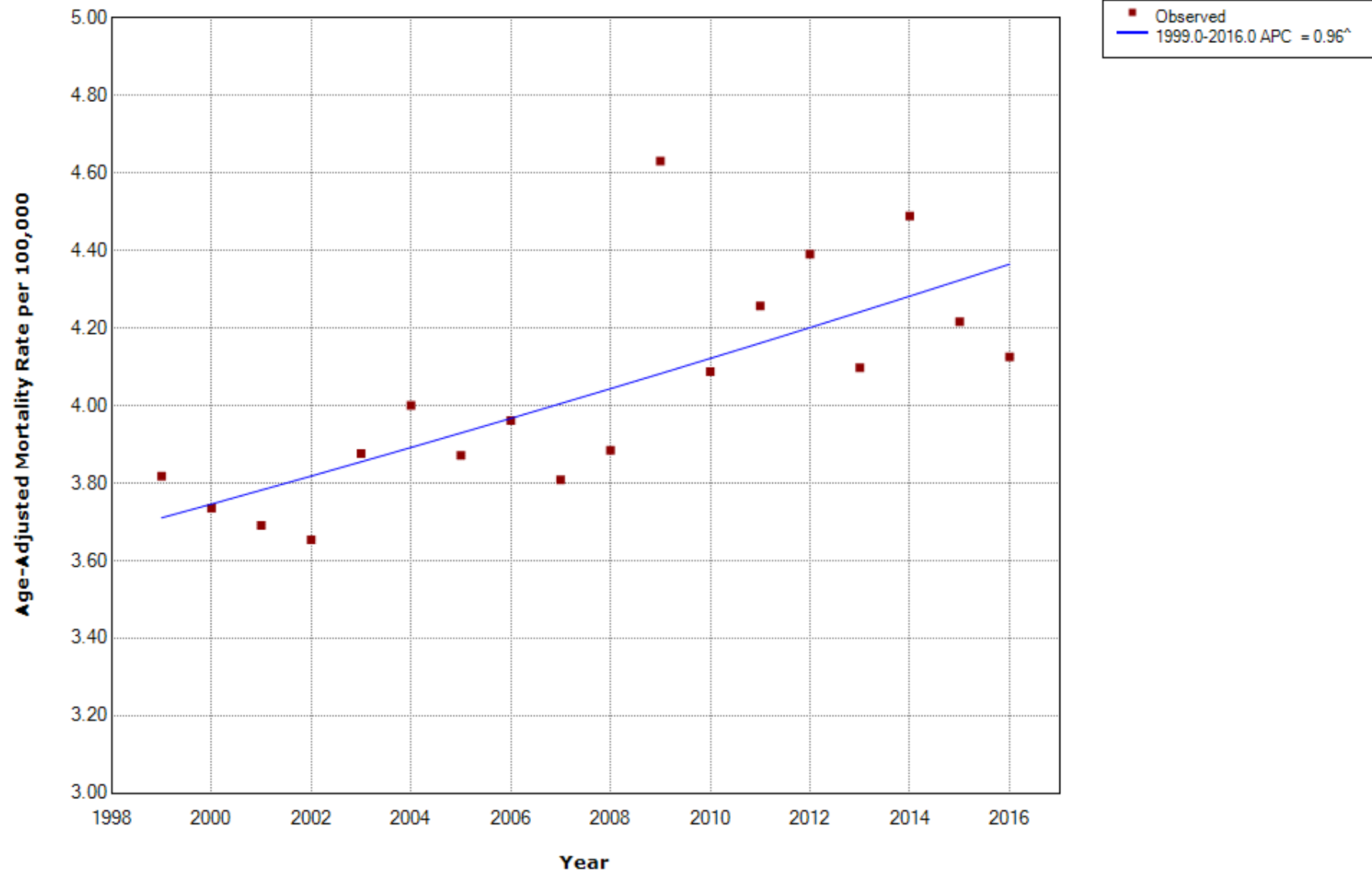
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

Intestinal, tuberculosis, zoonotic and other bacterial, sexually transmitted, spirochaetal, chlamydial, rickettsioses, central nervous system, arthropod-borne, viral hemorrhagic (A00-A99) / NH whites: 0 Joinpoints



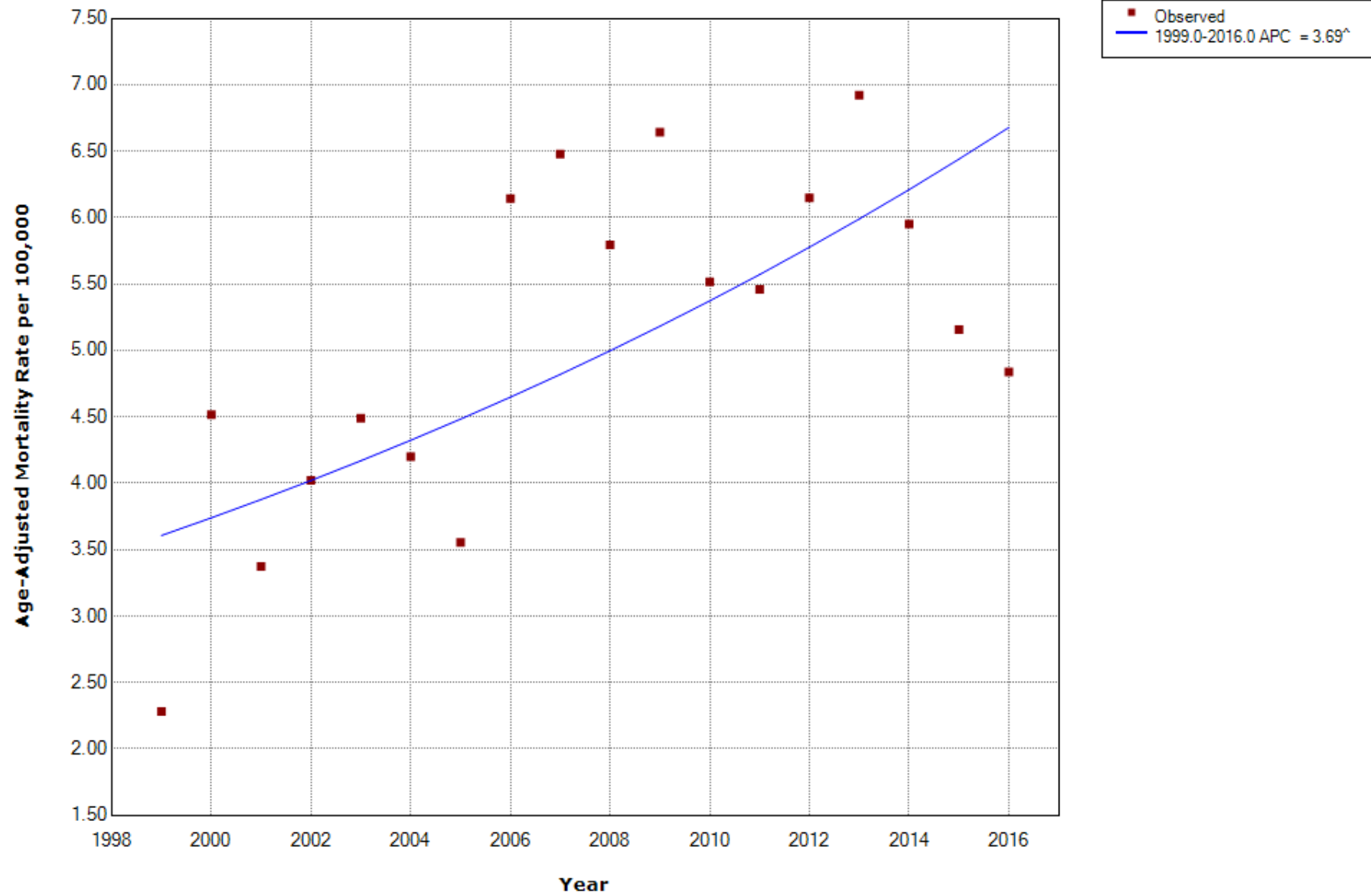
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

Intestinal, tuberculosis, zoonotic and other bacterial, sexually transmitted, spirochaetal, chlamydial, rickettsioses, central nervous system, arthropod-borne, viral hemorrhagic (A00-A99) / Hispanics: 0 Joinpoints



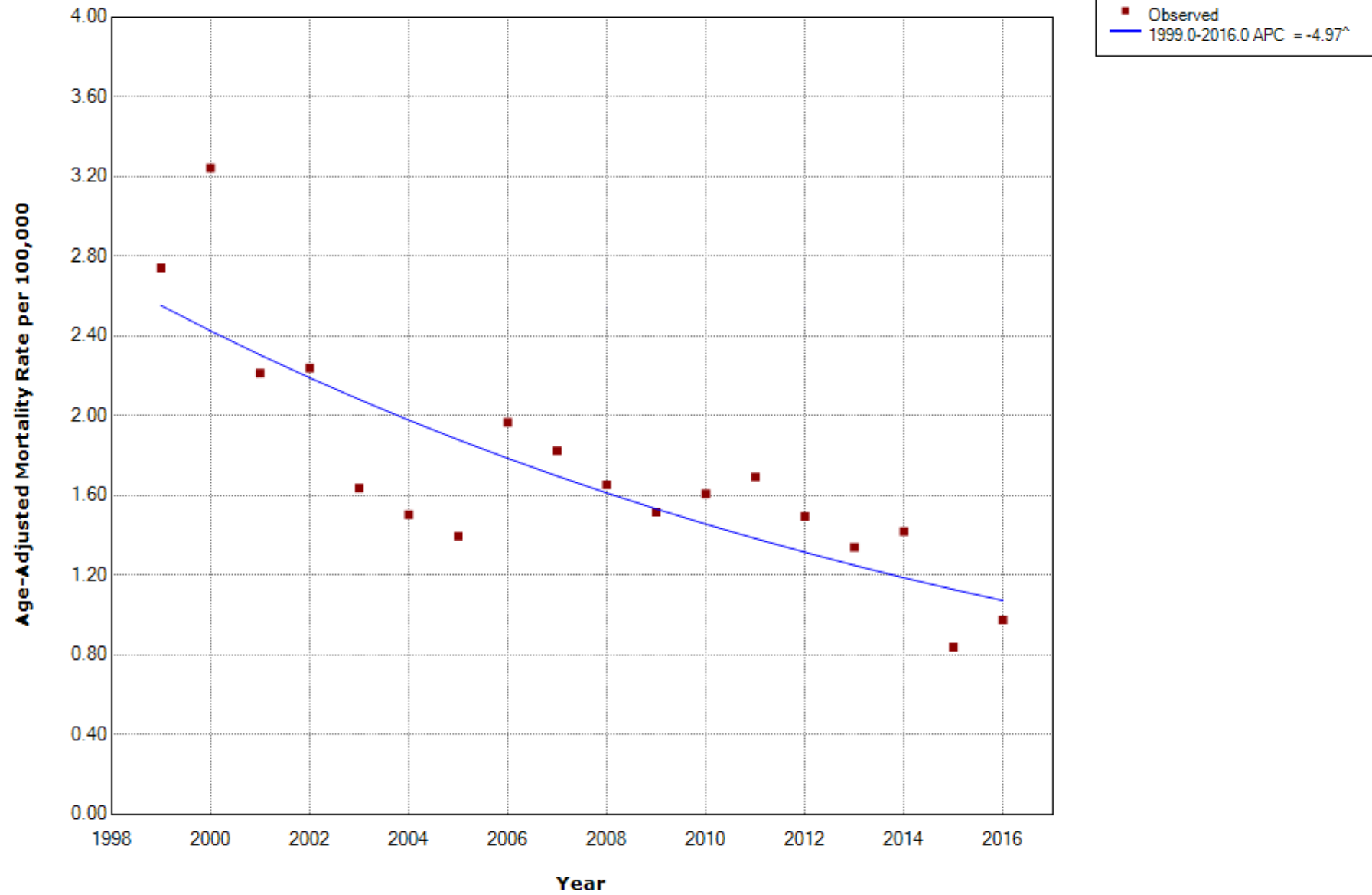
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

### Viral hepatitis (B15-B19) / NH AIAN: 0 Joinpoints



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

### Viral hepatitis (B15-B19) / NH API: 0 Joinpoints



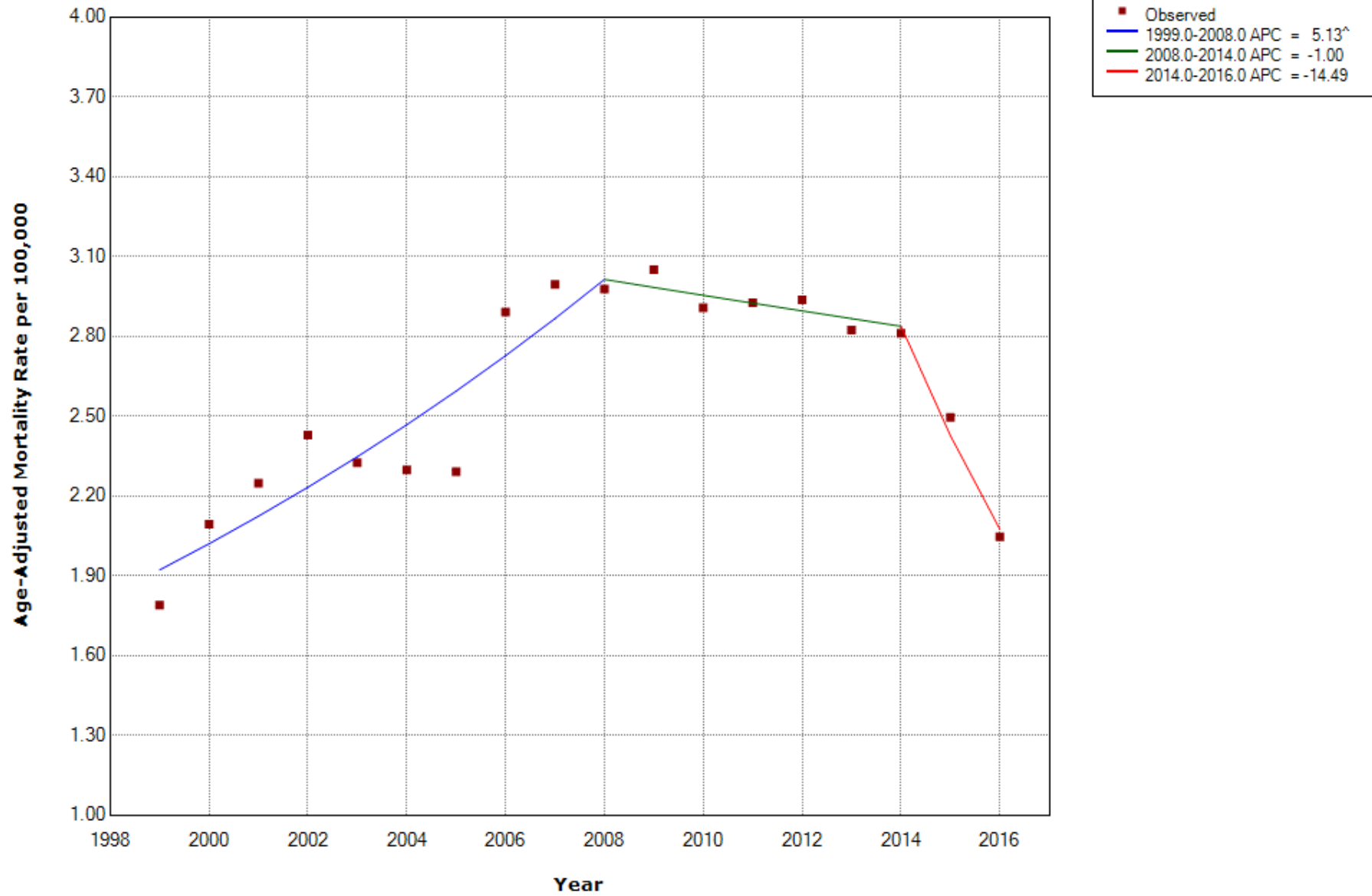
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

### Viral hepatitis (B15-B19) / NH Blacks: 2 Joinpoints



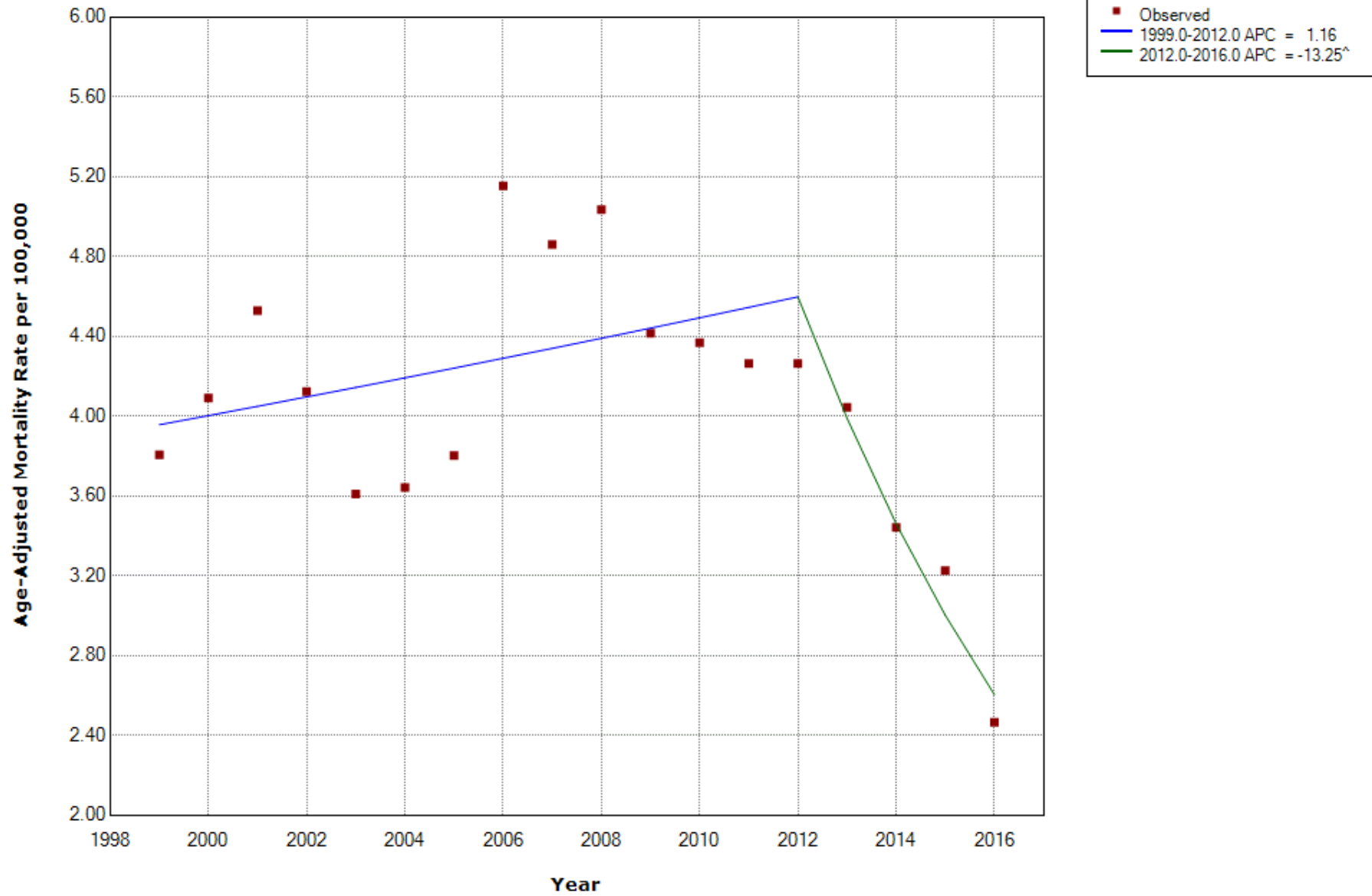
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

### Viral hepatitis (B15-B19) / NH whites: 2 Joinpoints



<sup>^</sup> Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

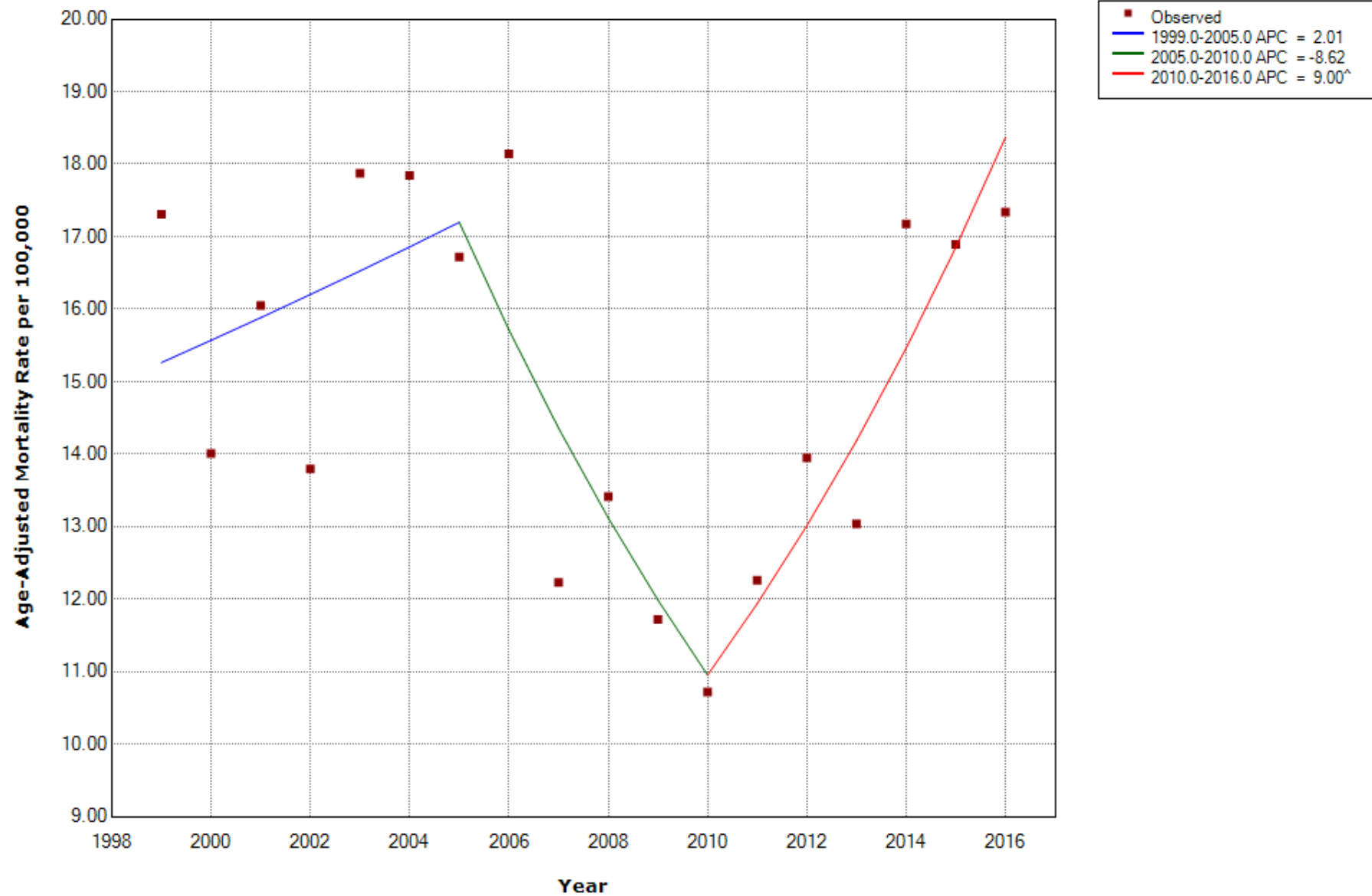
### Viral hepatitis (B15-B19) / Hispanics: 1 Joinpoint



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

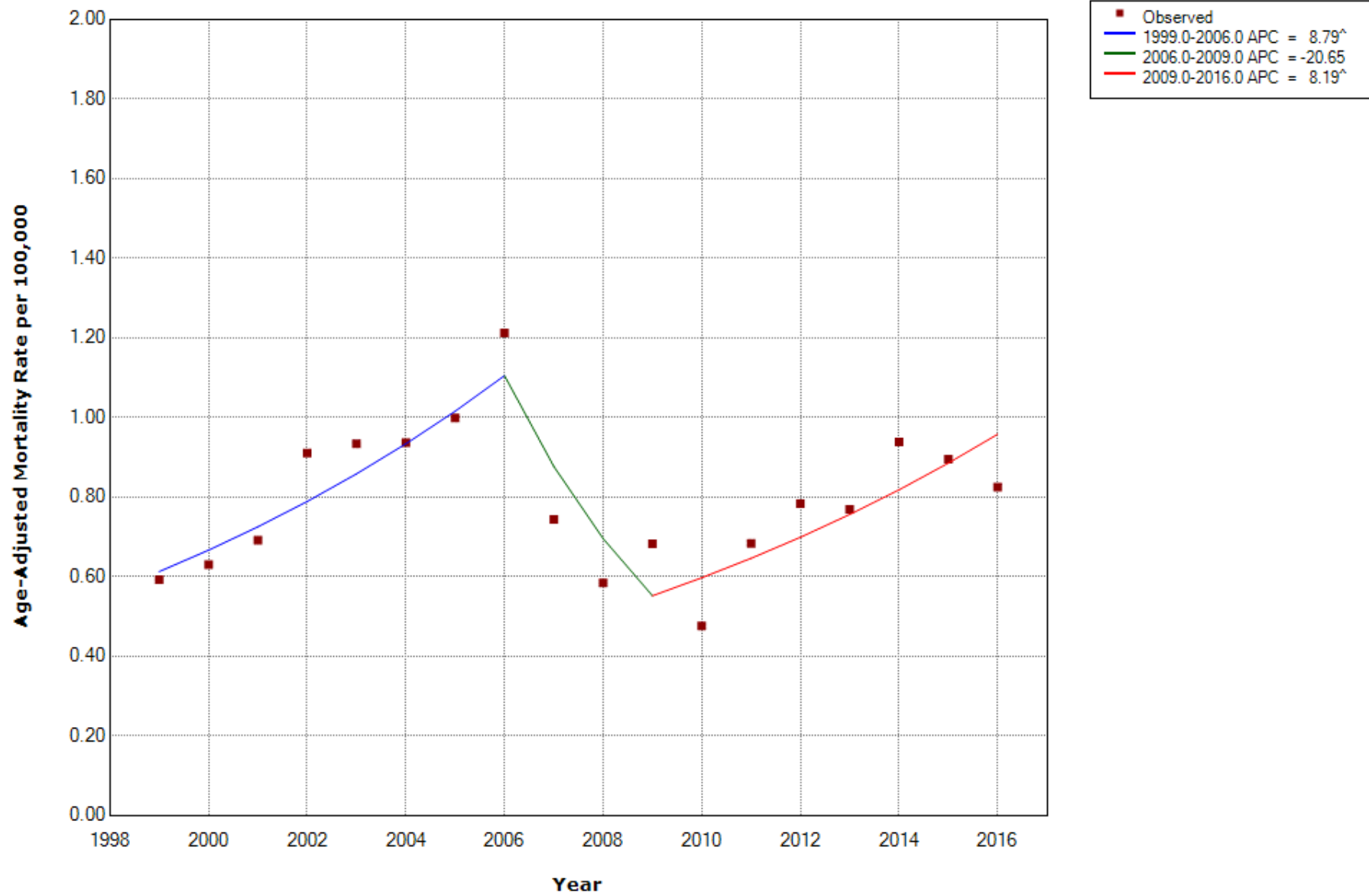


### Mental and behavioral disorders due to psychoactive substance use (F10-F19) / NH AIAN: 2 Joinpoints



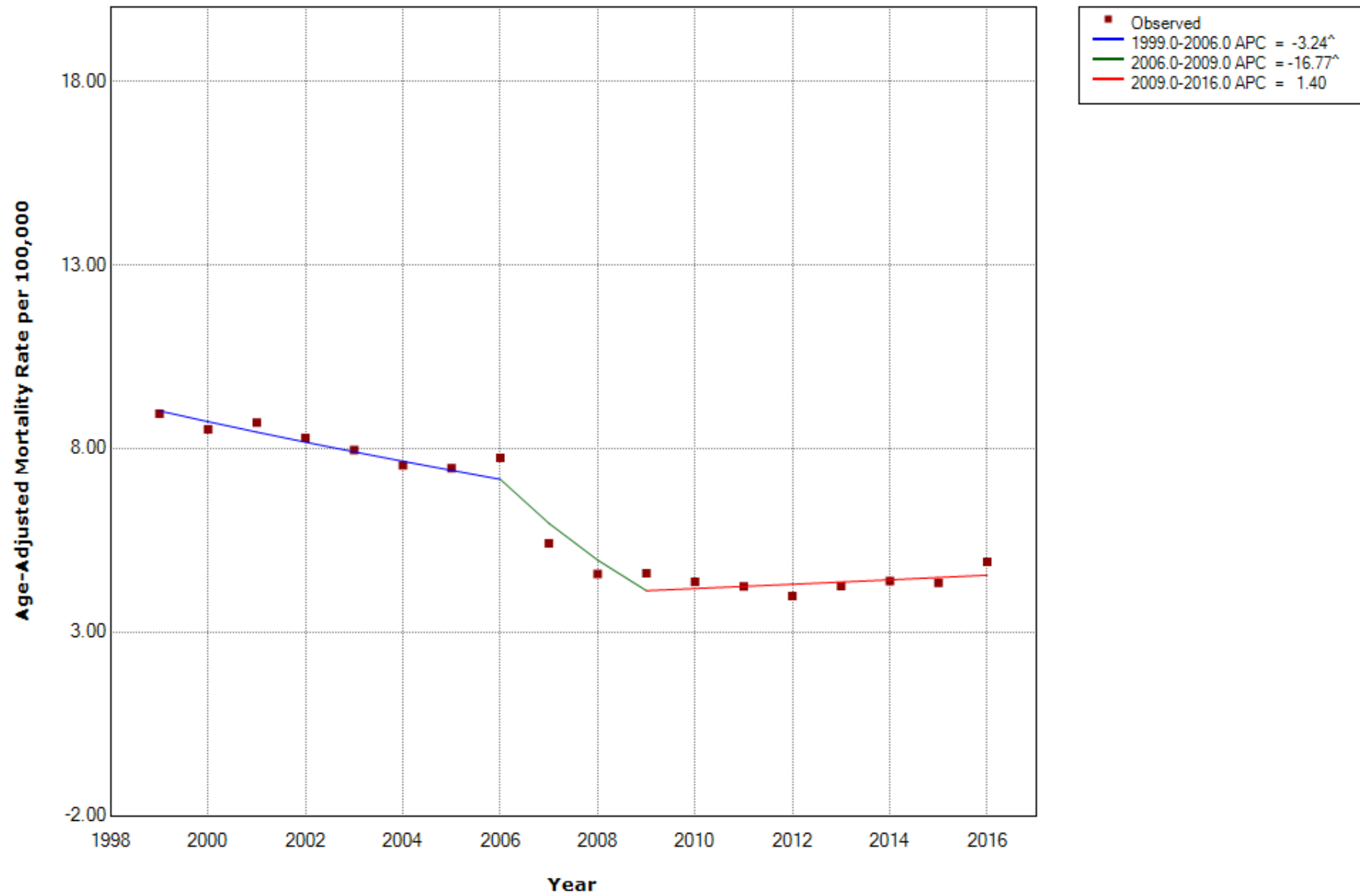
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

Mental and behavioral disorders due to psychoactive substance use (F10-F19) / NH API: 2 Joinpoints



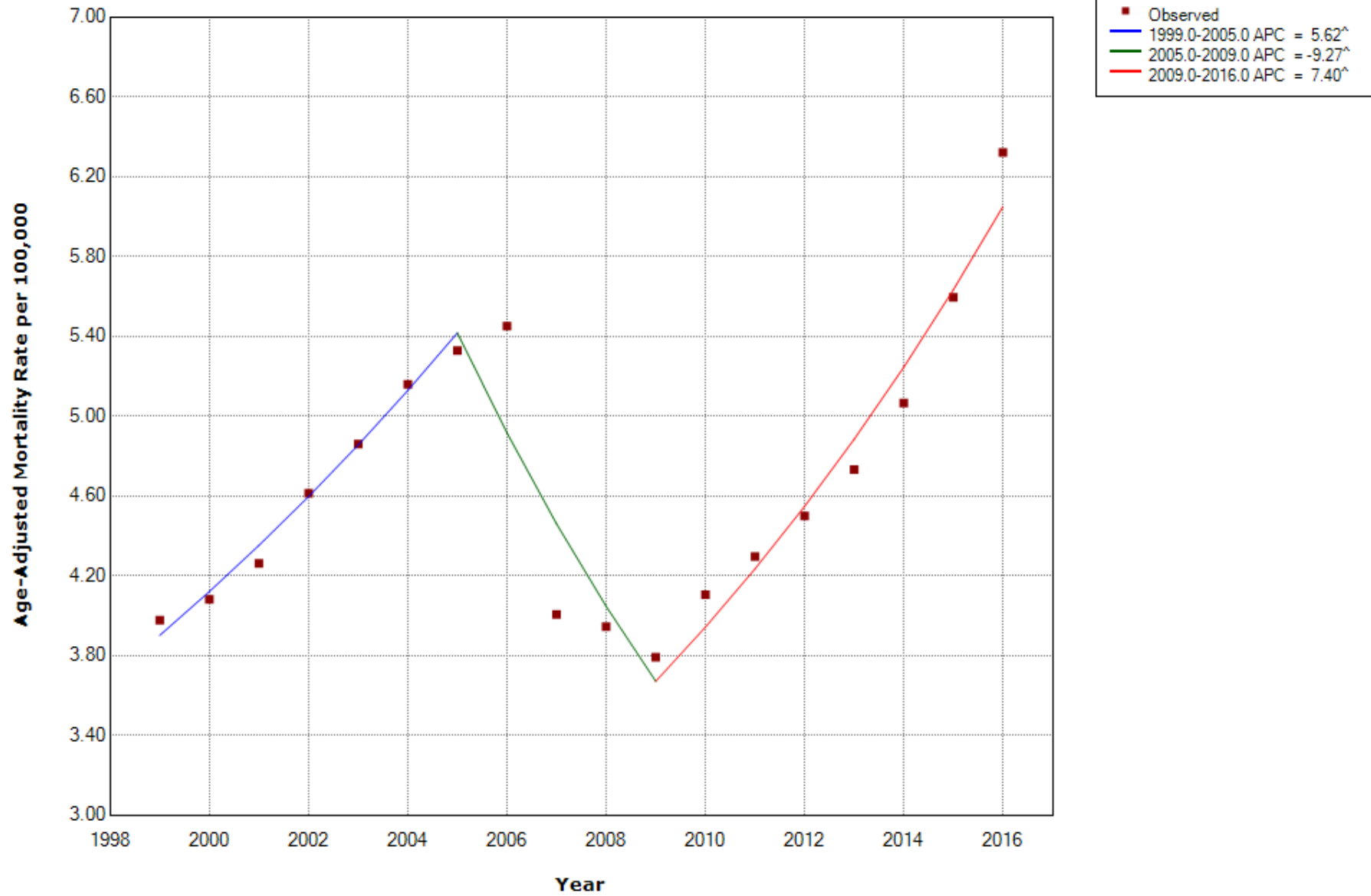
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

### Mental and behavioral disorders due to psychoactive substance use (F10-F19) / NH Blacks: 2 Joinpoints



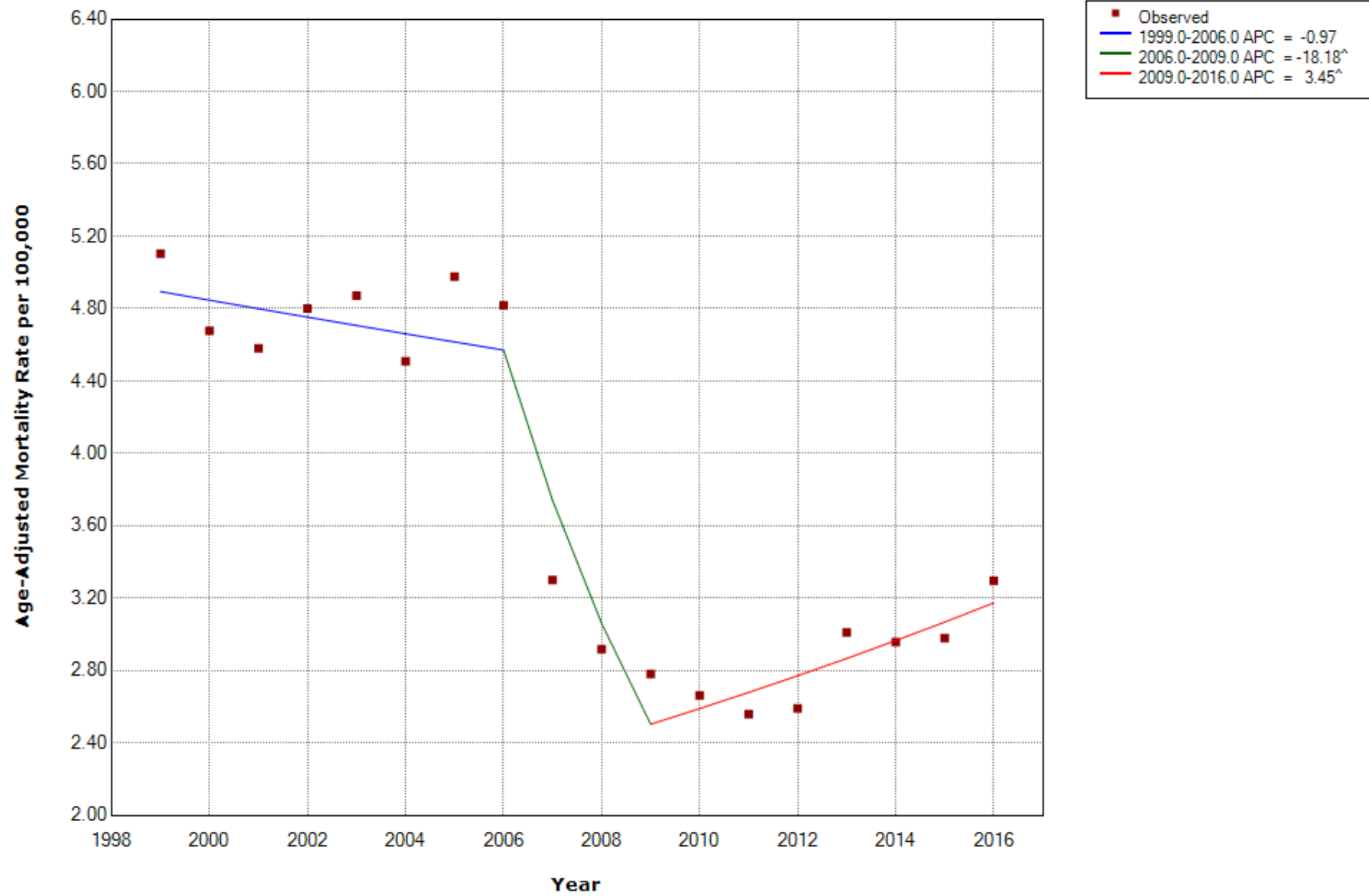
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

### Mental and behavioral disorders due to psychoactive substance use (F10-F19) / NH whites: 2 Joinpoints



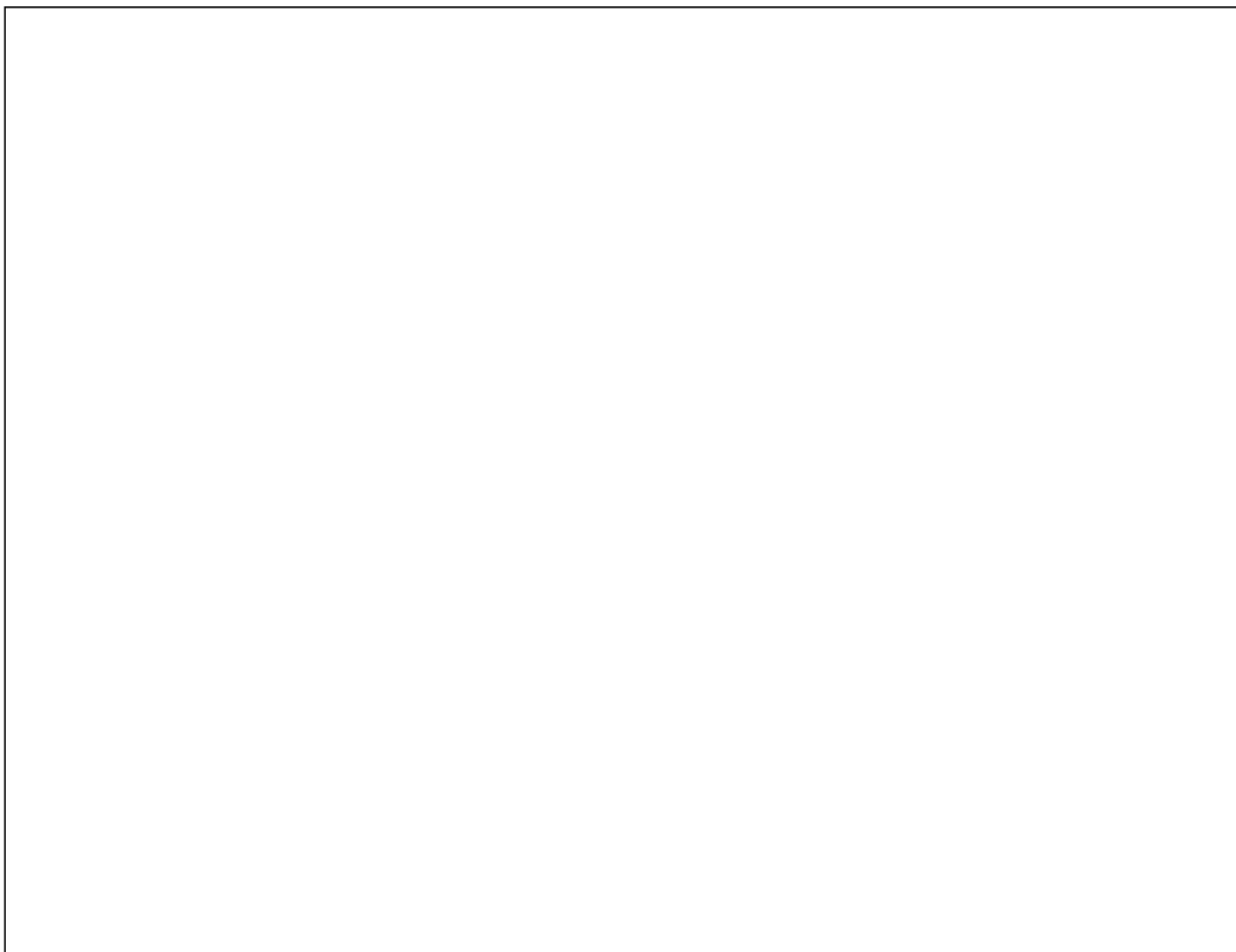
<sup>^</sup> Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

### Mental and behavioral disorders due to psychoactive substance use (F10-F19) / Hispanics: 2 Joinpoints



<sup>^</sup> Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

**Organic mental disorders, including vascular dementia ( F01-F09 ) / NH AIAN: Observed**

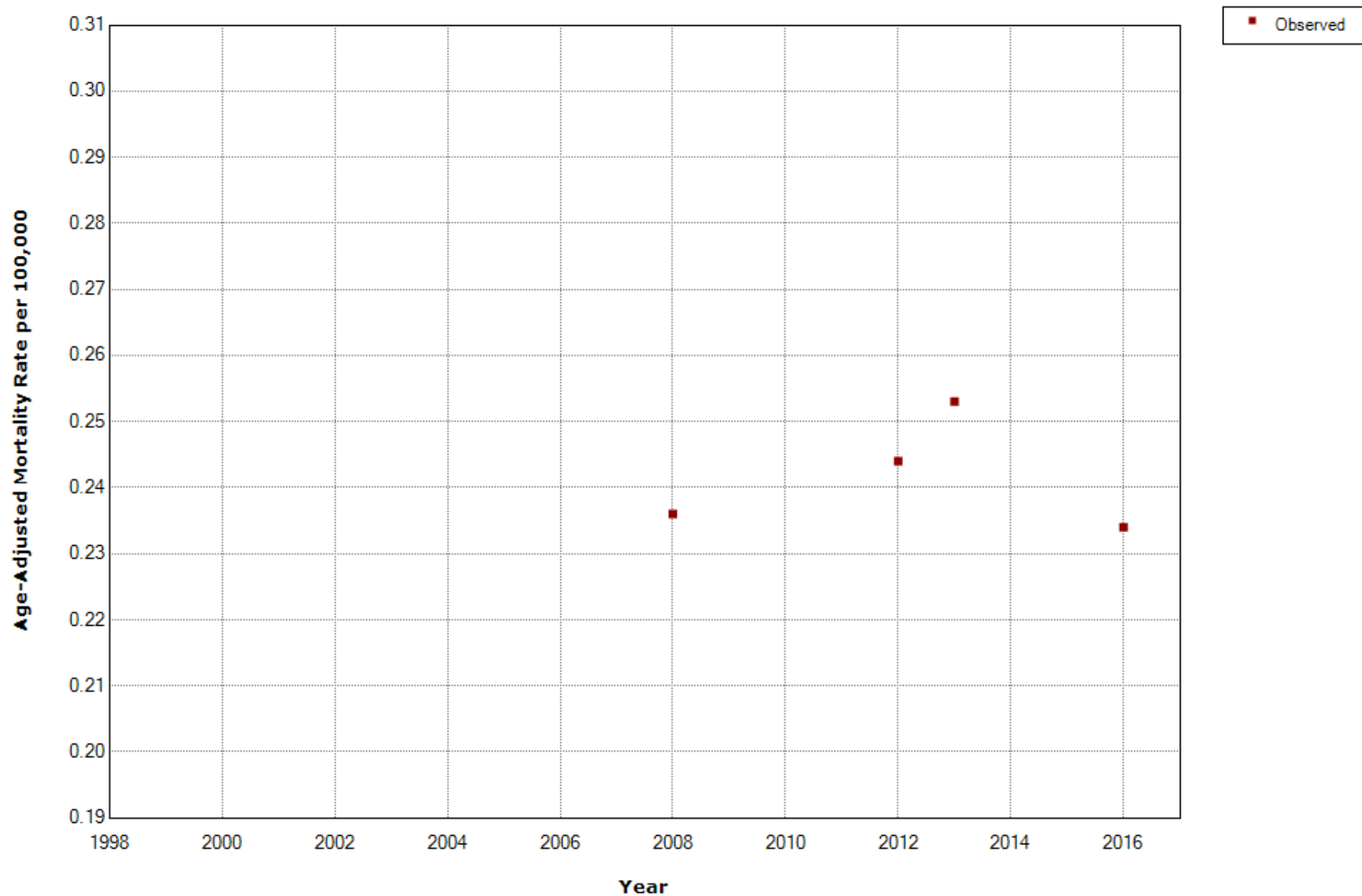


■ Observed

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

\*\* Joinpoint cannot process records with missing dependent variable values. Joinpoint will not analyze by-groups that have this error. (Row = 1980, Col = 1)

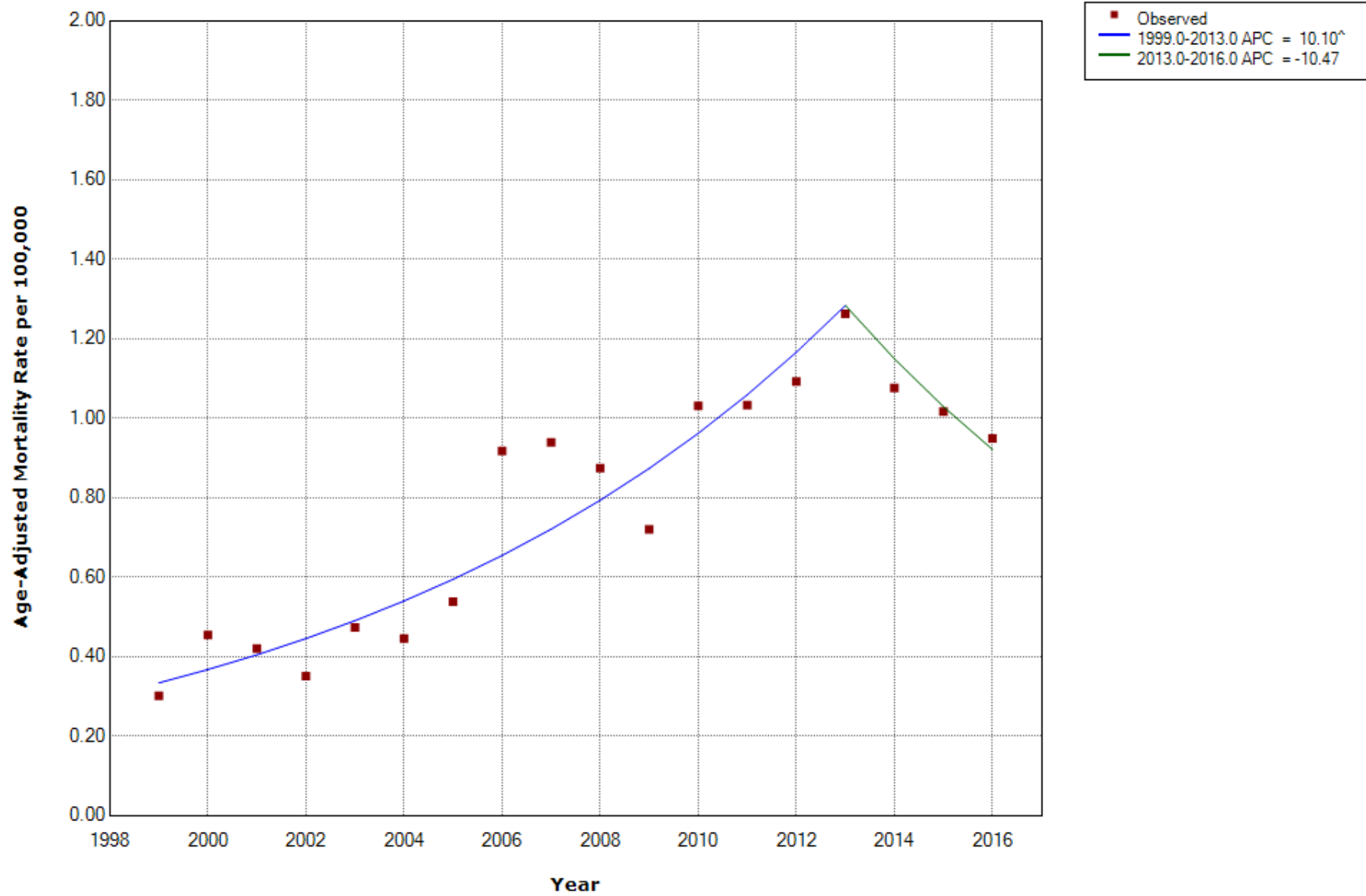
### Organic mental disorders, including vascular dementia ( F01-F09 ) / NH API: Observed



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

\* Joinpoint cannot process records with missing dependent variable values. Joinpoint will not analyze by-groups that have this error. (Row = 1998, Col = 1)

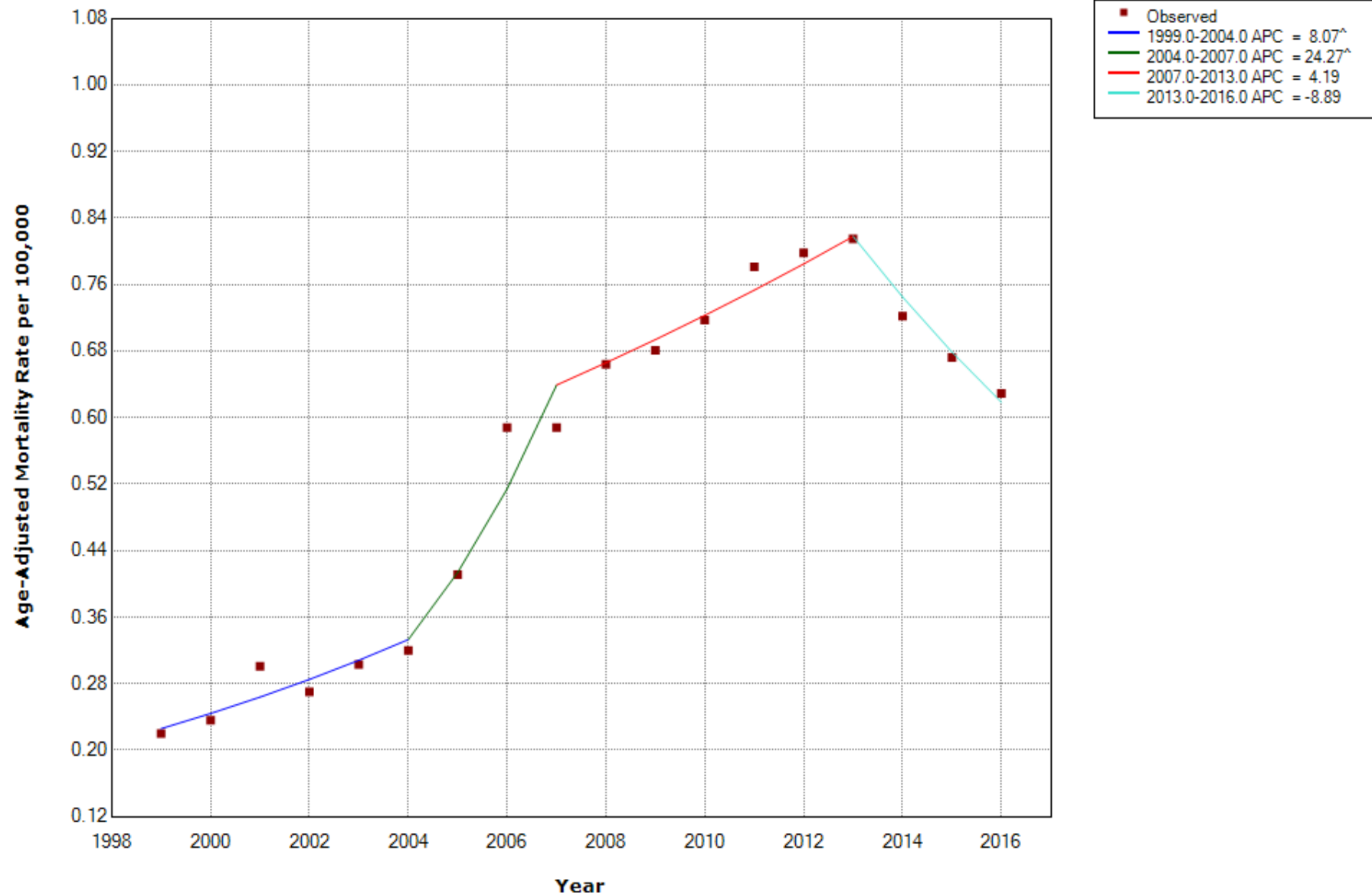
Organic mental disorders, including vascular dementia ( F01-F09 ) / NH Blacks: 1 Joinpoint



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

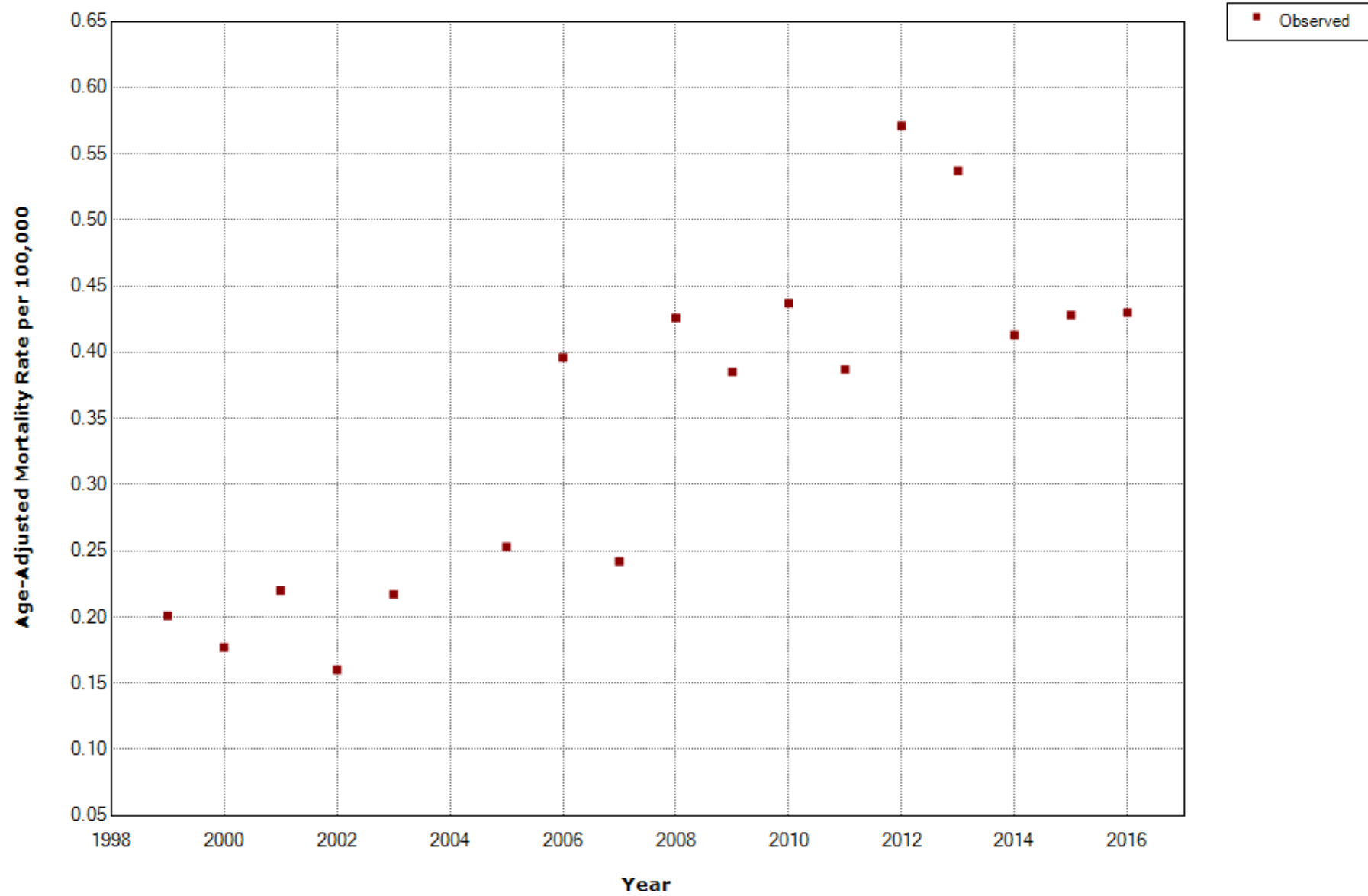


### Organic mental disorders, including vascular dementia ( F01-F09 ) / NH whites: 3 Joinpoints



<sup>^</sup> Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 3 Joinpoints.

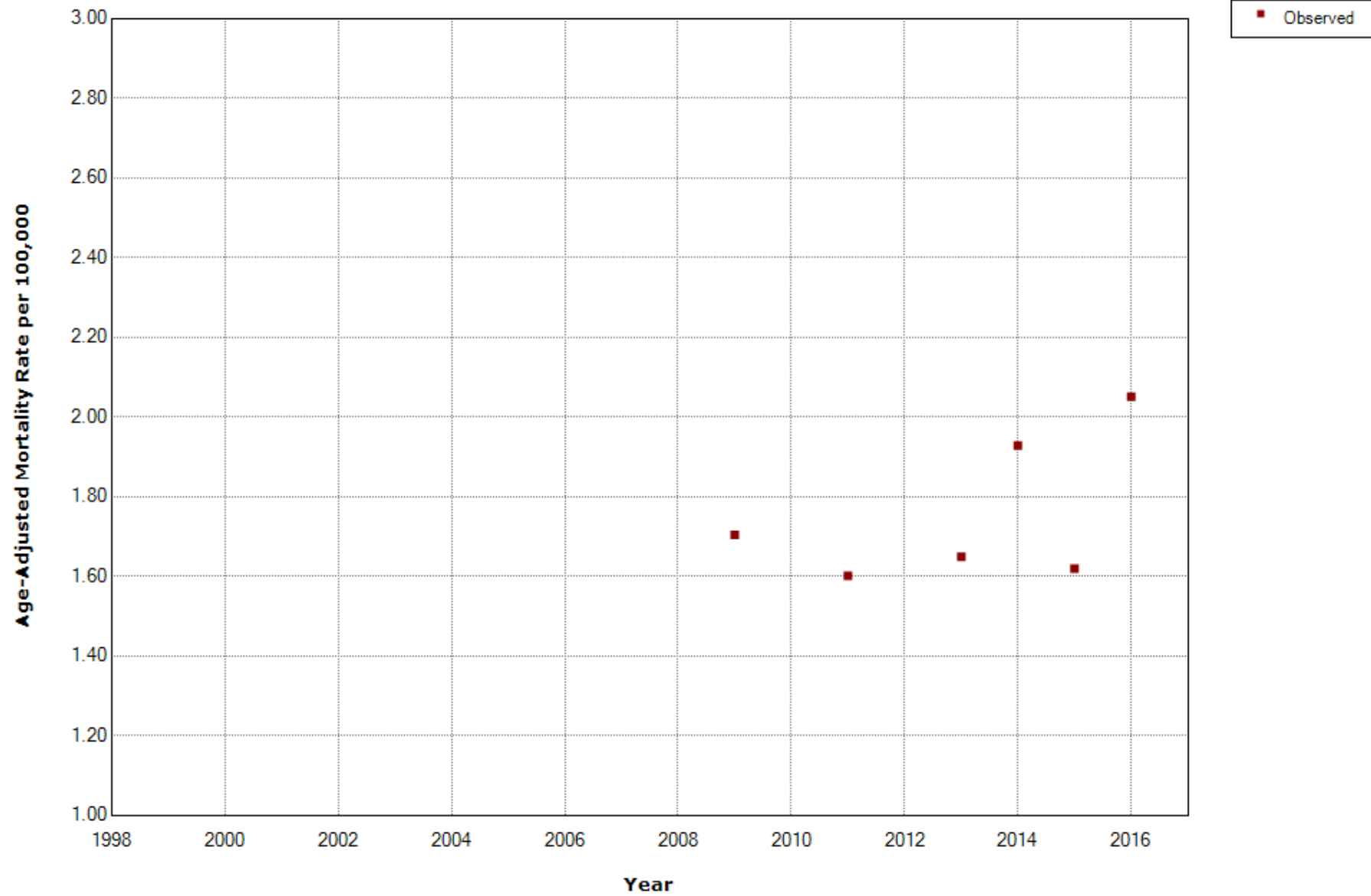
### Organic mental disorders, including vascular dementia ( F01-F09 ) / Hispanics: Observed



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

\* Joinpoint cannot process records with missing dependent variable values. Joinpoint will not analyze by-groups that have this error. (Row = 2057, Col = 1)

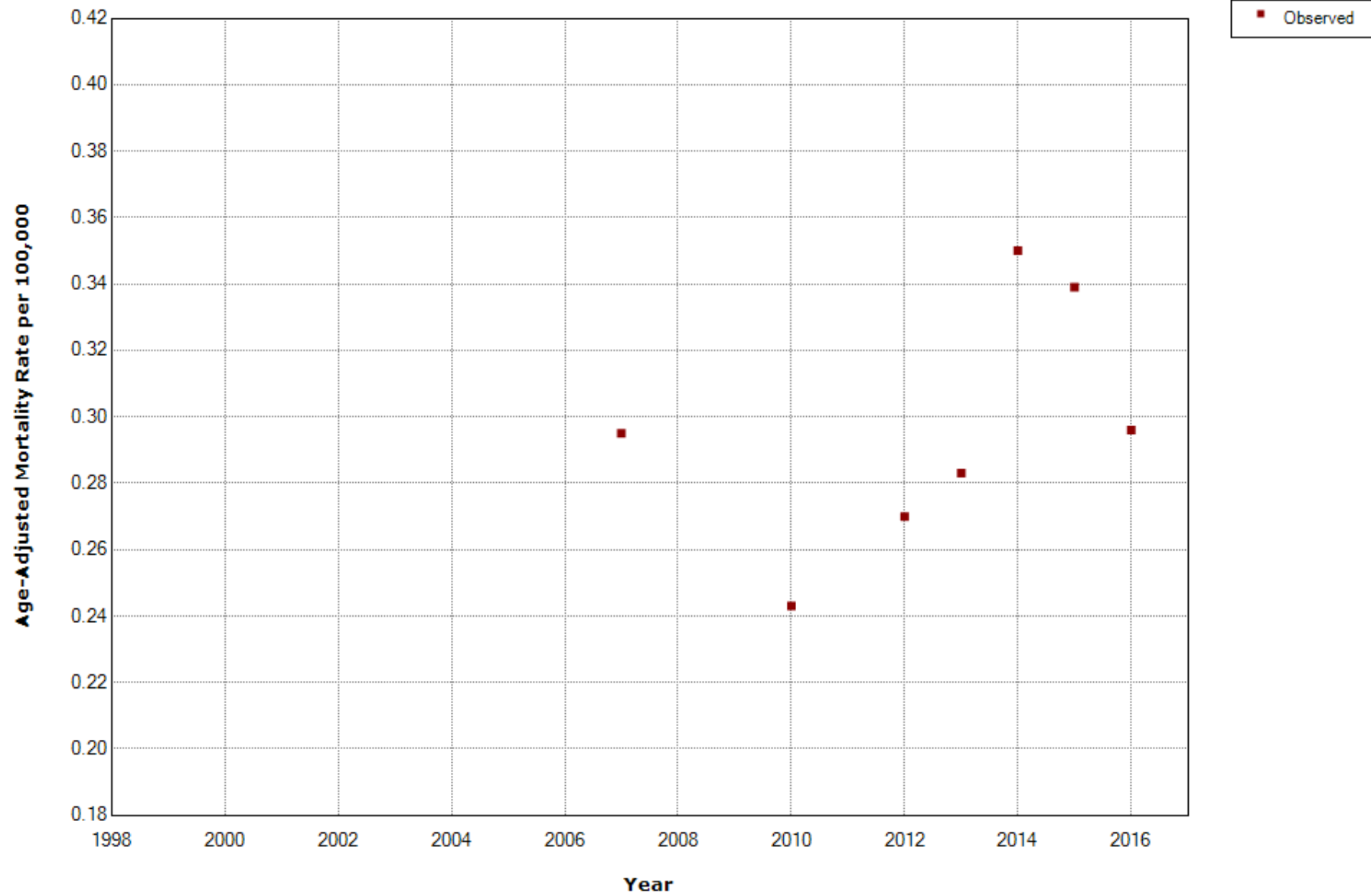
### Episodic and paroxysmal disorders, including epilepsy (G40-G47) / NH AIAN: Observed



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

\* Joinpoint cannot process records with missing dependent variable values. Joinpoint will not analyze by-groups that have this error. (Row = 2070, Col = 1)

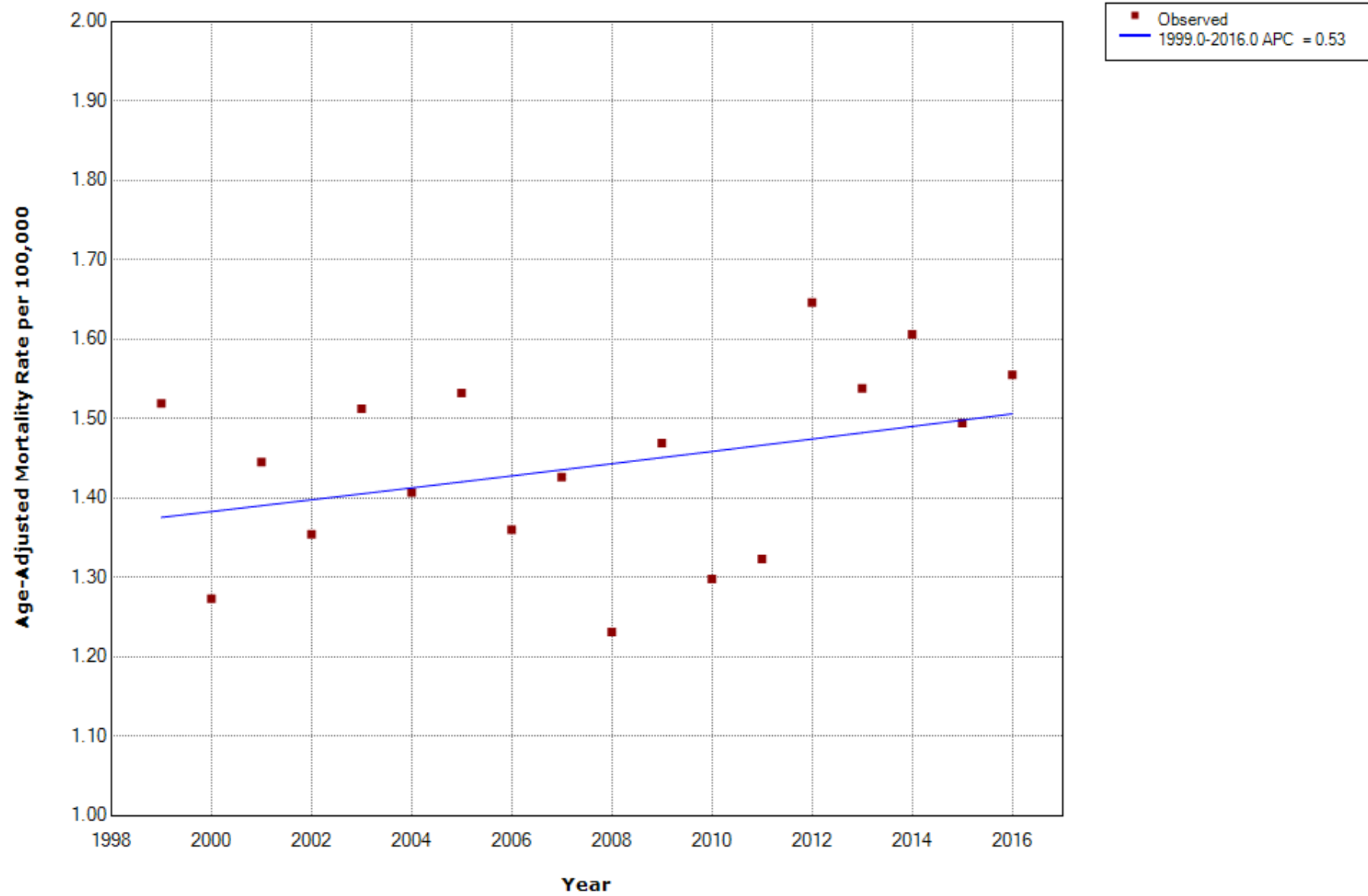
### Episodic and paroxysmal disorders, including epilepsy (G40-G47) / NH API: Observed



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

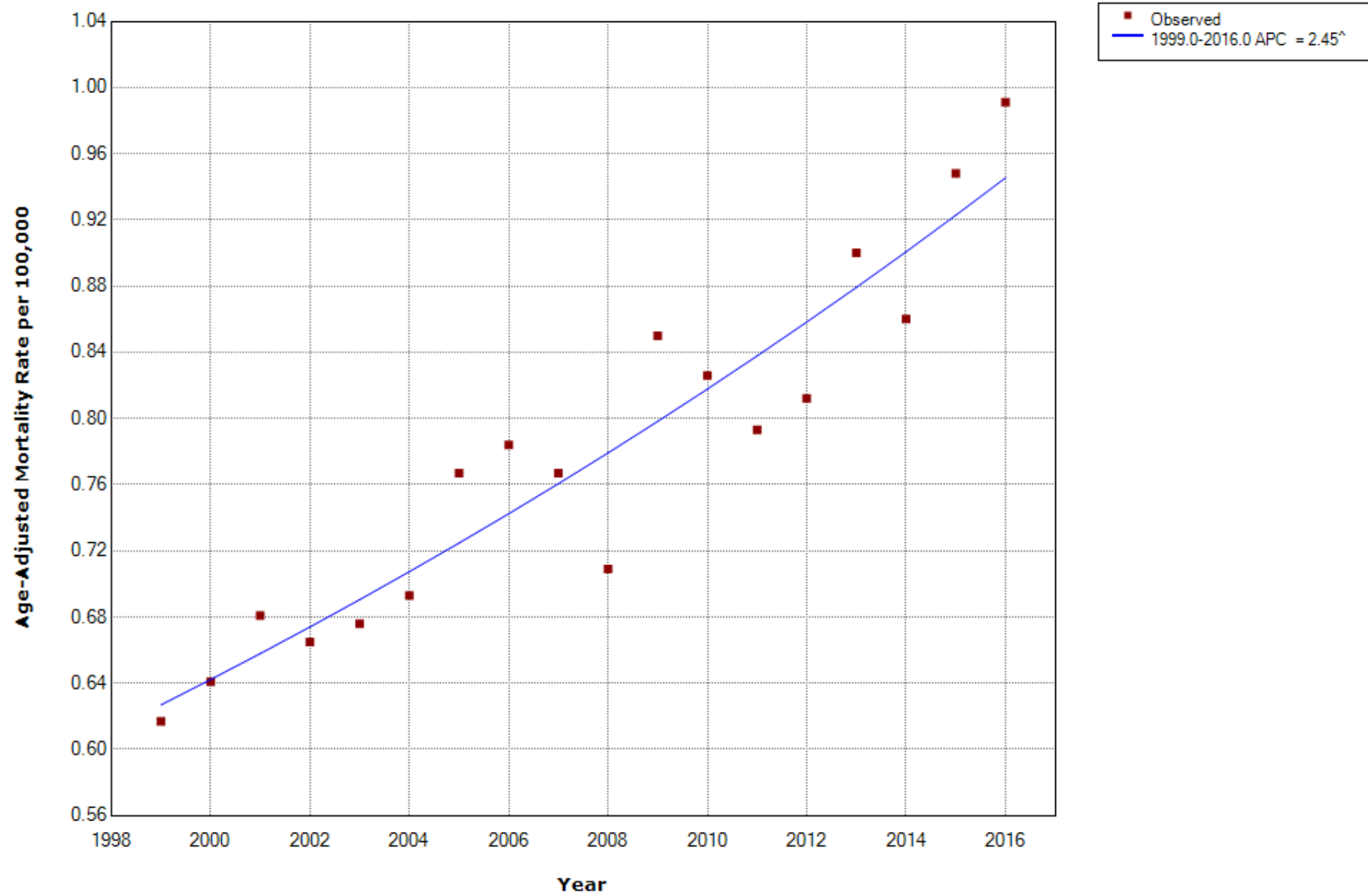
\* Joinpoint cannot process records with missing dependent variable values. Joinpoint will not analyze by-groups that have this error. (Row = 2088, Col = 1)

Episodic and paroxysmal disorders, including epilepsy (G40-G47) / NH Blacks: 0 Joinpoints



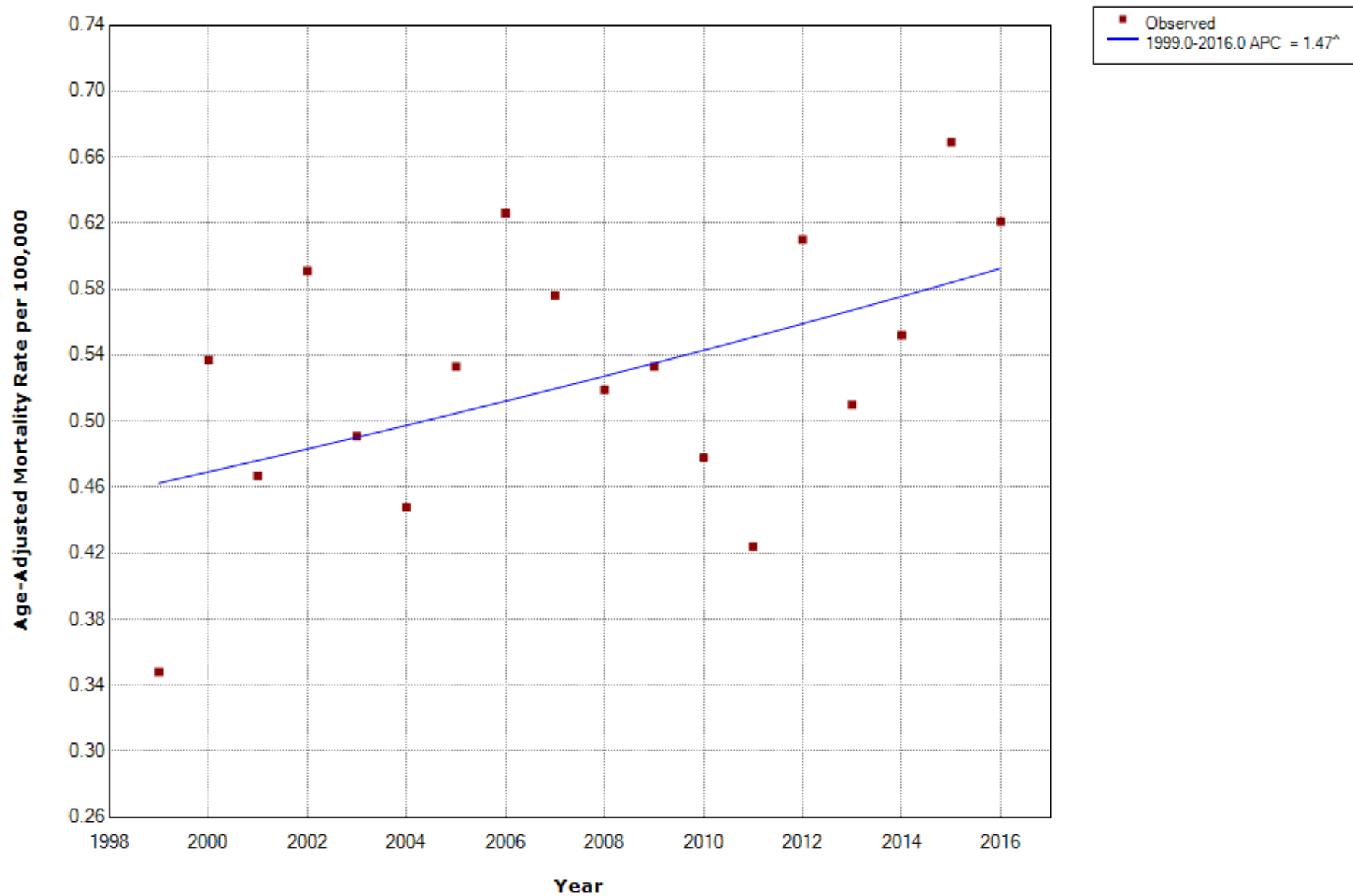
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

# Episodic and paroxysmal disorders, including epilepsy (G40-G47) / NH whites: 0 Joinpoints



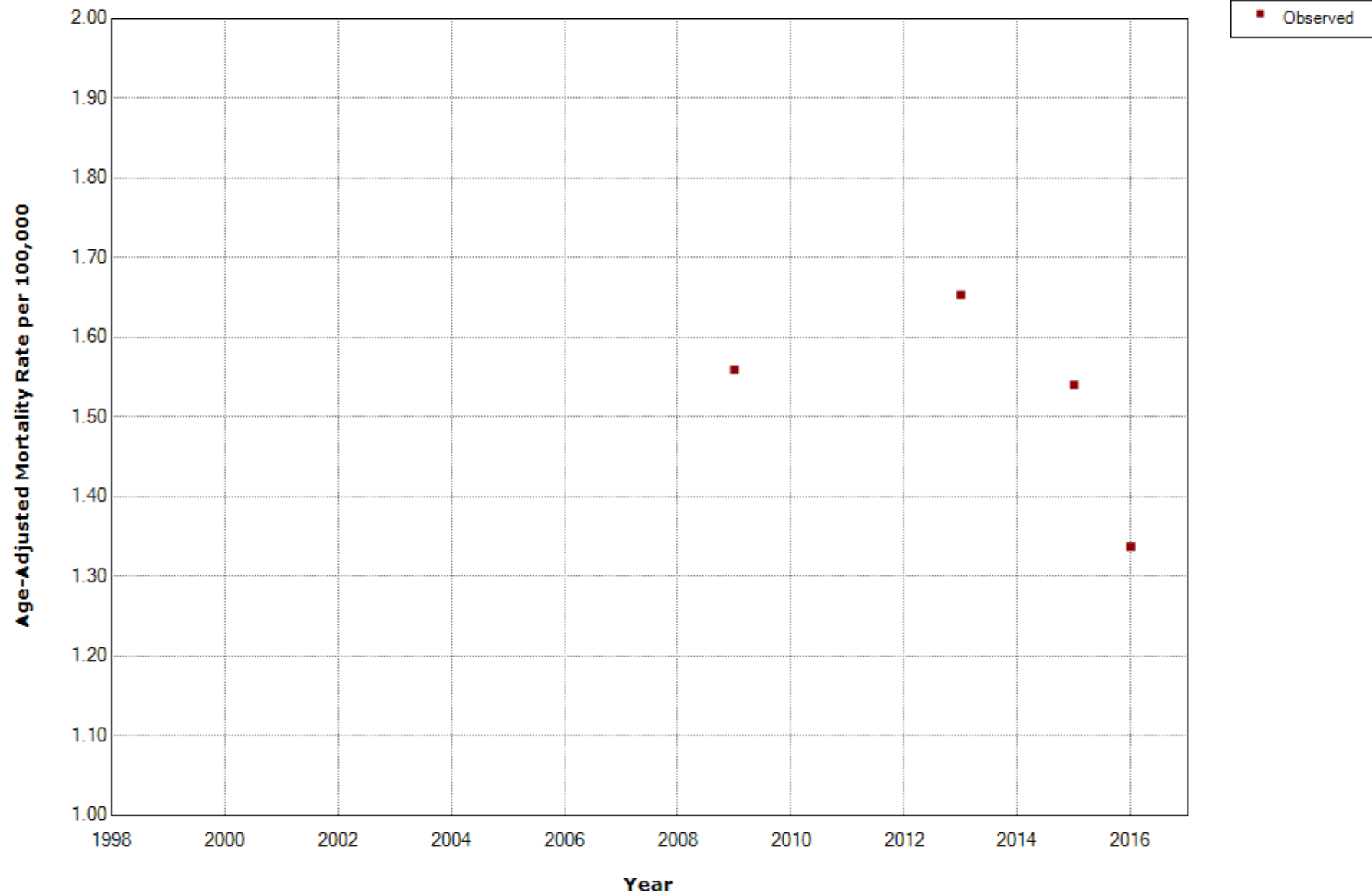
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

Episodic and paroxysmal disorders, including epilepsy (G40-G47) / Hispanics: 0 Joinpoints



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

### Cerebral palsy and other paralytic syndromes (G80-G83) / NH AIAN: Observed

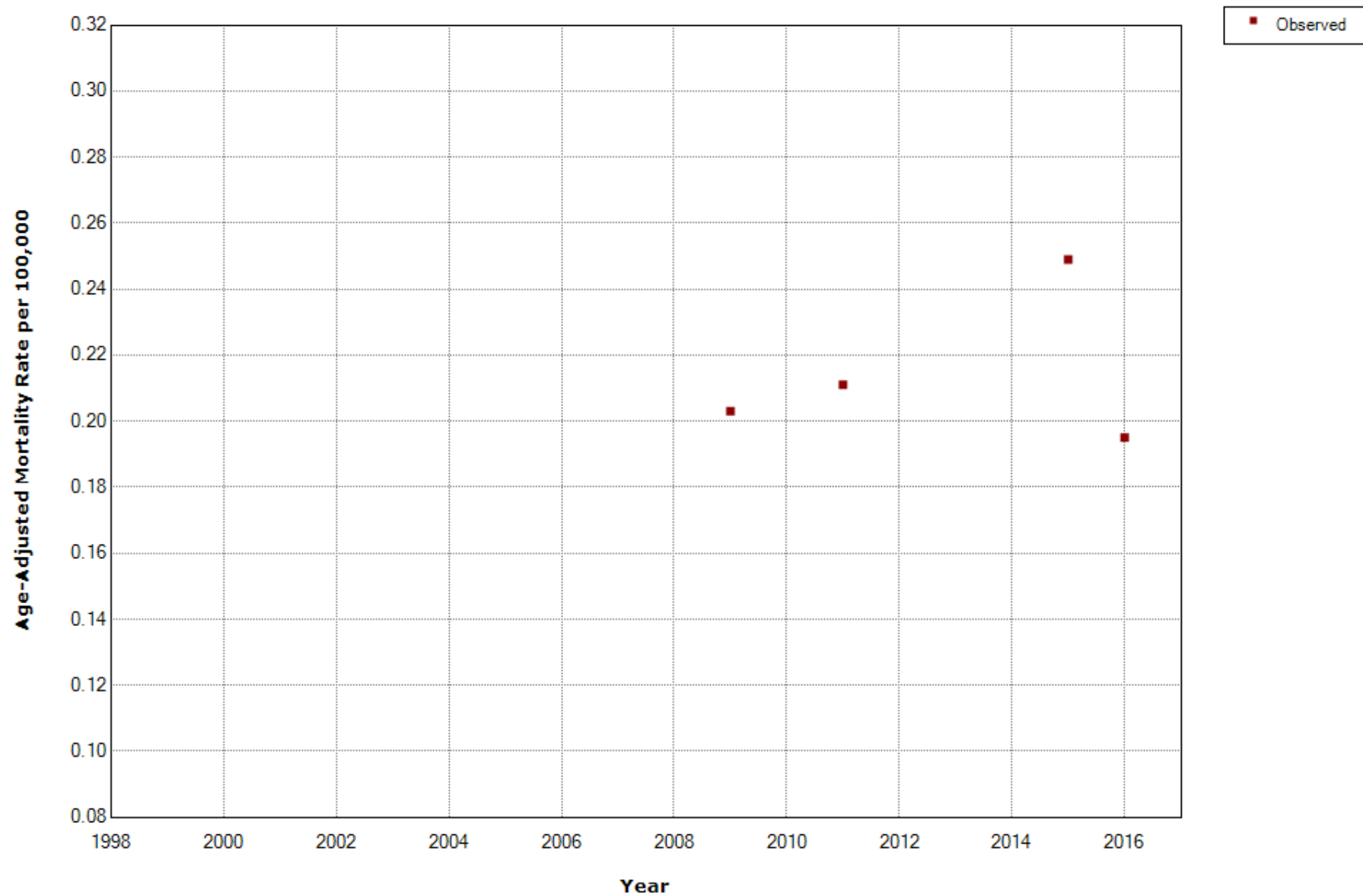


^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

\* Joinpoint cannot process records with missing dependent variable values. Joinpoint will not analyze by-groups that have this error. (Row = 2160, Col = 1)



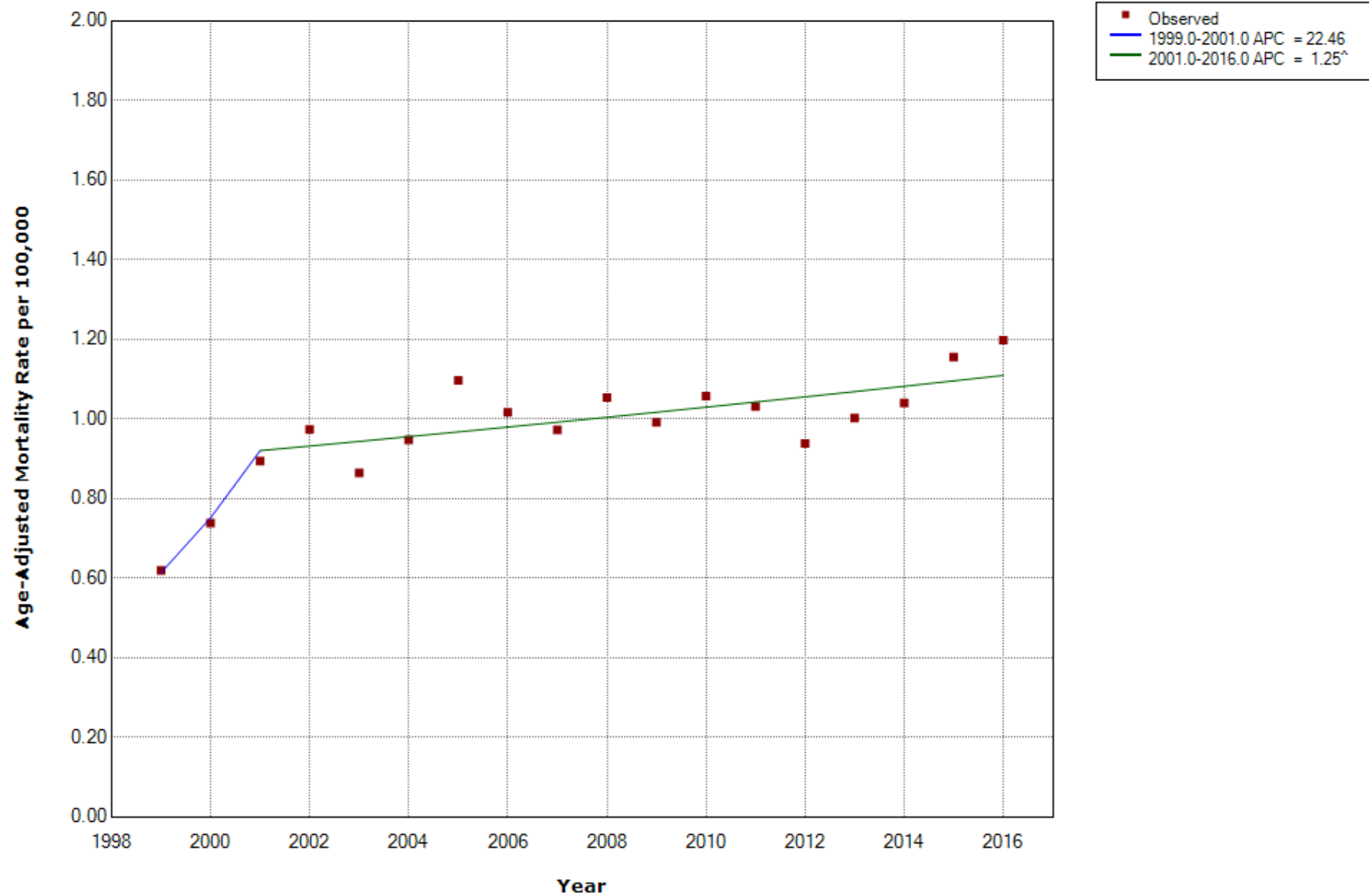
### Cerebral palsy and other paralytic syndromes (G80-G83) / NH API: Observed



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

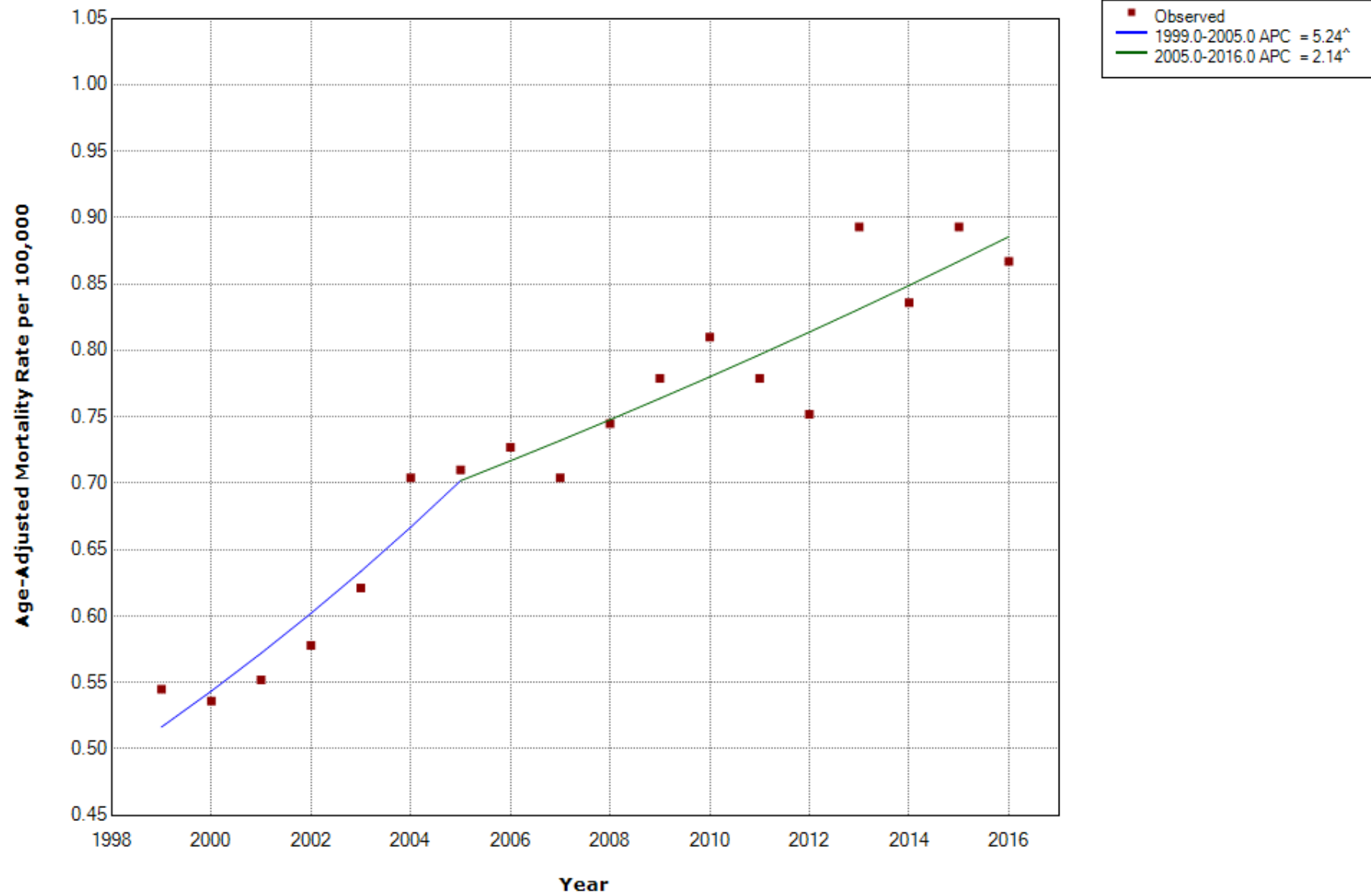
\* Joinpoint cannot process records with missing dependent variable values. Joinpoint will not analyze by-groups that have this error. (Row = 2178, Col = 1)

### Cerebral palsy and other paralytic syndromes (G80-G83) / NH Blacks: 1 Joinpoint



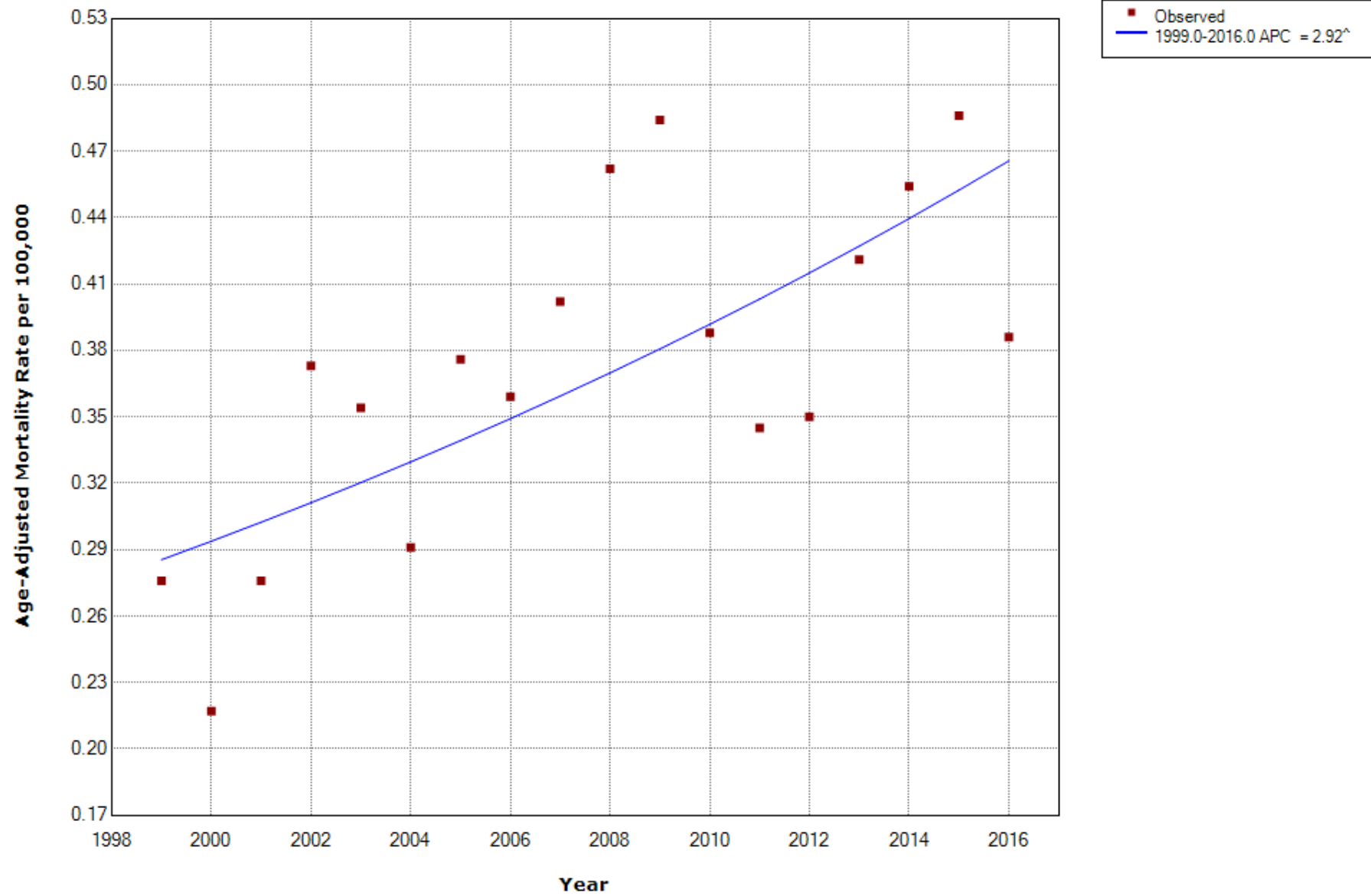
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

### Cerebral palsy and other paralytic syndromes (G80-G83) / NH whites: 1 Joinpoint



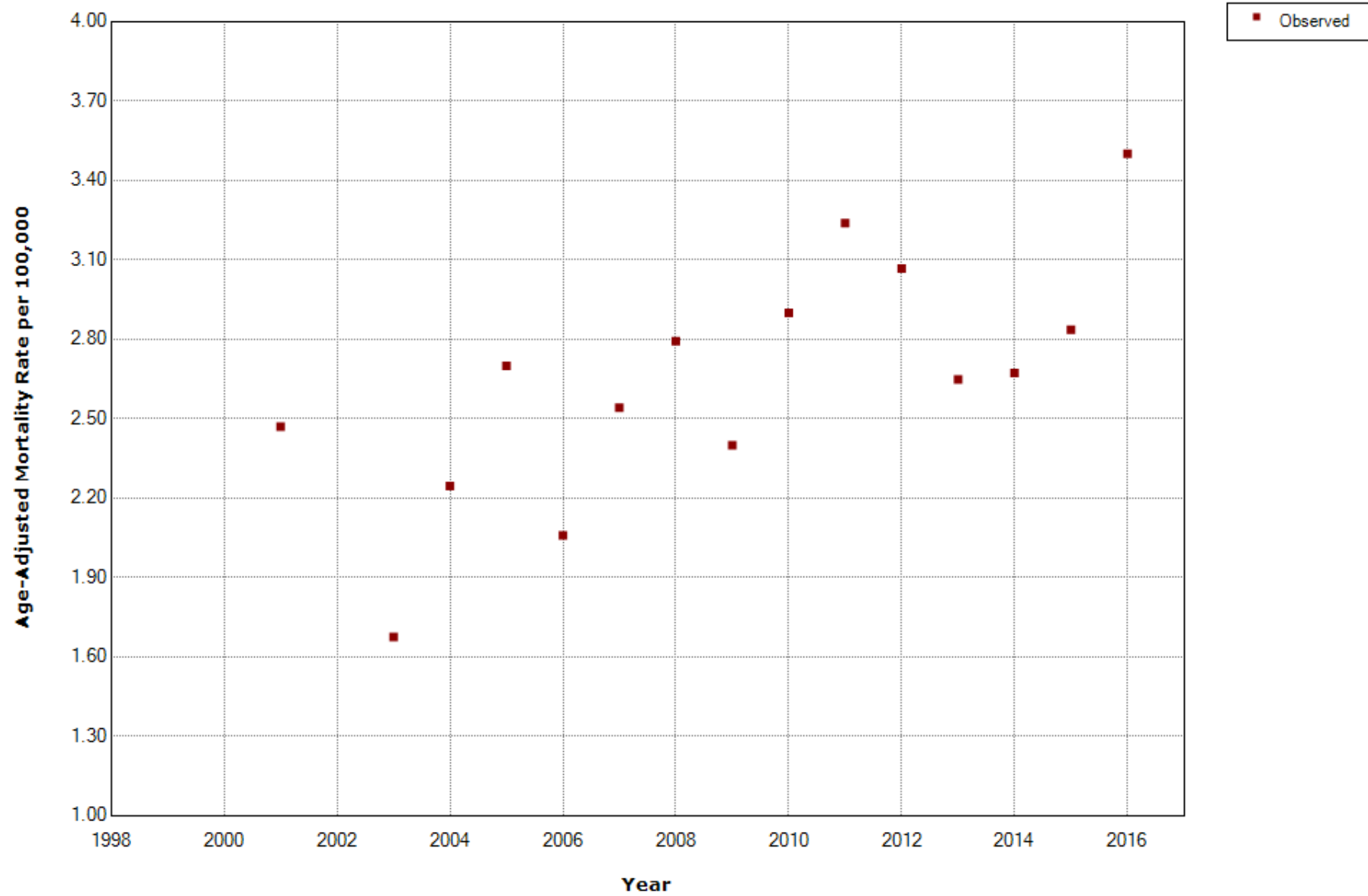
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

### Cerebral palsy and other paralytic syndromes (G80-G83) / Hispanics: 0 Joinpoints



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

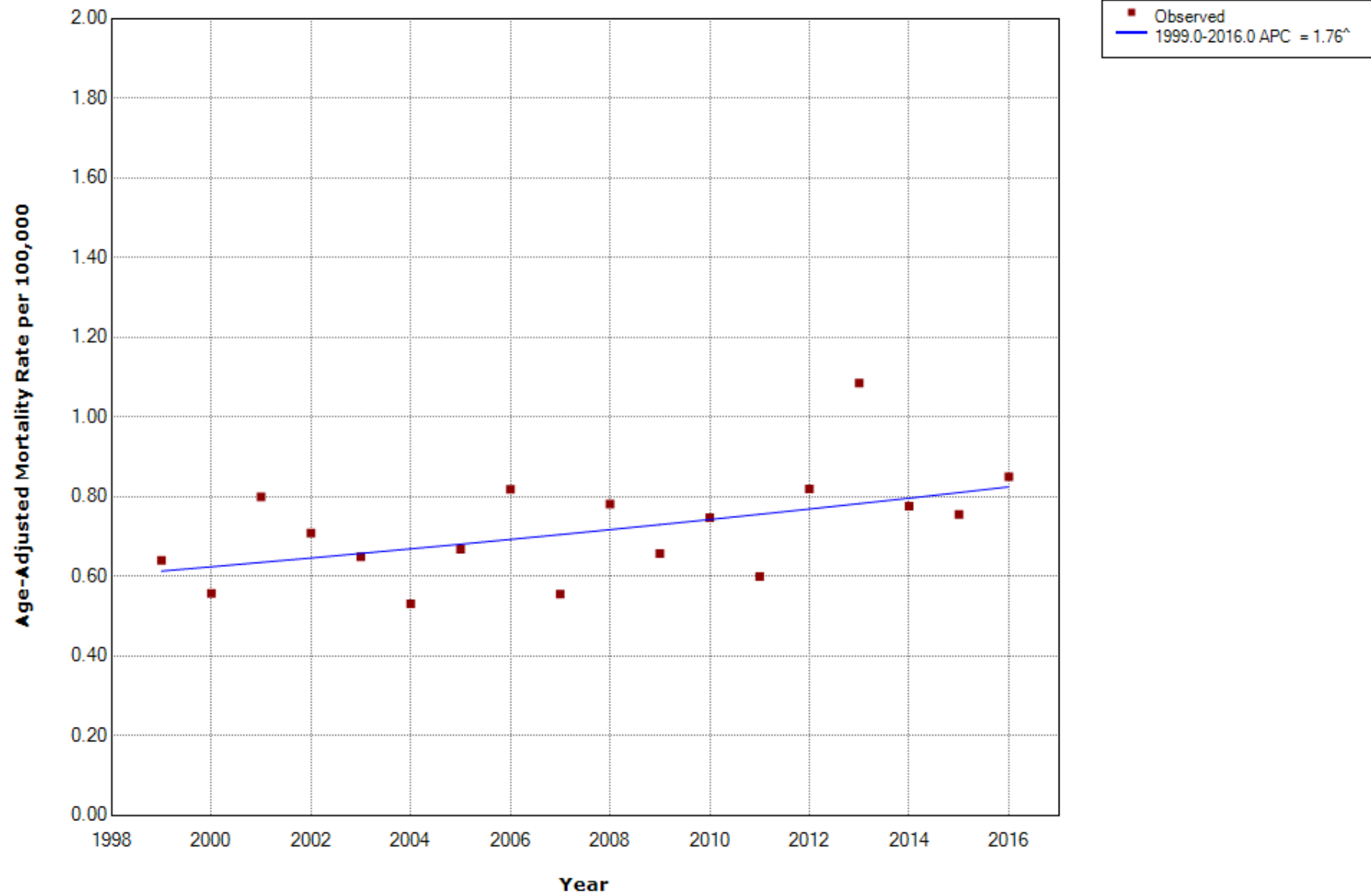
### Other disorders of the nervous system (G90-G98) / NH AIAN: Observed



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

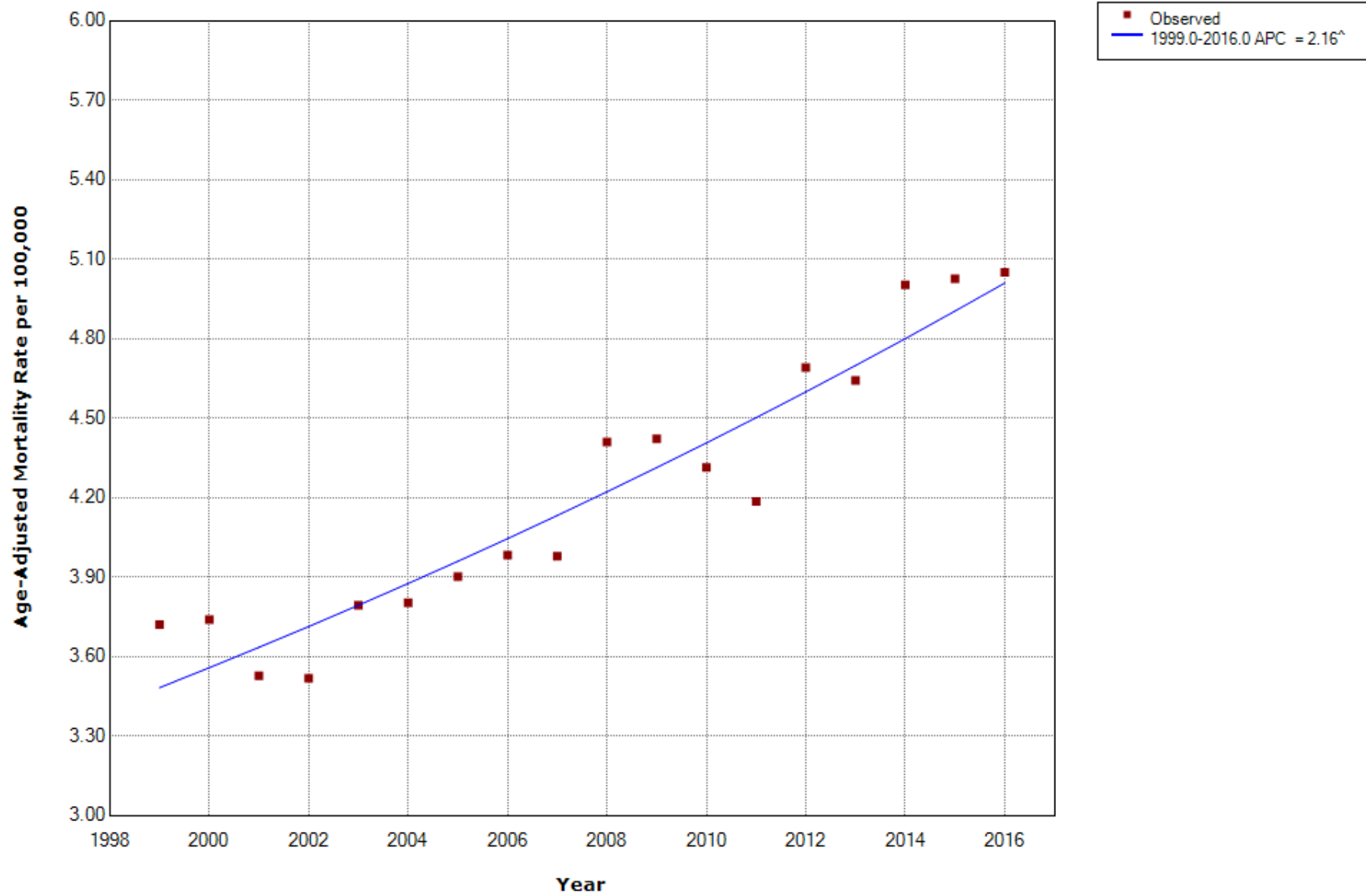
\* Joinpoint cannot process records with missing dependent variable values. Joinpoint will not analyze by-groups that have this error. (Row = 2250, Col = 1)

Other disorders of the nervous system (G90-G98) / NH API: 0 Joinpoints



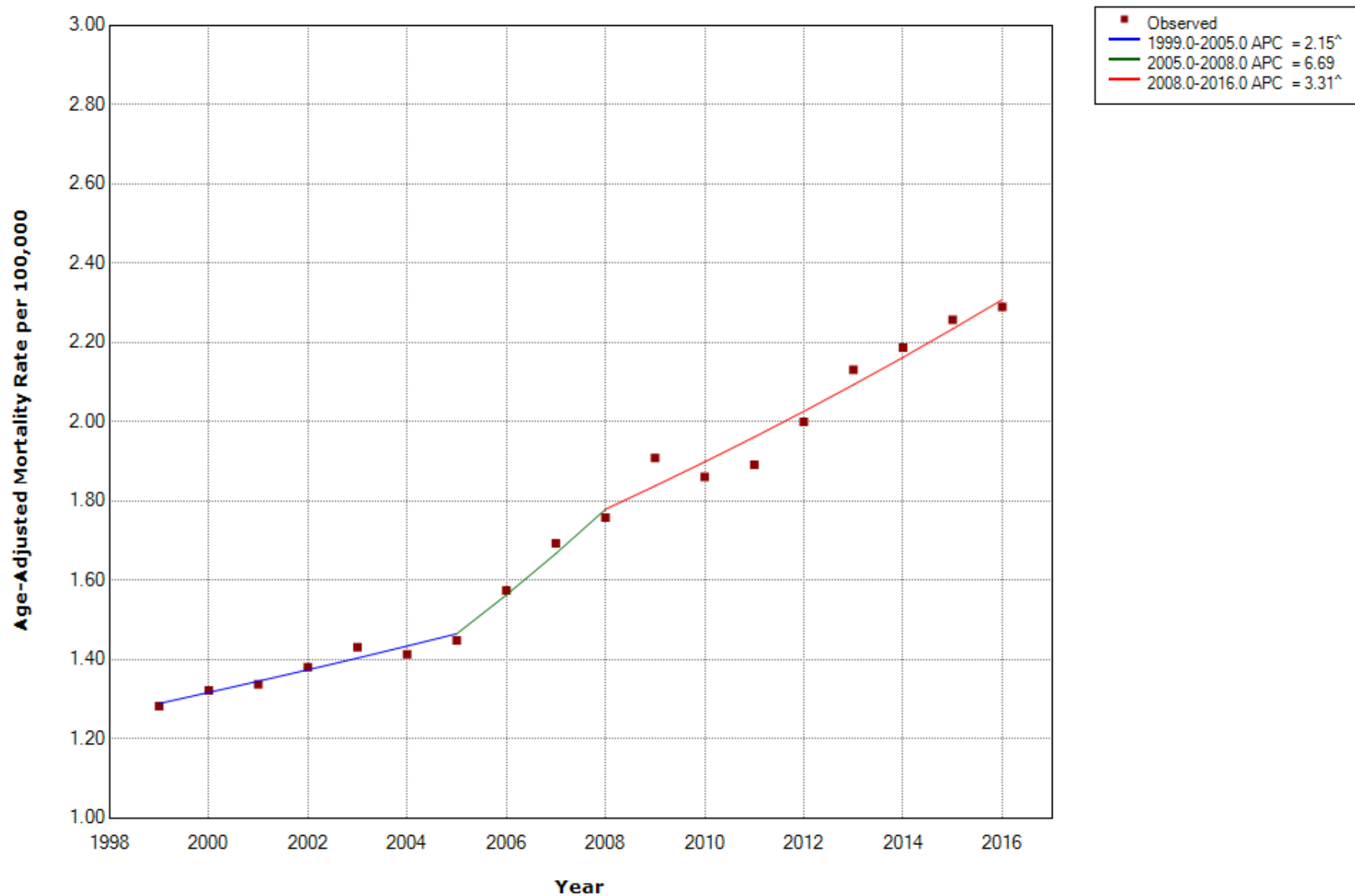
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

Other disorders of the nervous system (G90-G98) / NH Blacks: 0 Joinpoints



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

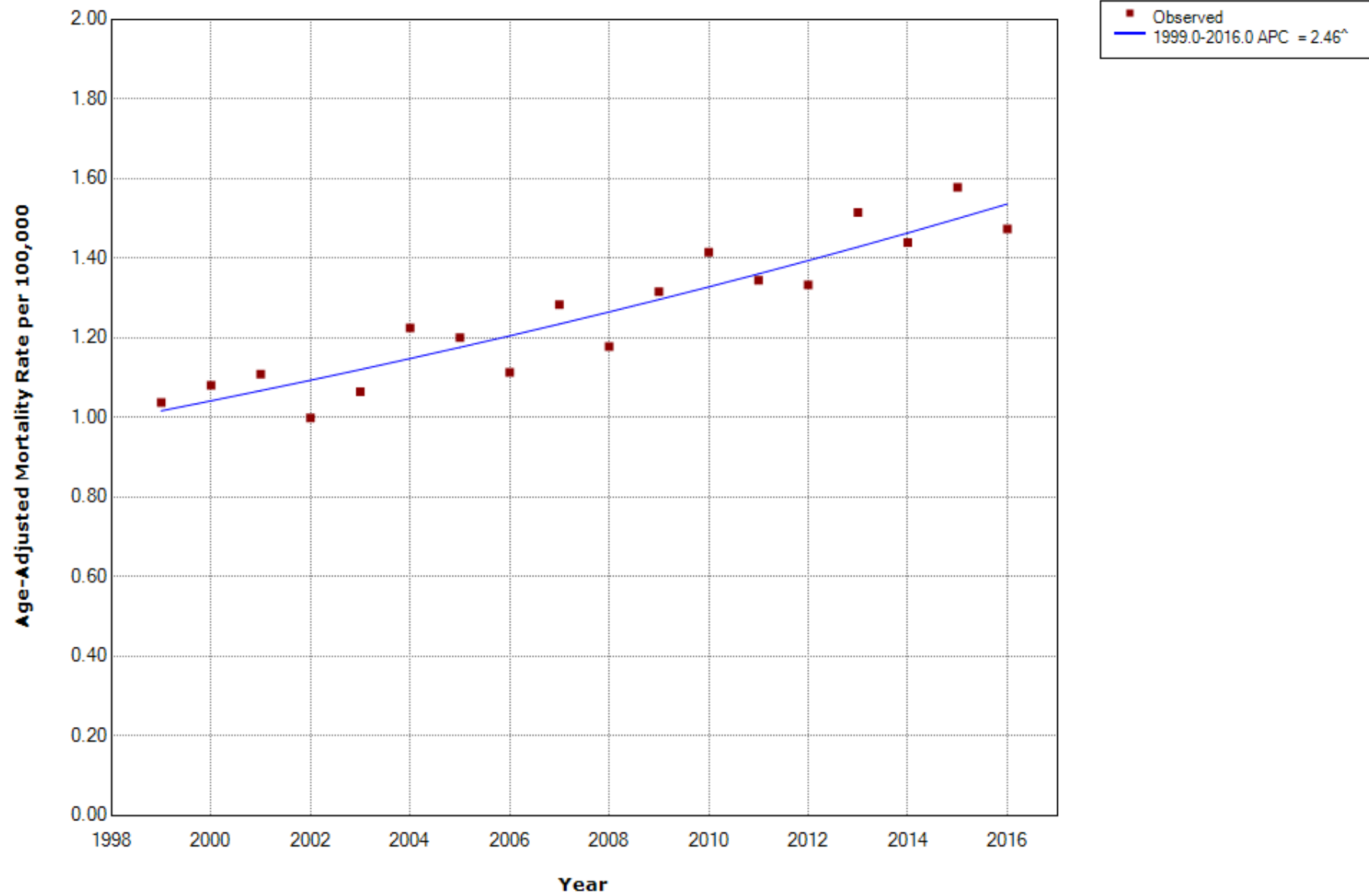
Other disorders of the nervous system (G90-G98) / NH whites: 2 Joinpoints



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

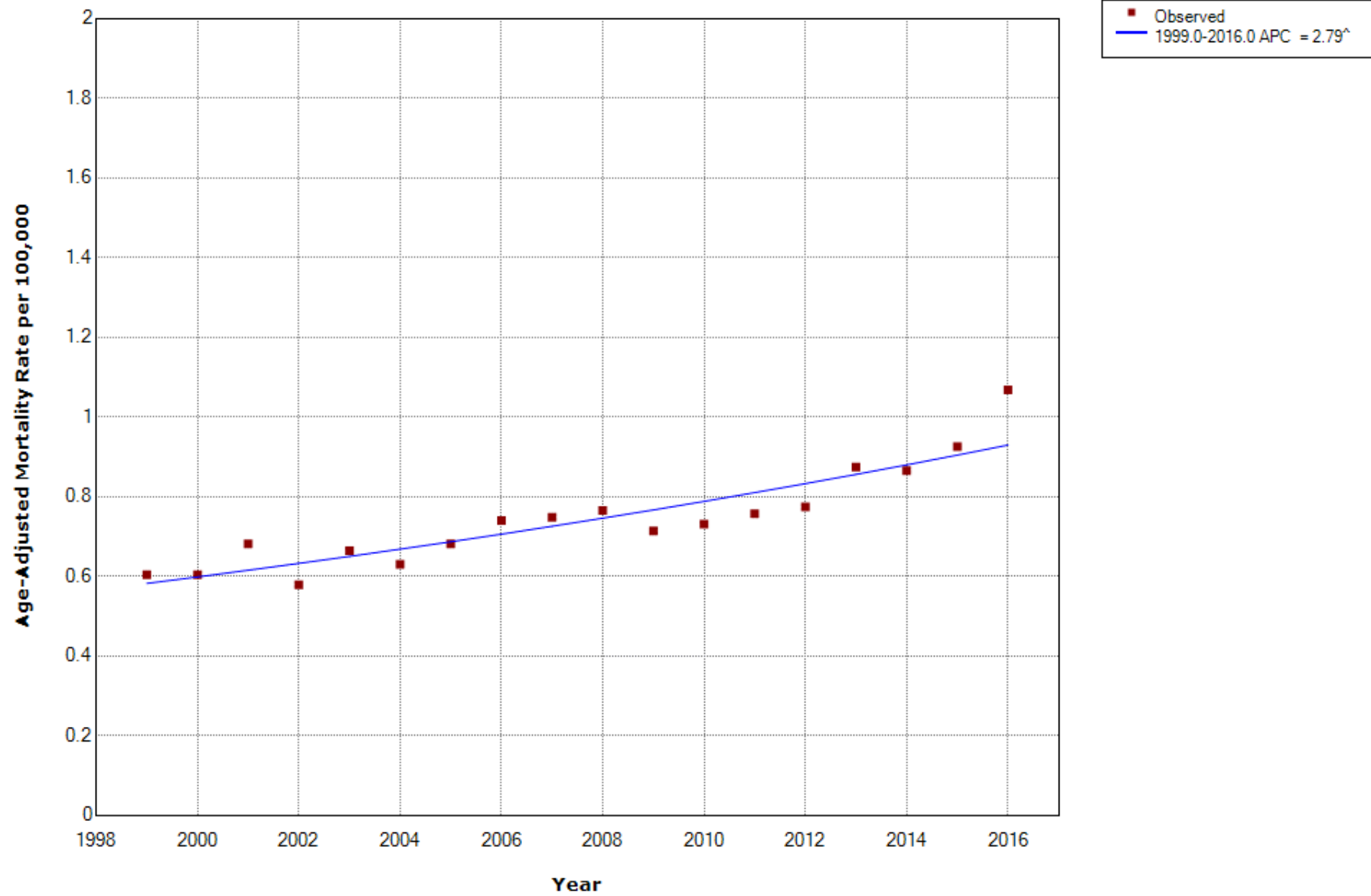


Other disorders of the nervous system (G90-G98) / Hispanics: 0 Joinpoints



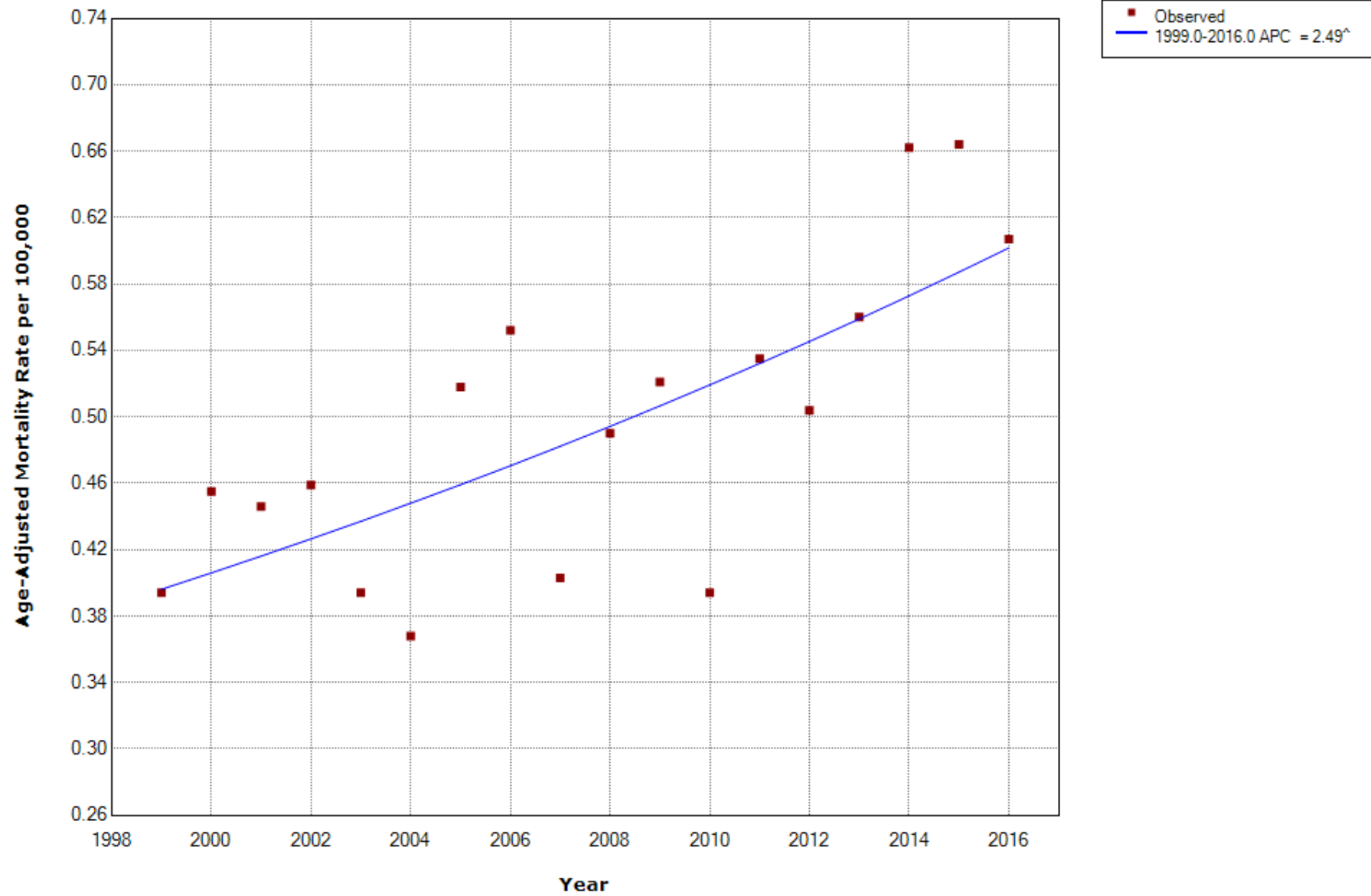
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

Alzheimer's/degenerative disorders (G30-G31) / NH whites: 0 Joinpoints



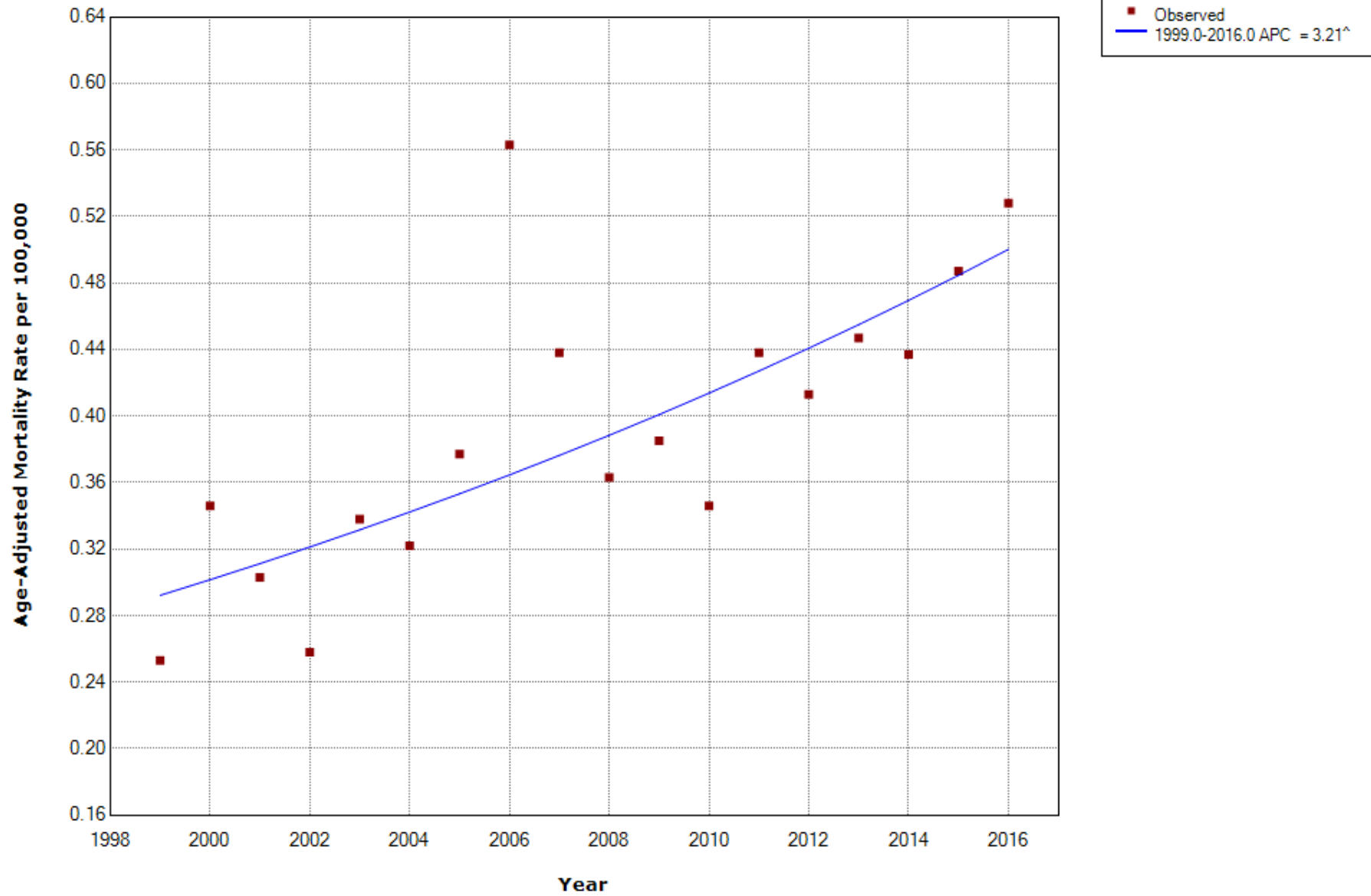
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

Alzheimer's/degenerative disorders (G30-G31) / NH Blacks: 0 Joinpoints



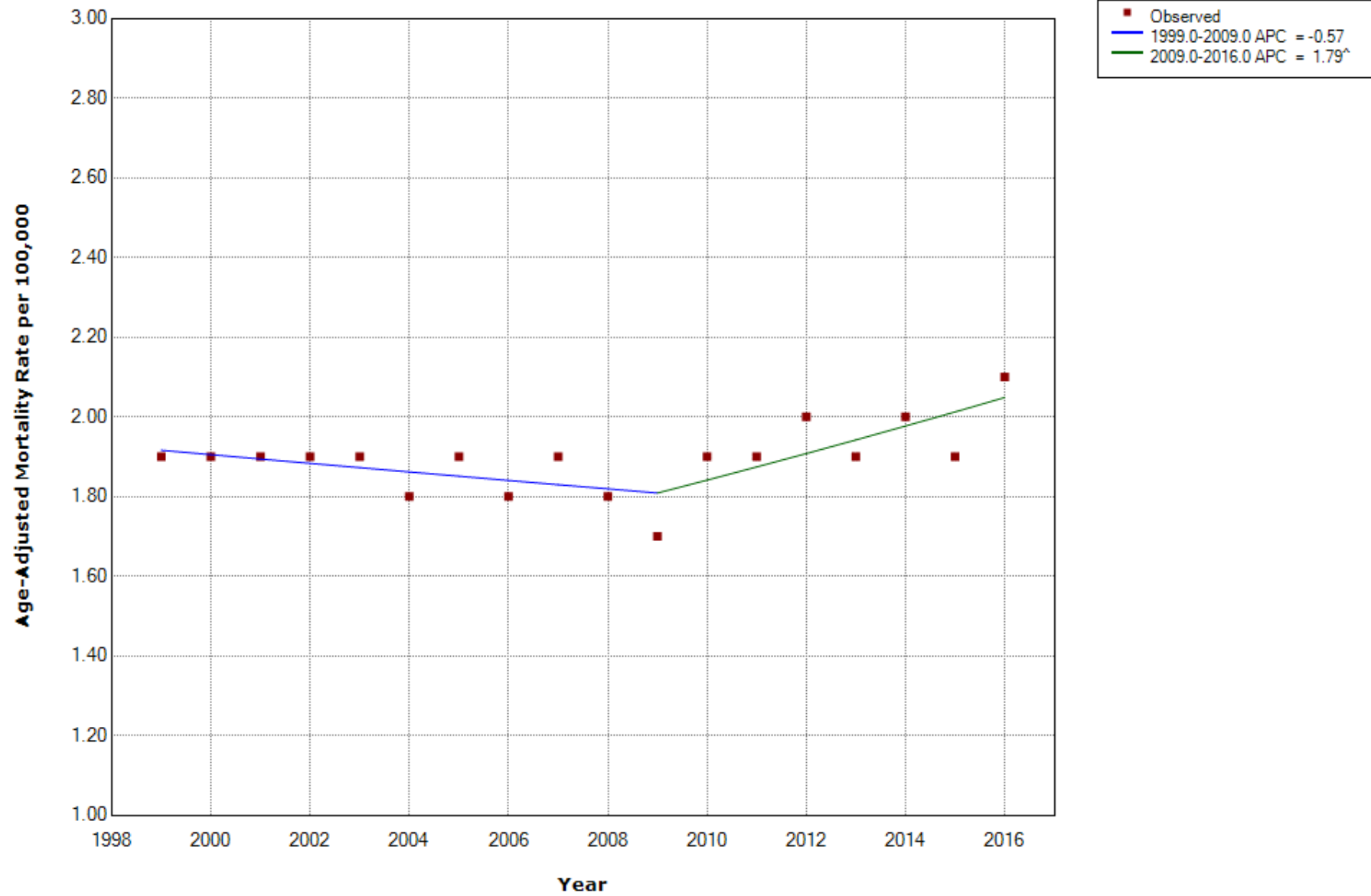
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

Alzheimer's/degenerative disorders (G30-G31) / Hispanics: 0 Joinpoints



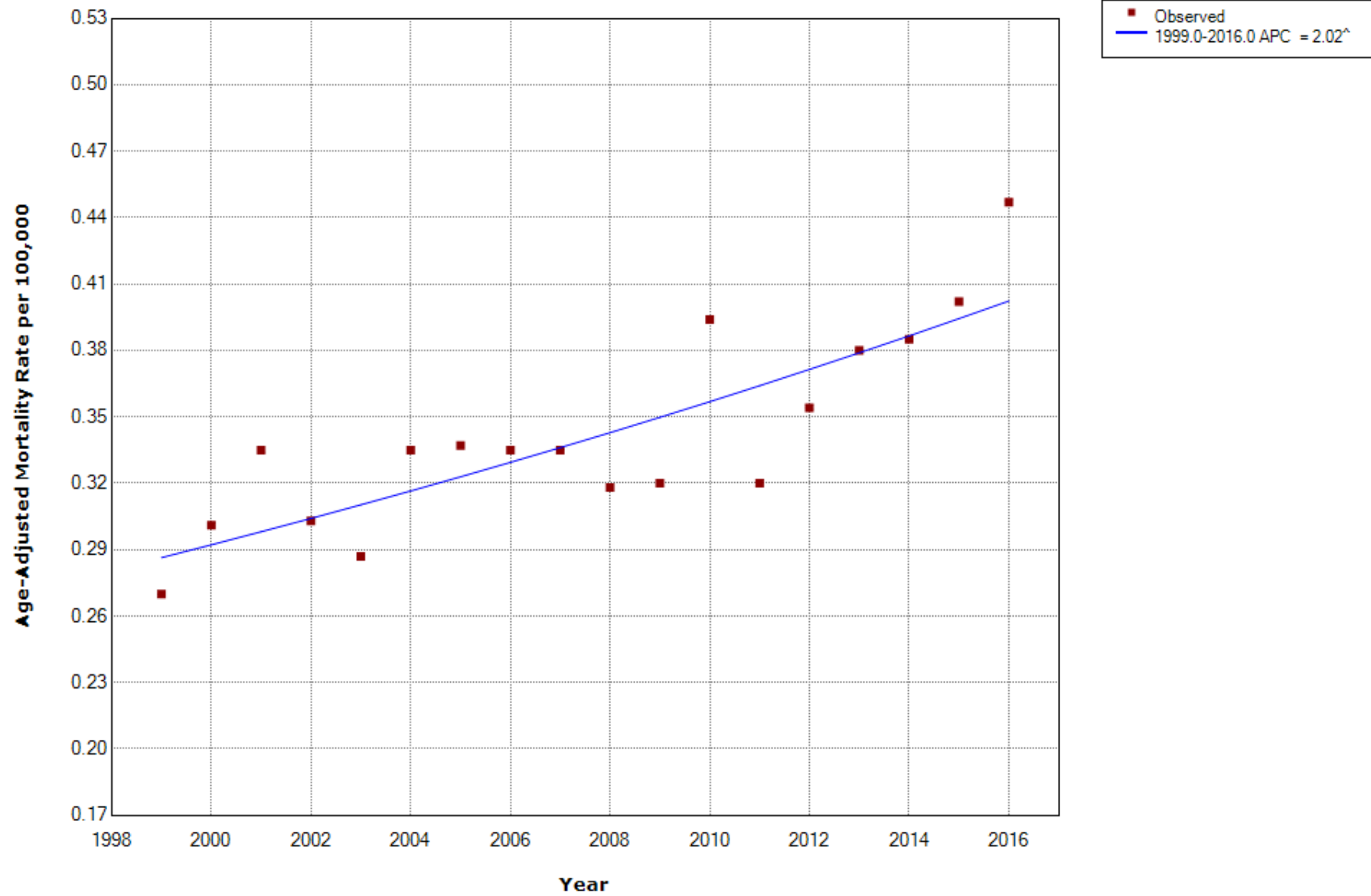
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

### Cancer of lip/oral cavity/pharynx (C00-C14) / NH whites: 1 Joinpoint



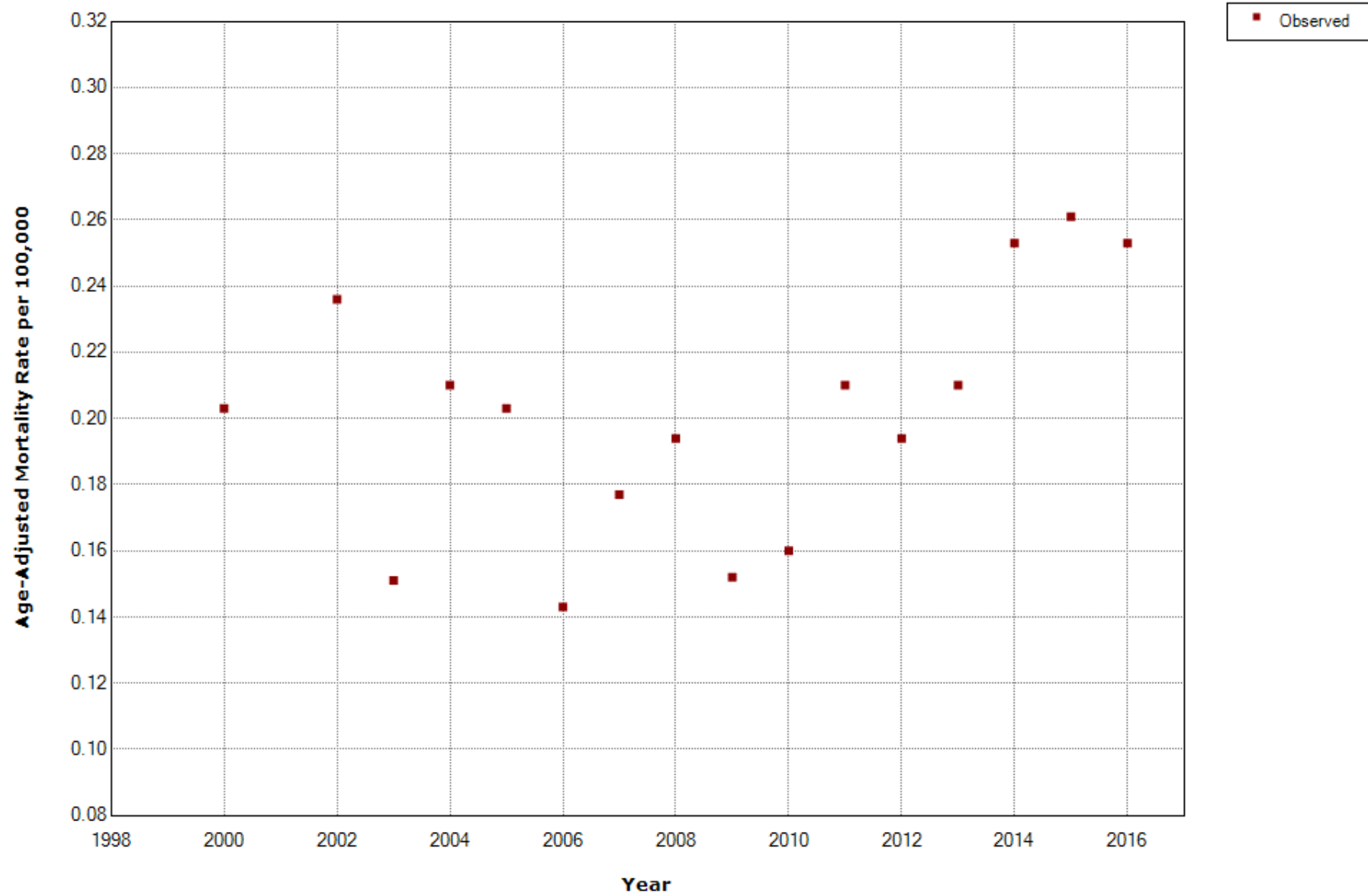
<sup>^</sup> Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

### Extrapyramidal/movement disorders (G20-G25) / NH whites: 0 Joinpoints



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

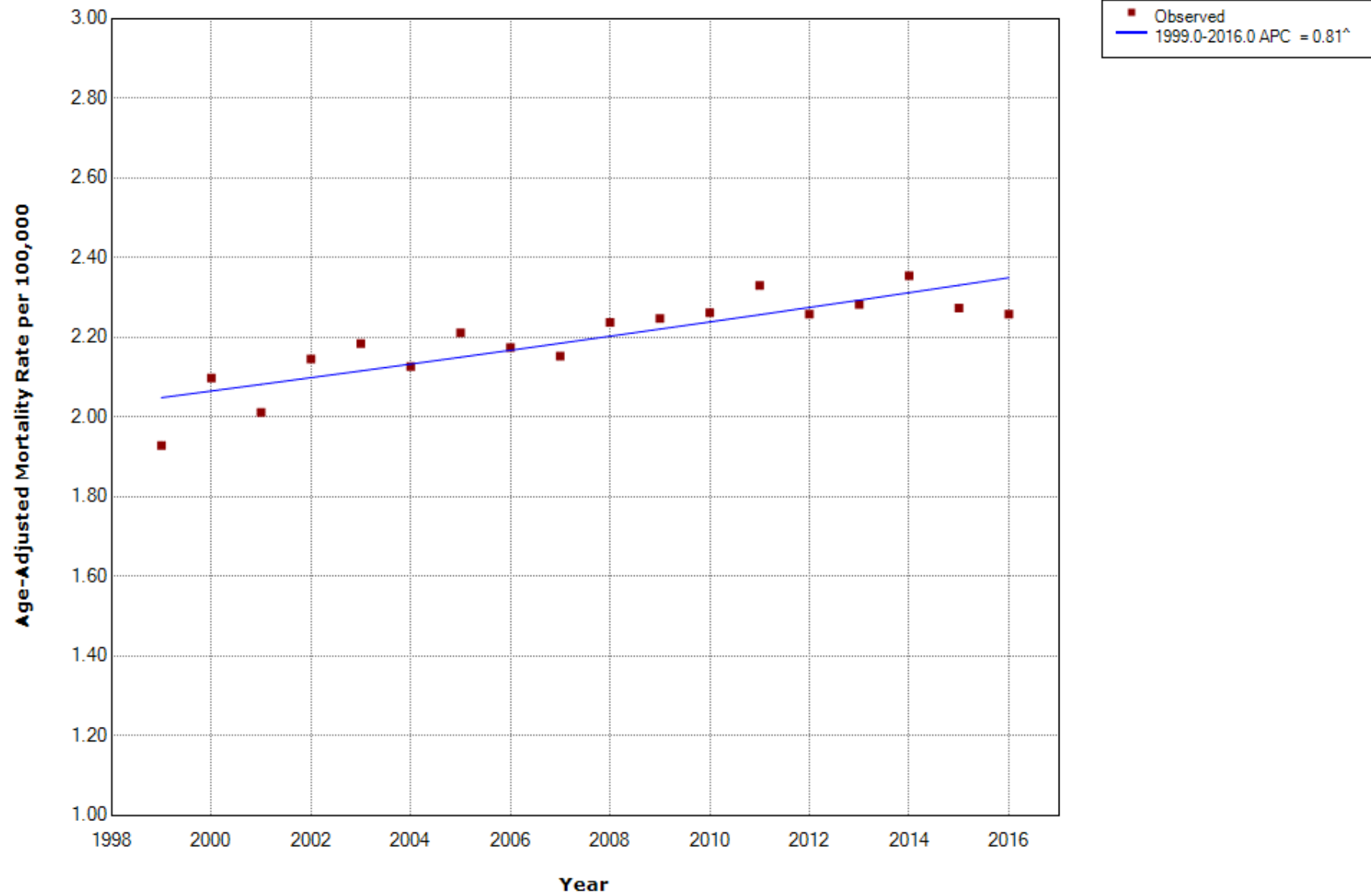
### Extrapyramidal/movement disorders (G20-G25) / Hispanics: Observed



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

\* Joinpoint cannot process records with missing dependent variable values. Joinpoint will not analyze by-groups that have this error. (Row = 90, Col = 1)

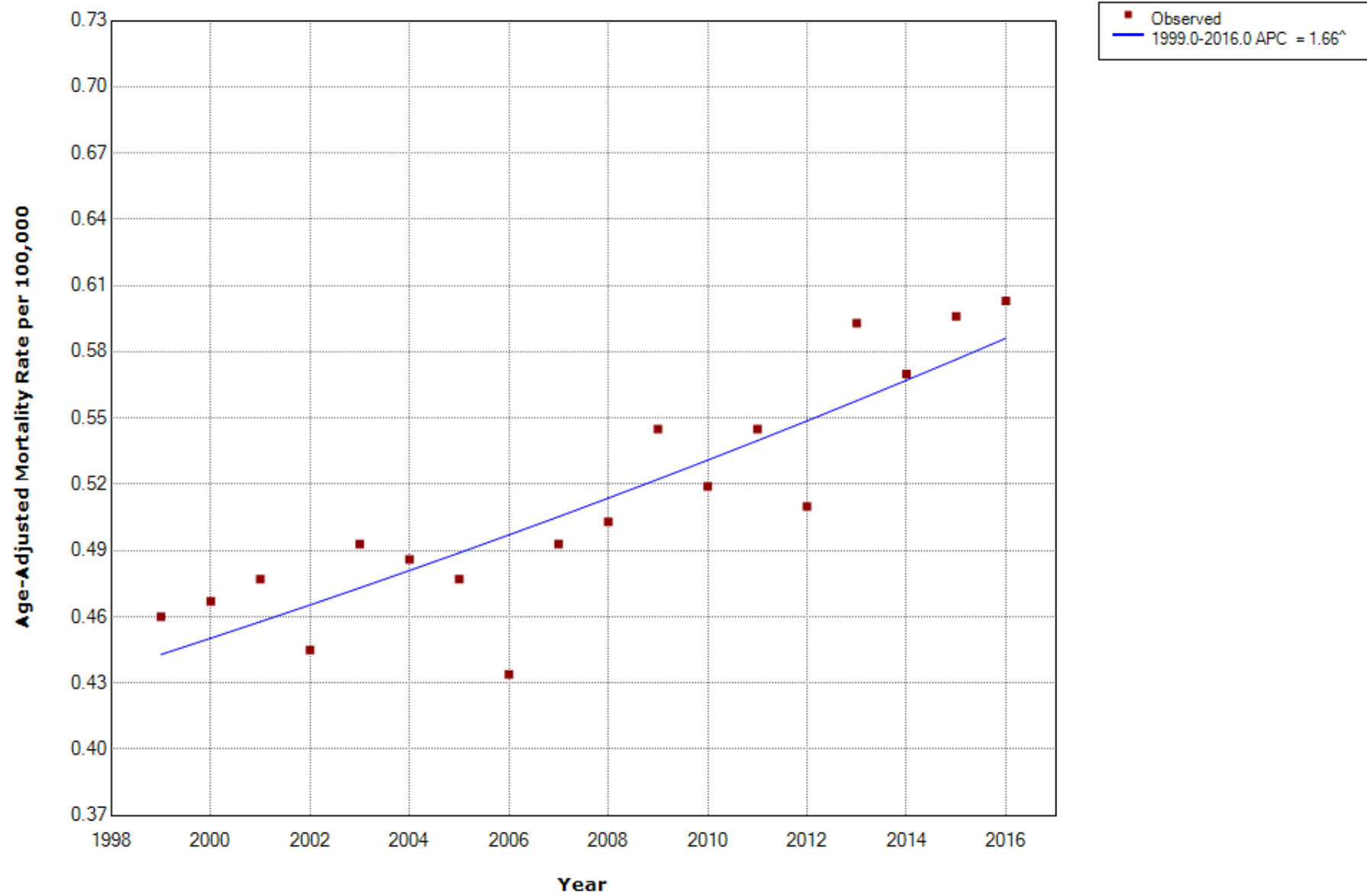
### Inflammatory diseases (G00-G14) / NH whites: 0 Joinpoints



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

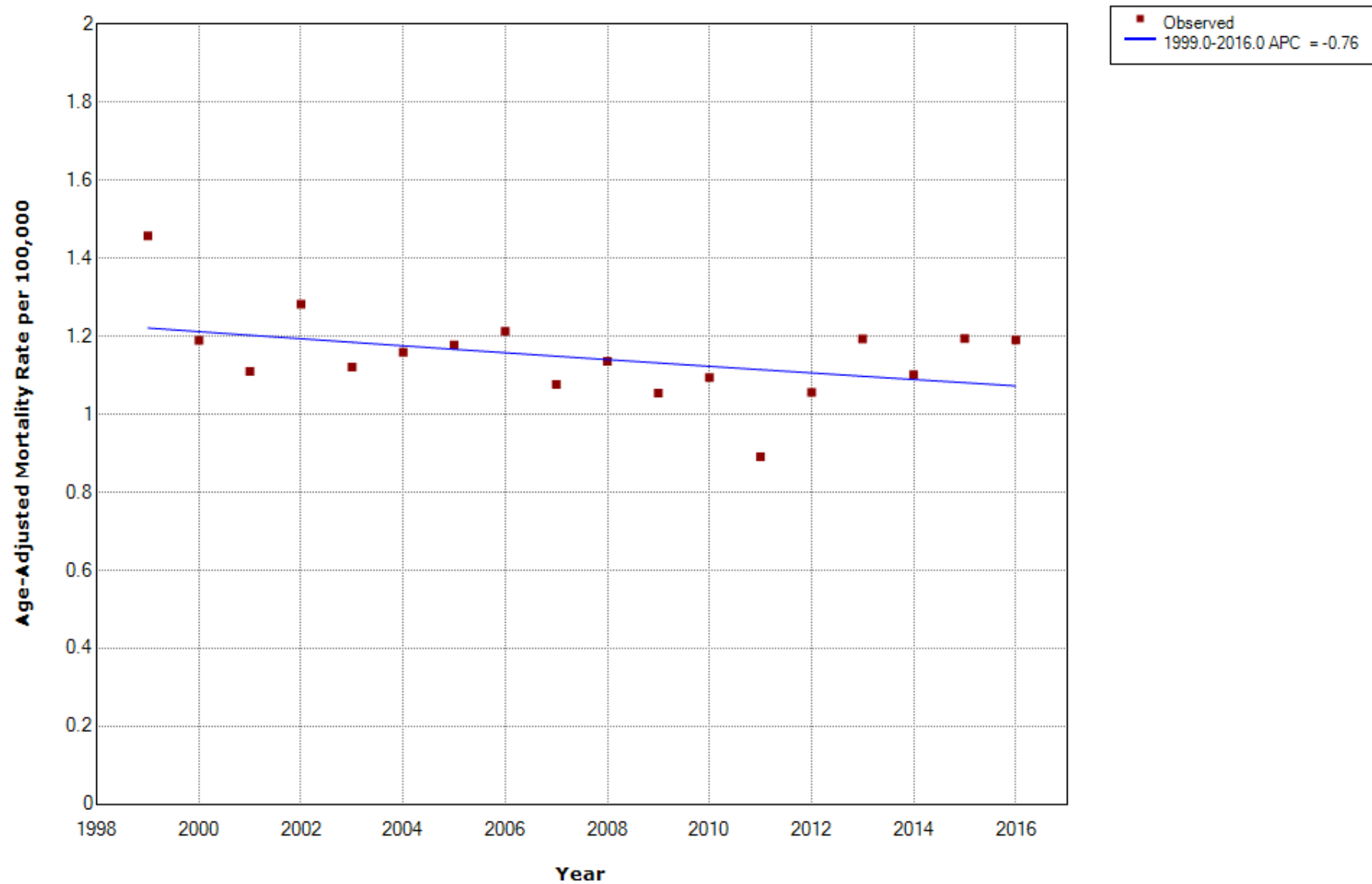


Misc. endocrine disorders (E00-E07, 15-16, 20-34, 40-46) / NH whites: 0 Joinpoints



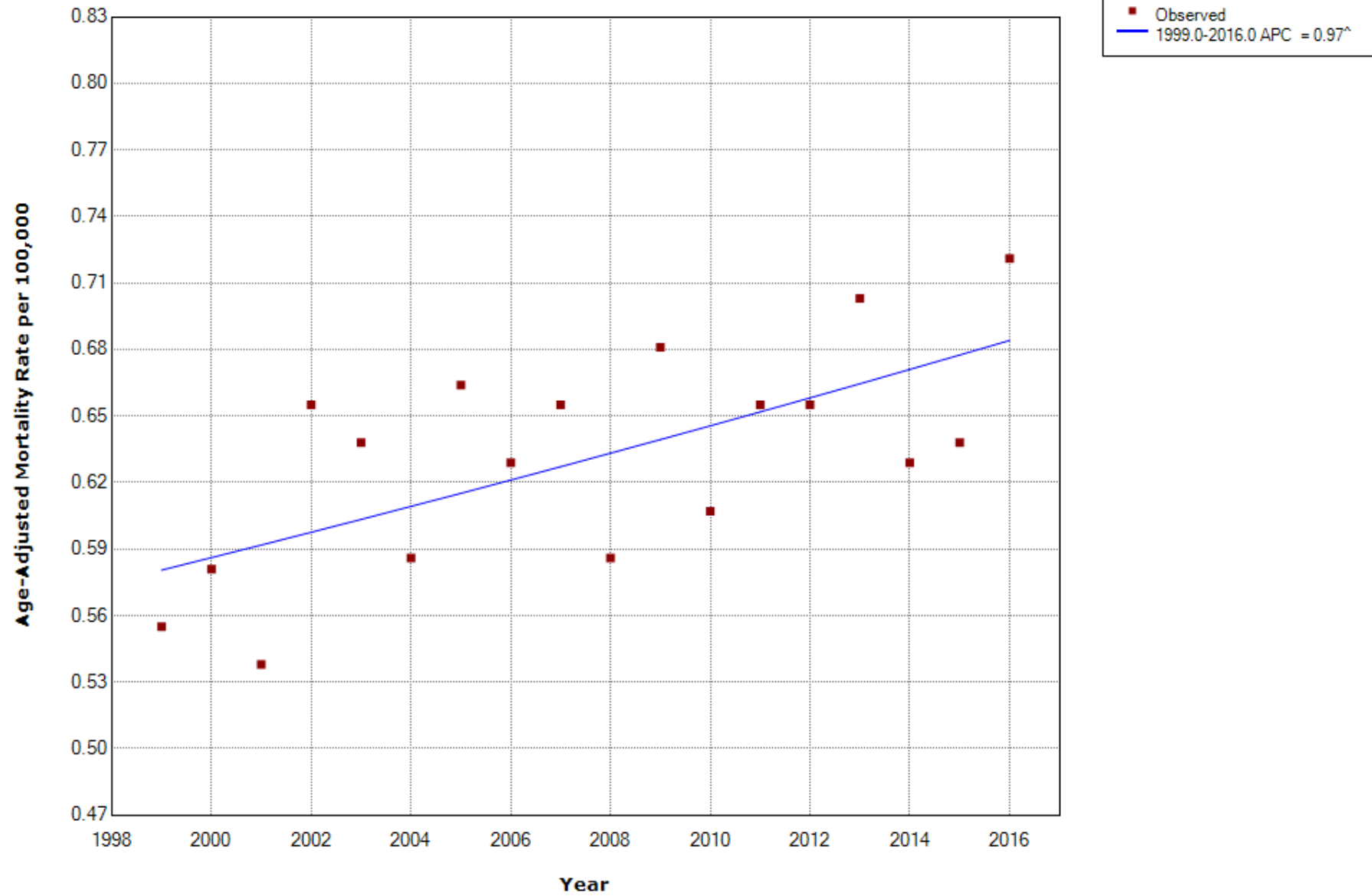
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

E00-E07, 15-16, 20-34, 40-46 (Other endocrine disorders {e.g., thyroid and other endocrine glands, malnutrition}) / NH  
Blacks: 0 Joinpoints



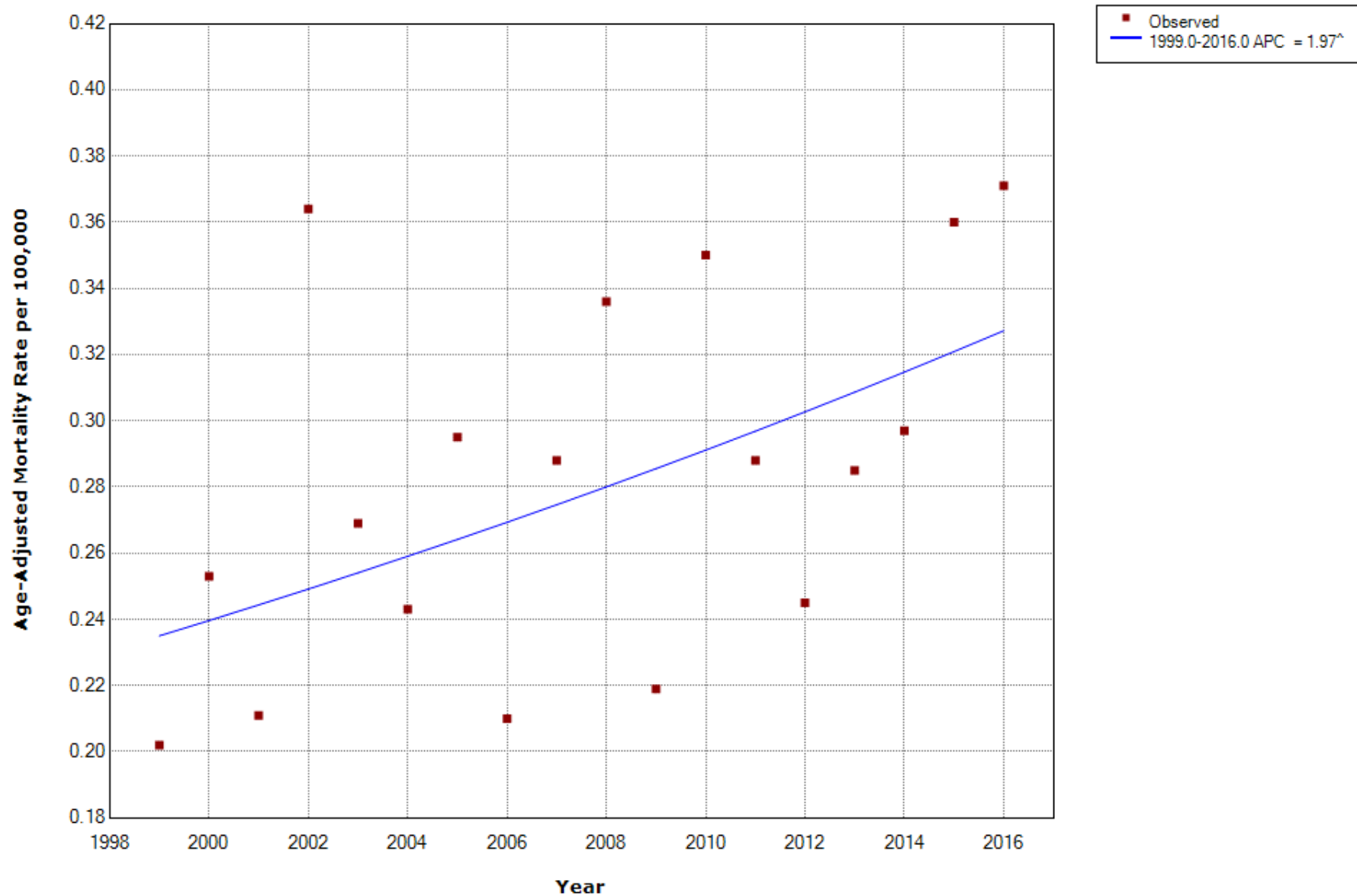
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

Misc. peripheral diseases (G50-G72) / NH whites: 0 Joinpoints



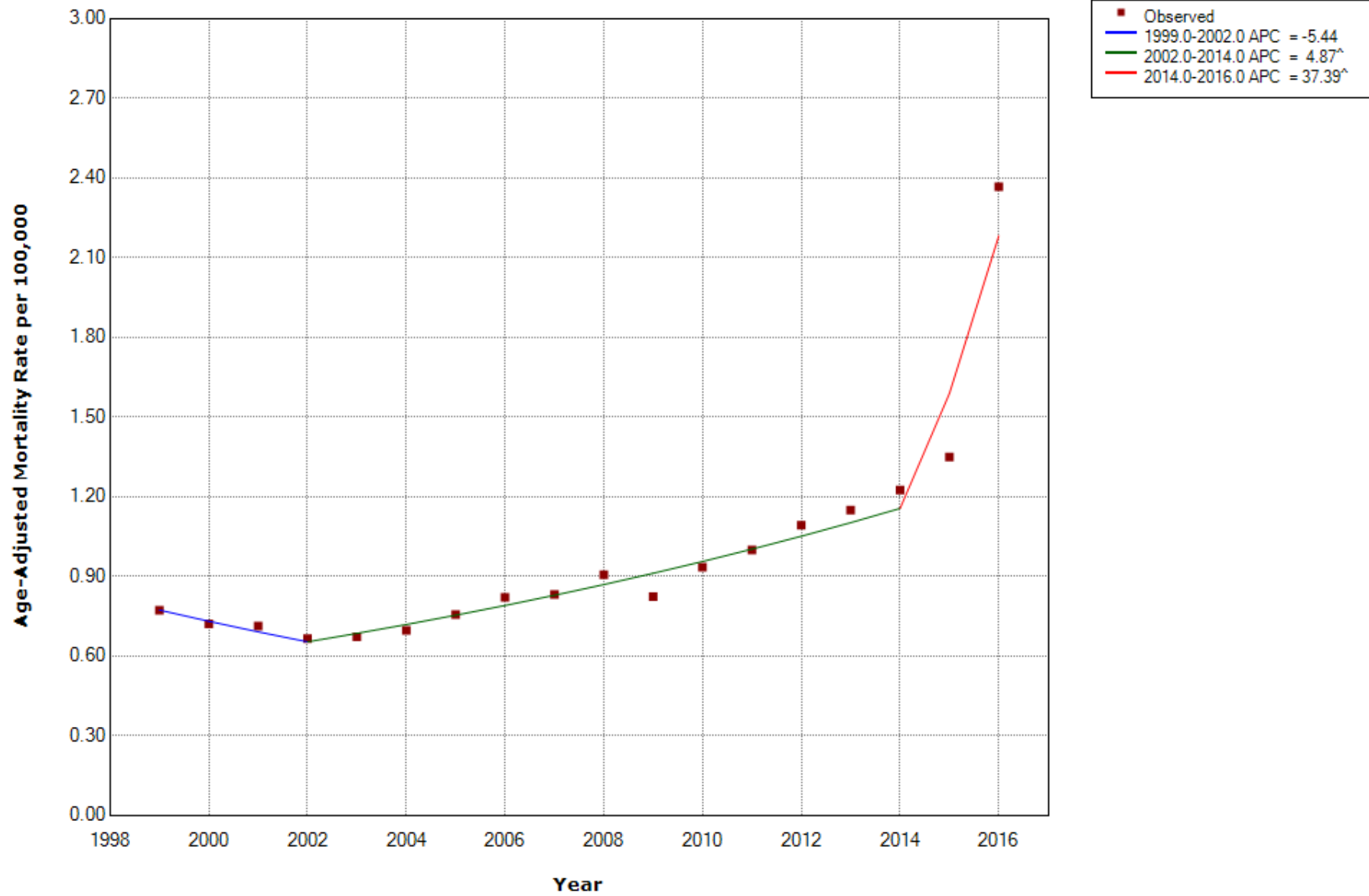
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

Misc. peripheral diseases (G50-G72) / Hispanics: 0 Joinpoints



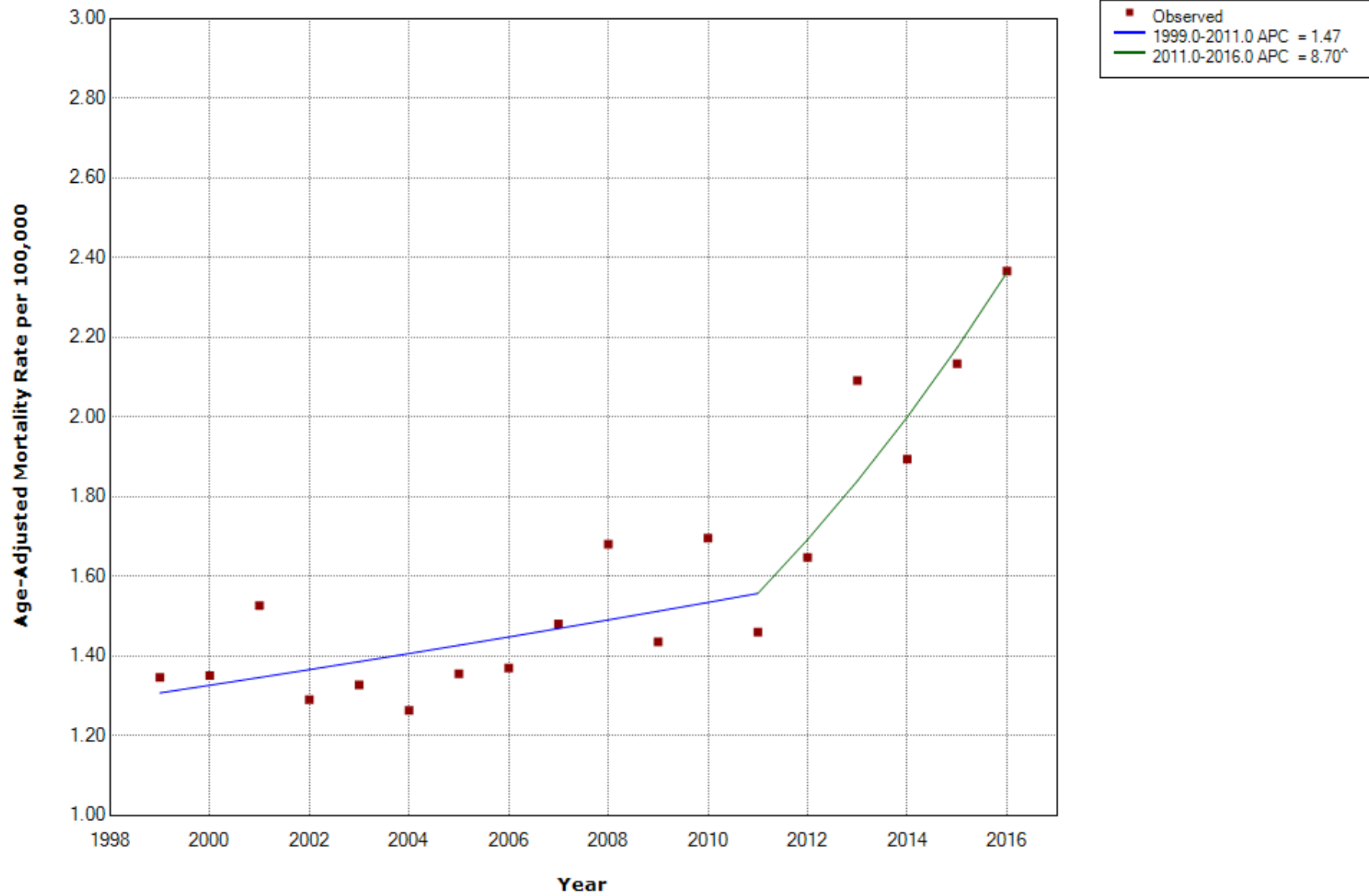
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

Misc. respiratory system disorders (J96-J98) / NH whites: 2 Joinpoints



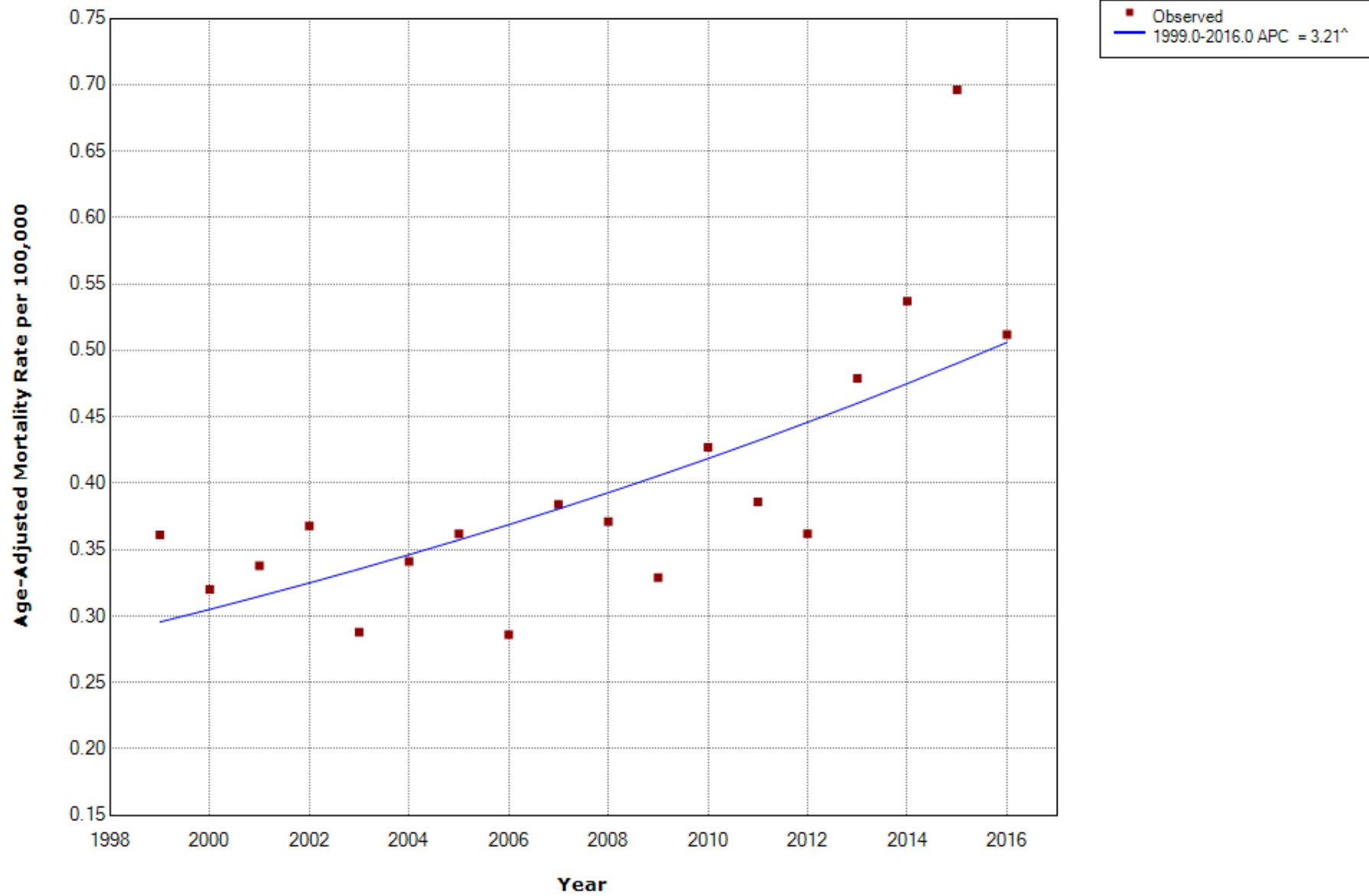
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

### Misc. respiratory system disorders (J96-J98) / NH Blacks: 1 Joinpoint



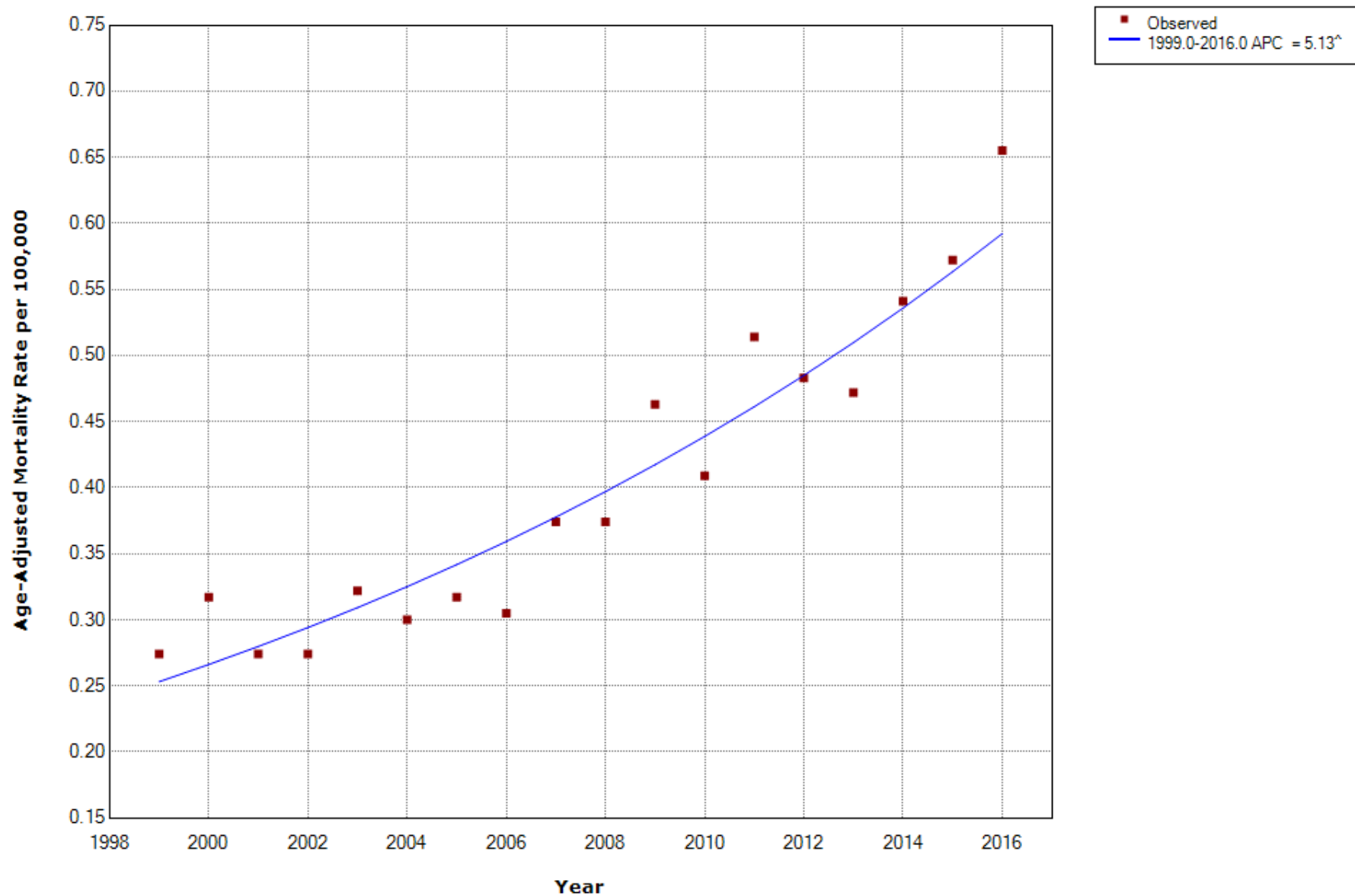
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

Misc. respiratory system disorders (J96-J98) / Hispanics: 0 Joinpoints



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

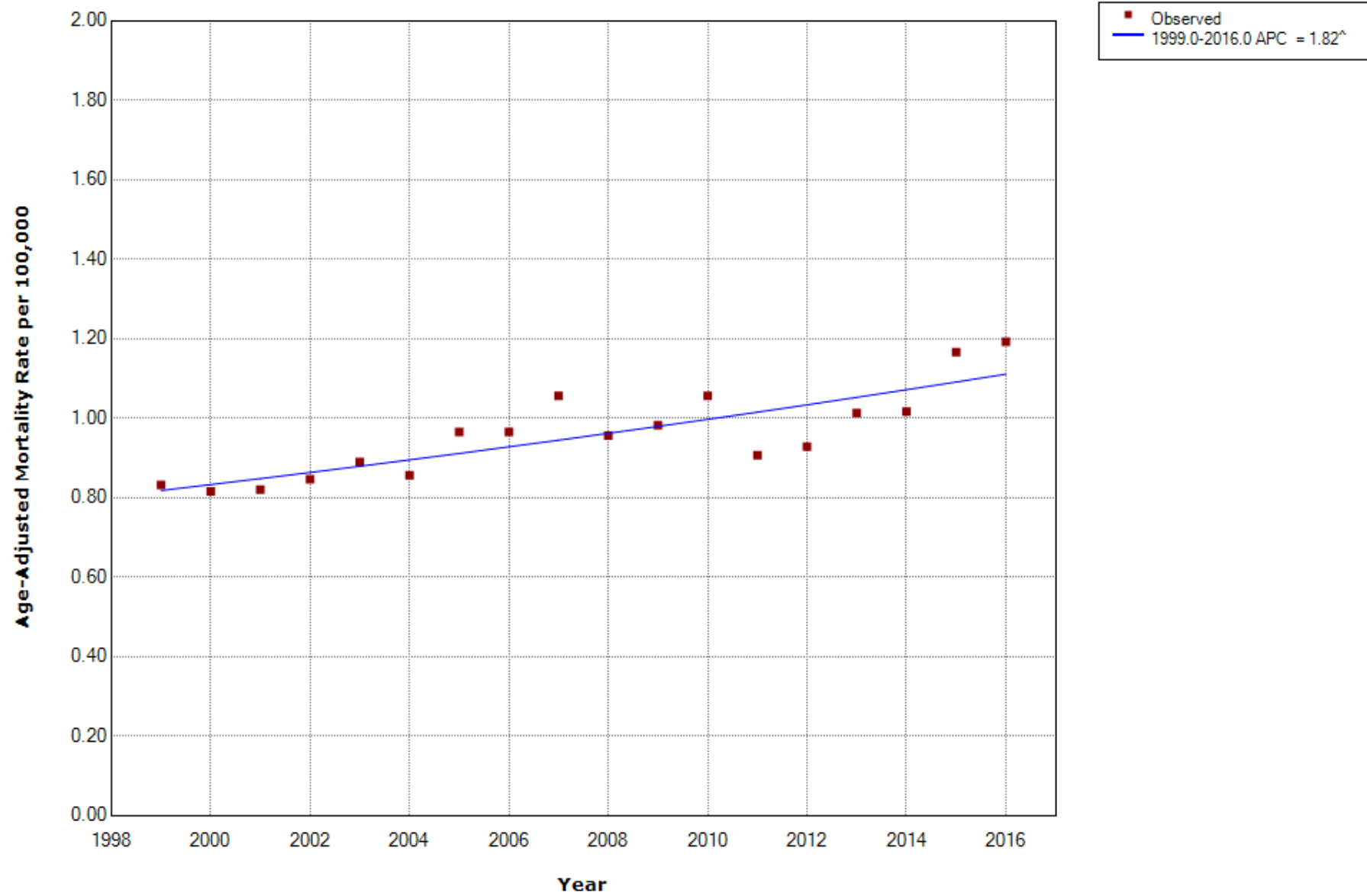
Other forms of accidental poisoning (X46-X49) / NH whites: 0 Joinpoints



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

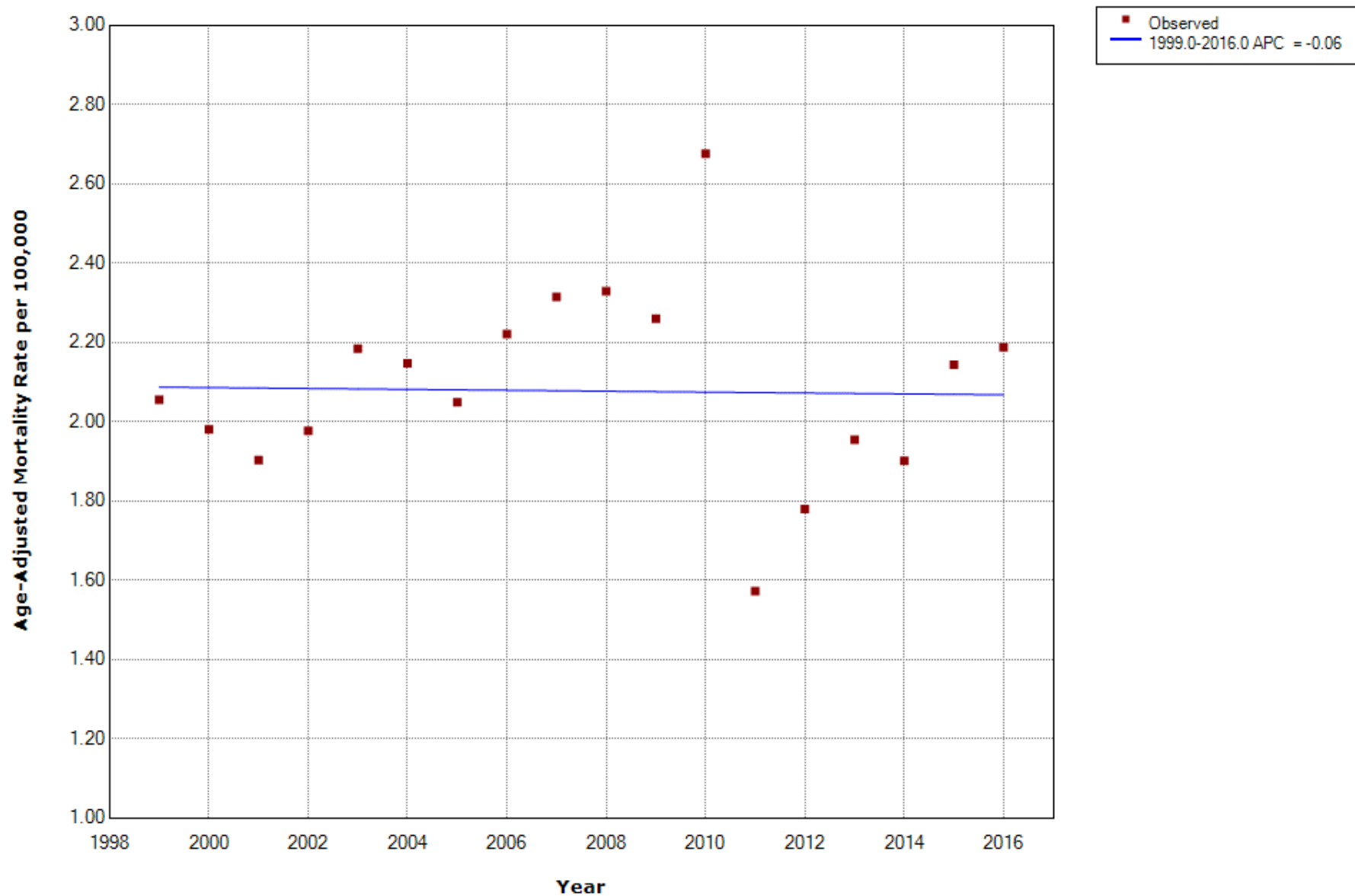


Other urinary system diseases (N00-N15, N20-39) / NH whites: 0 Joinpoints



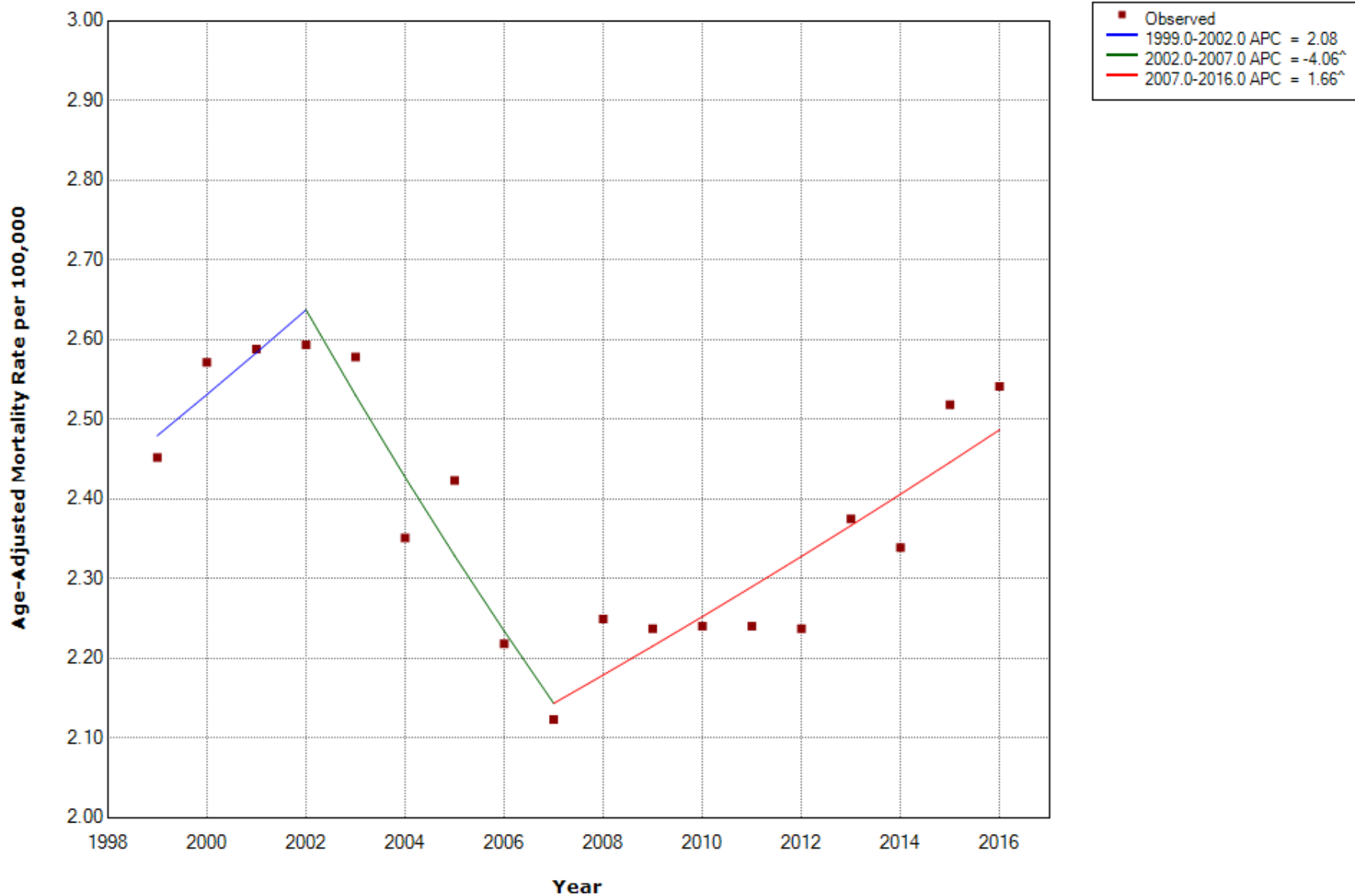
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

Other urinary system diseases (N00-N15, N20-39) / NH Blacks: 0 Joinpoints



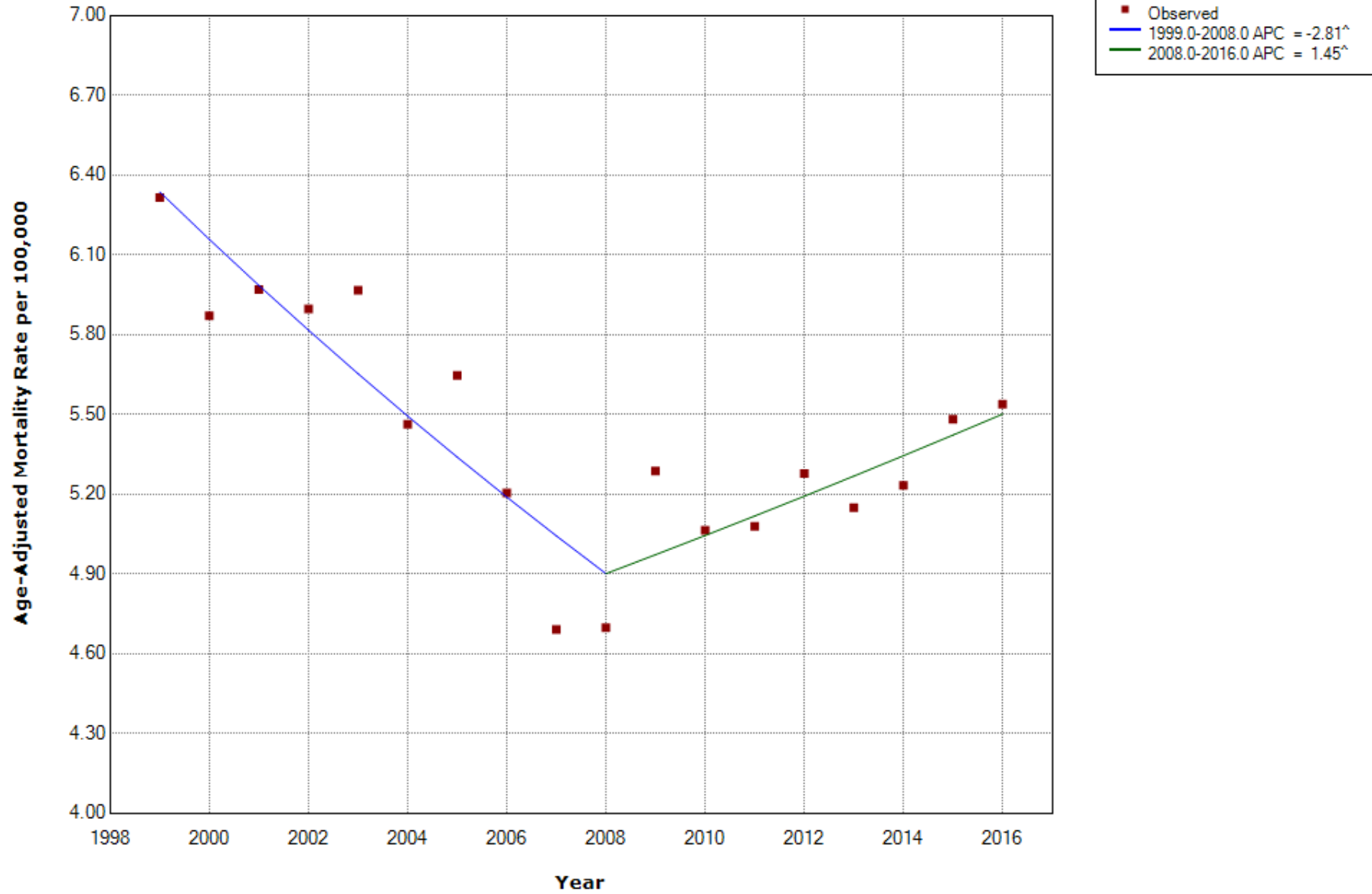
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

Pulmonary heart disease (I26-I28) / NH whites: 2 Joinpoints



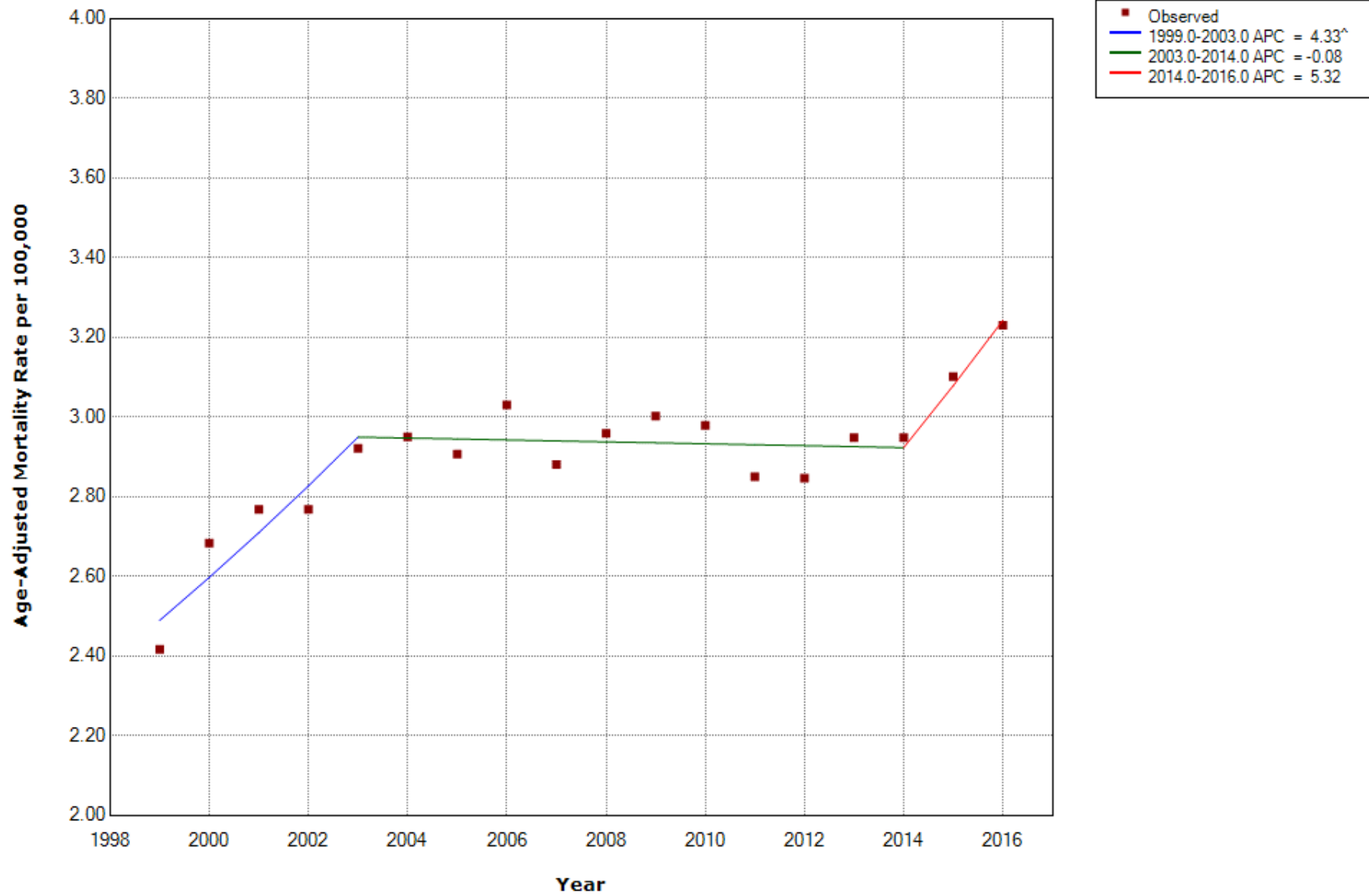
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

### Pulmonary heart disease (I26-I28) / NH Blacks: 1 Joinpoint



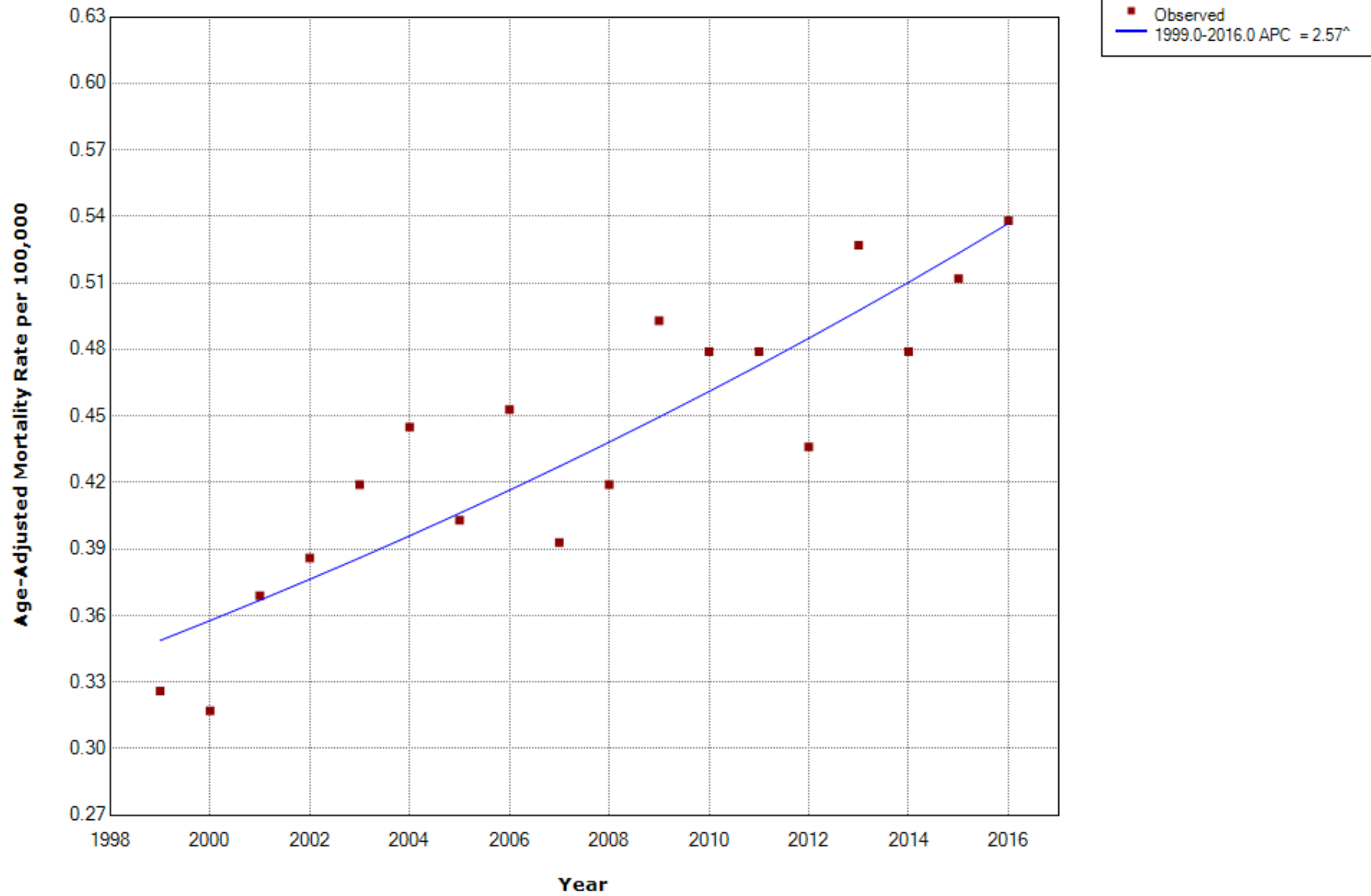
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 1 Joinpoint.

### Renal failure (N17-N19) / NH whites: 2 Joinpoints



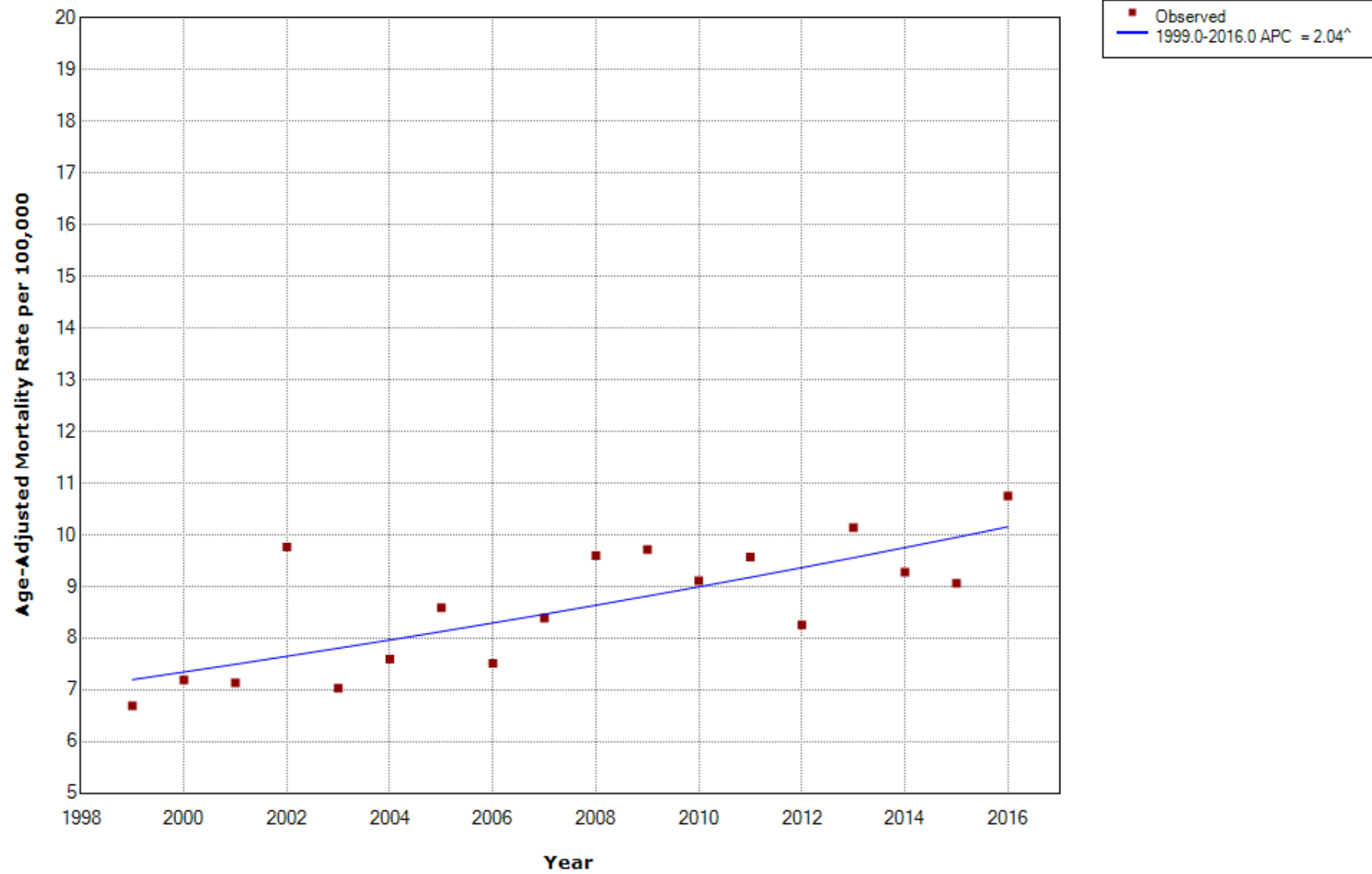
<sup>^</sup> Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

### Skin diseases (L00-L98) / NH whites: 0 Joinpoints



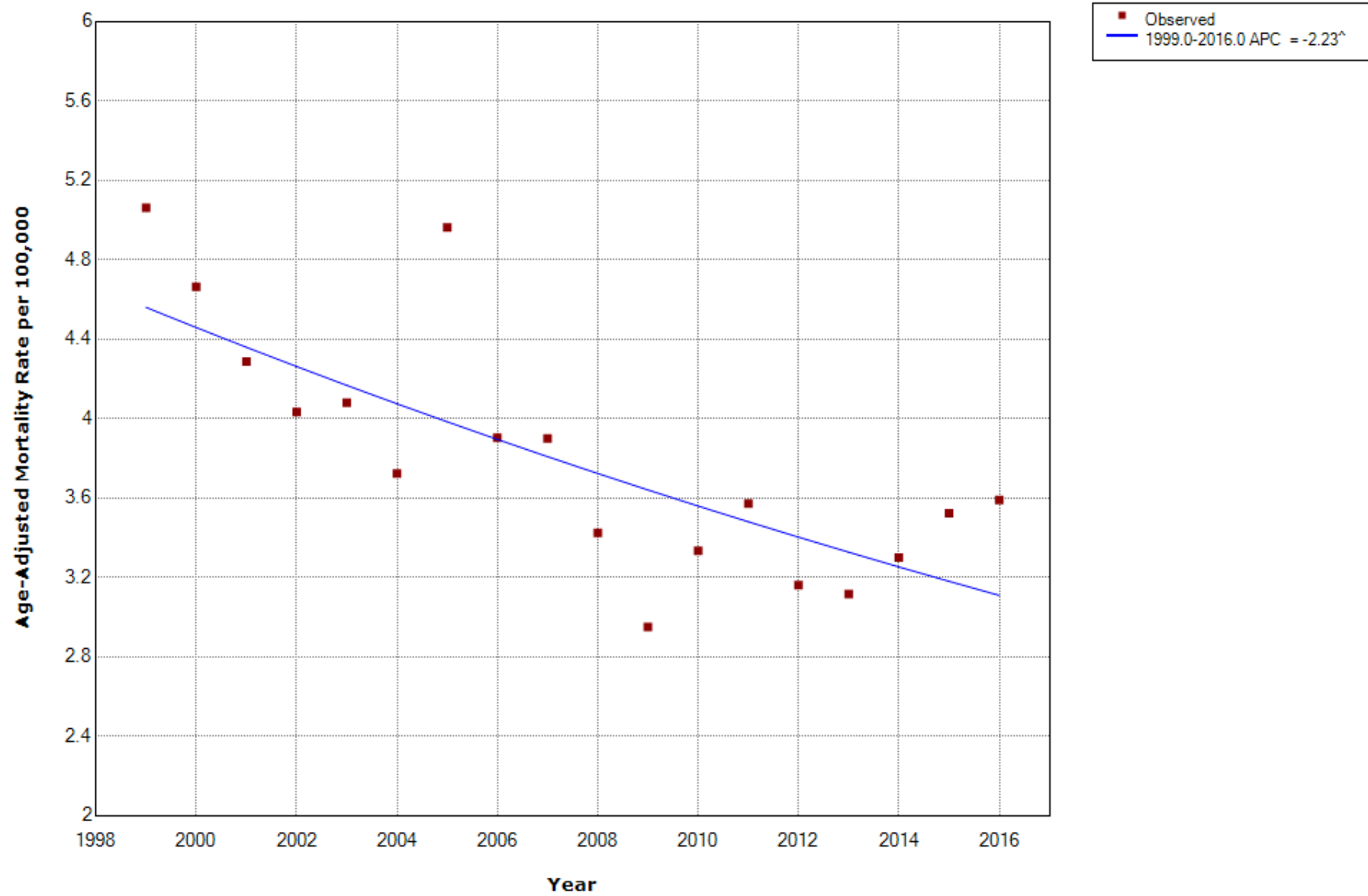
^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

C17-21 (Malignant neoplasm of small intestine, colon, rectosigmoid junction, rectum, anus, anal canal) / NH AIAN: 0  
Joinpoints



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

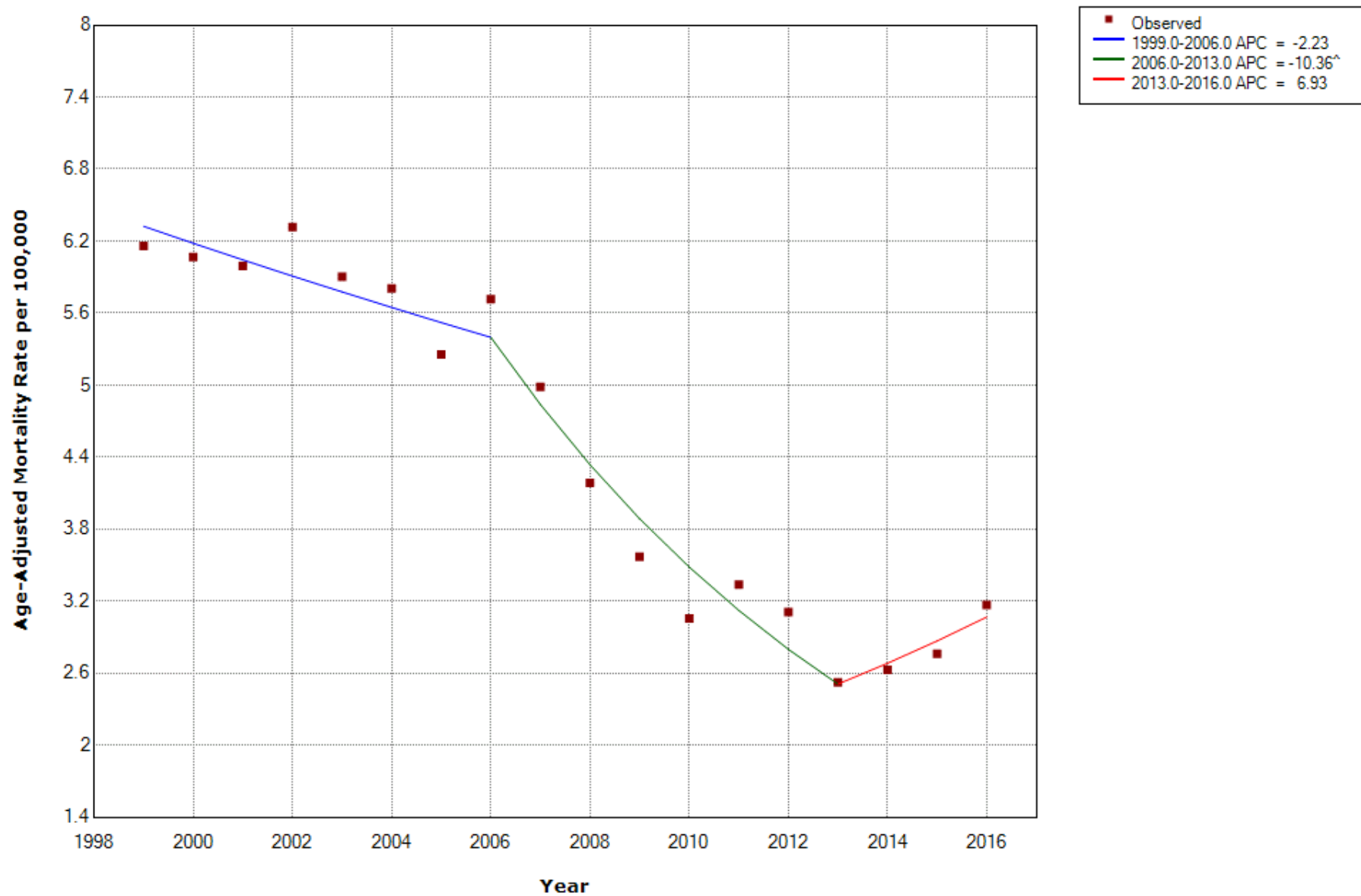
W20-W64, W75-W99, X10-X39, X50-59 (Other external causes of accidental injury) / NH Blacks: 0 Joinpoints



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.

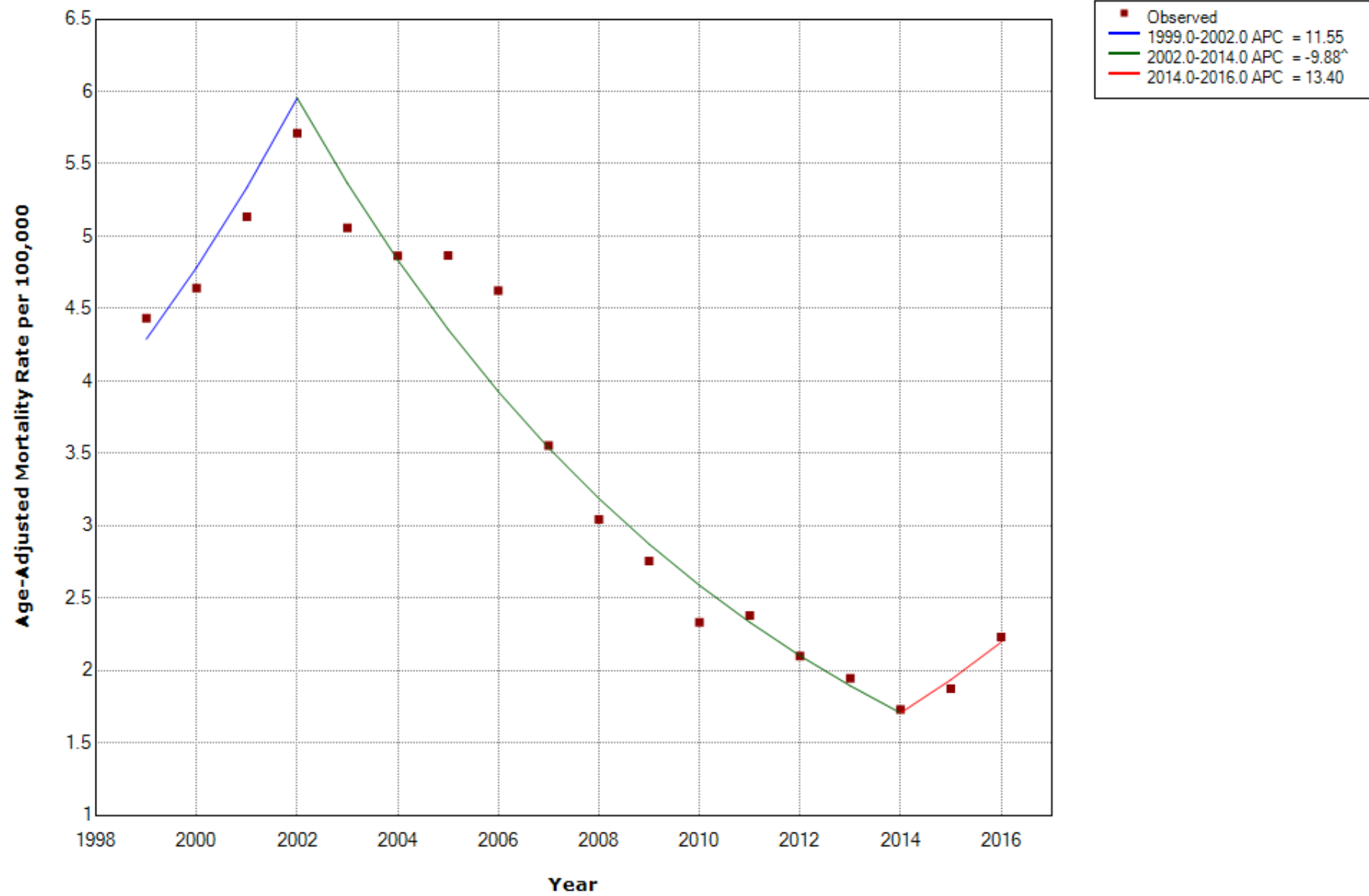


### V40-V49 (Car occupant injured in transport accident) / NH Blacks: 2 Joinpoints



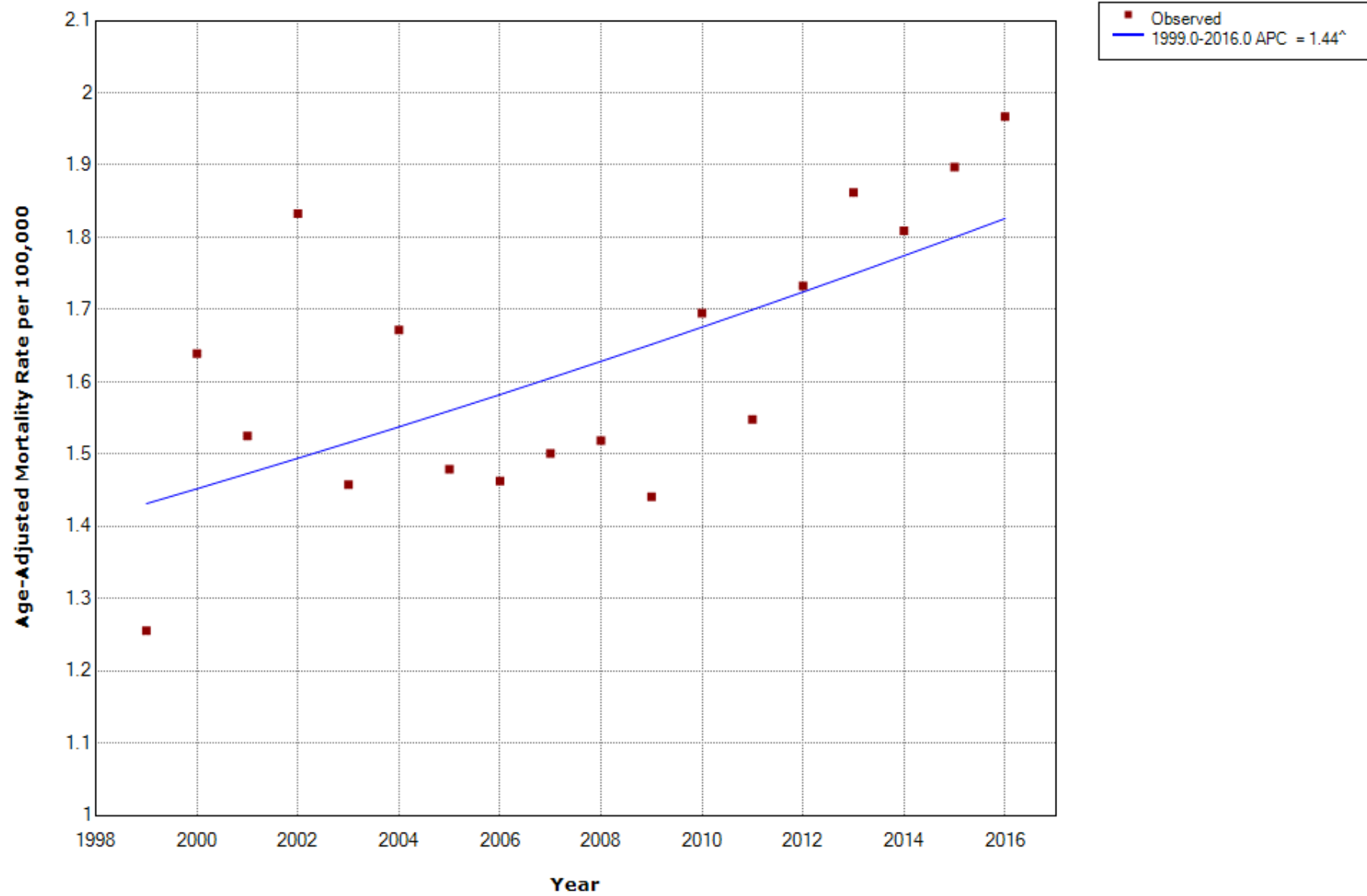
<sup>^</sup> Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

### V40-V49 (Car occupant injured in transport accident) / Hispanics: 2 Joinpoints



<sup>^</sup> Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 2 Joinpoints.

C69-C72 (Malignant neoplasms of eye, brain and other parts of central nervous system) / NH API: 0 Joinpoints



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.  
Final Selected Model: 0 Joinpoints.