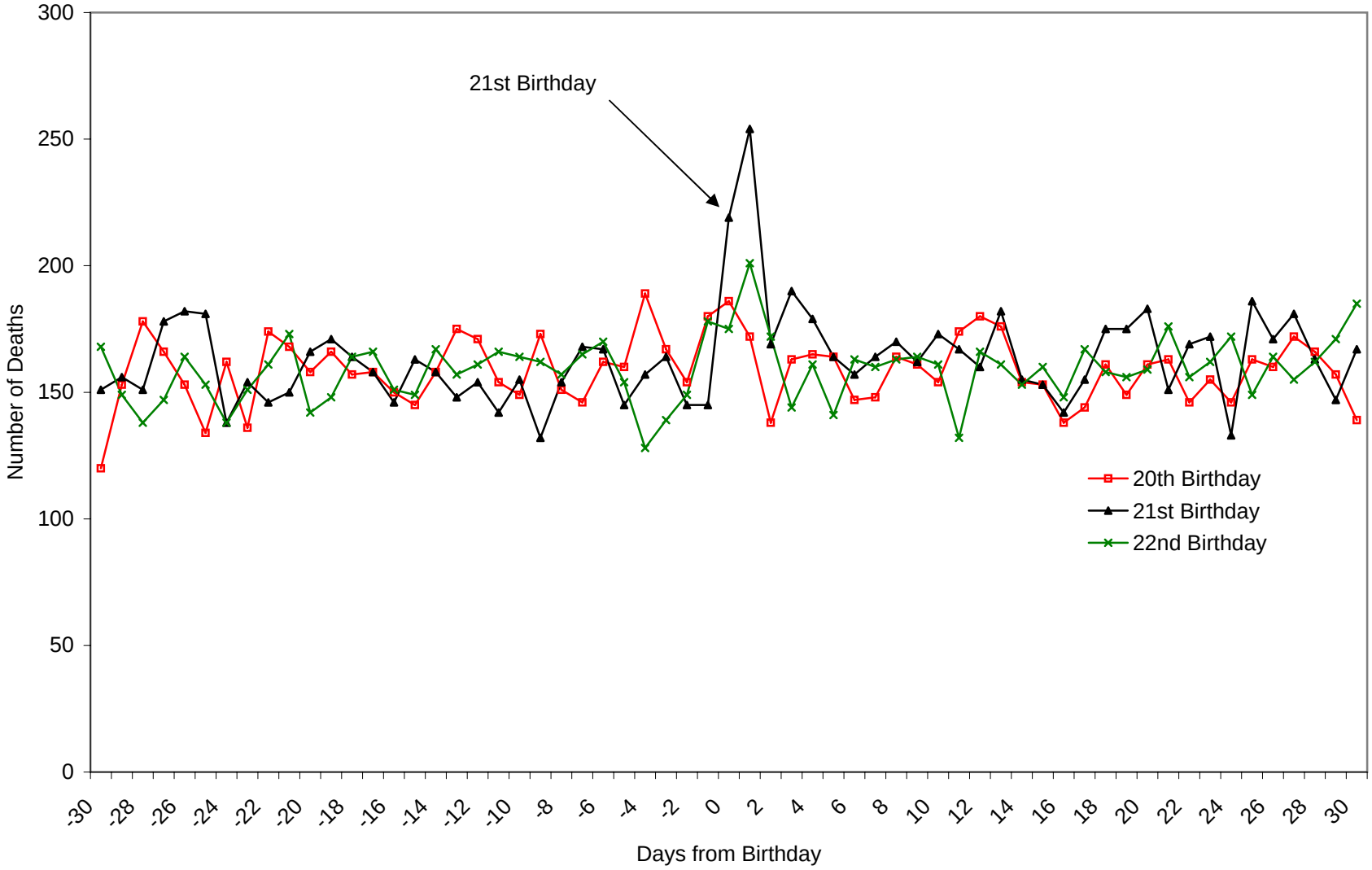
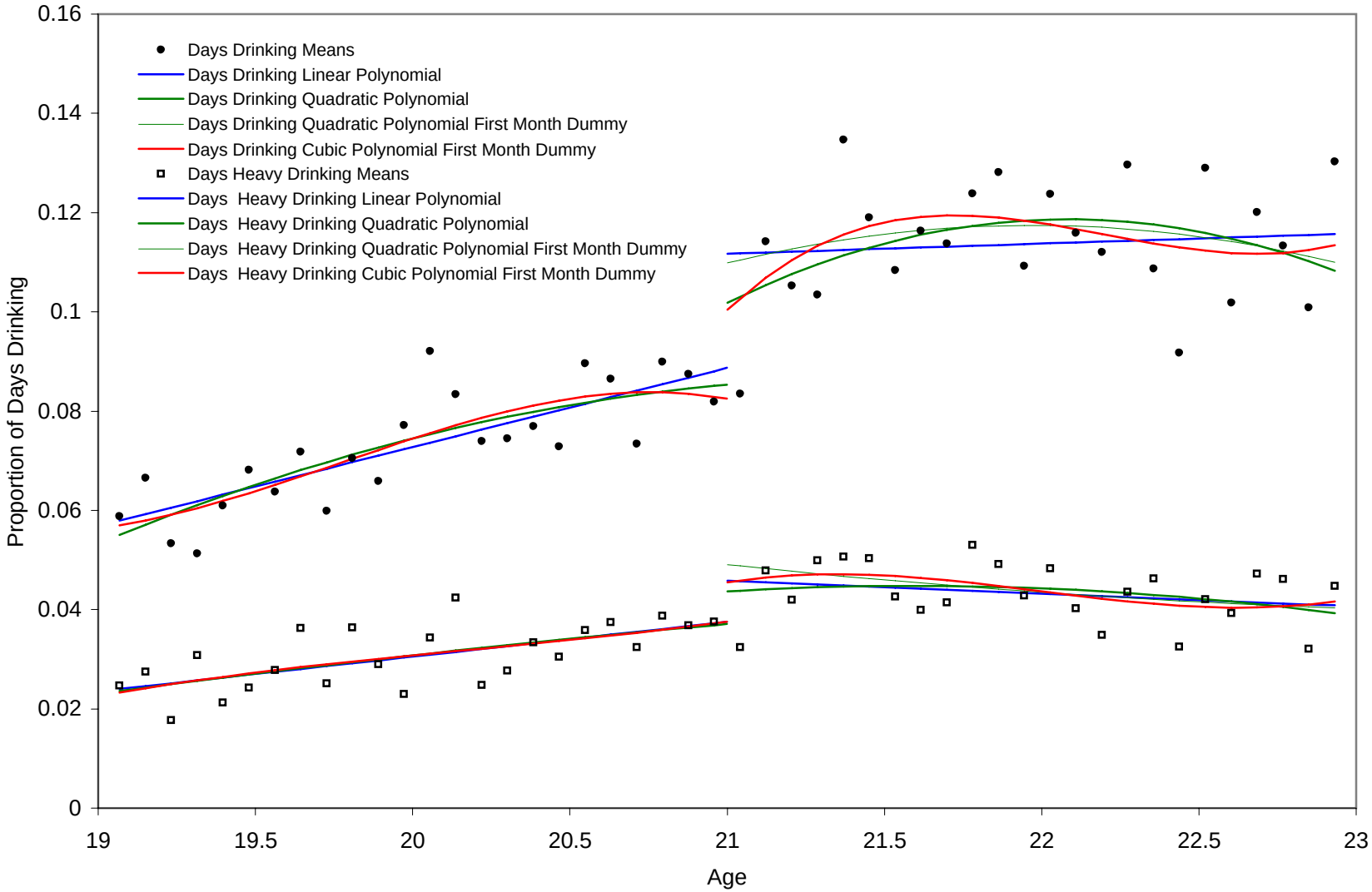
Appendix A: Deaths by Days to Birthday

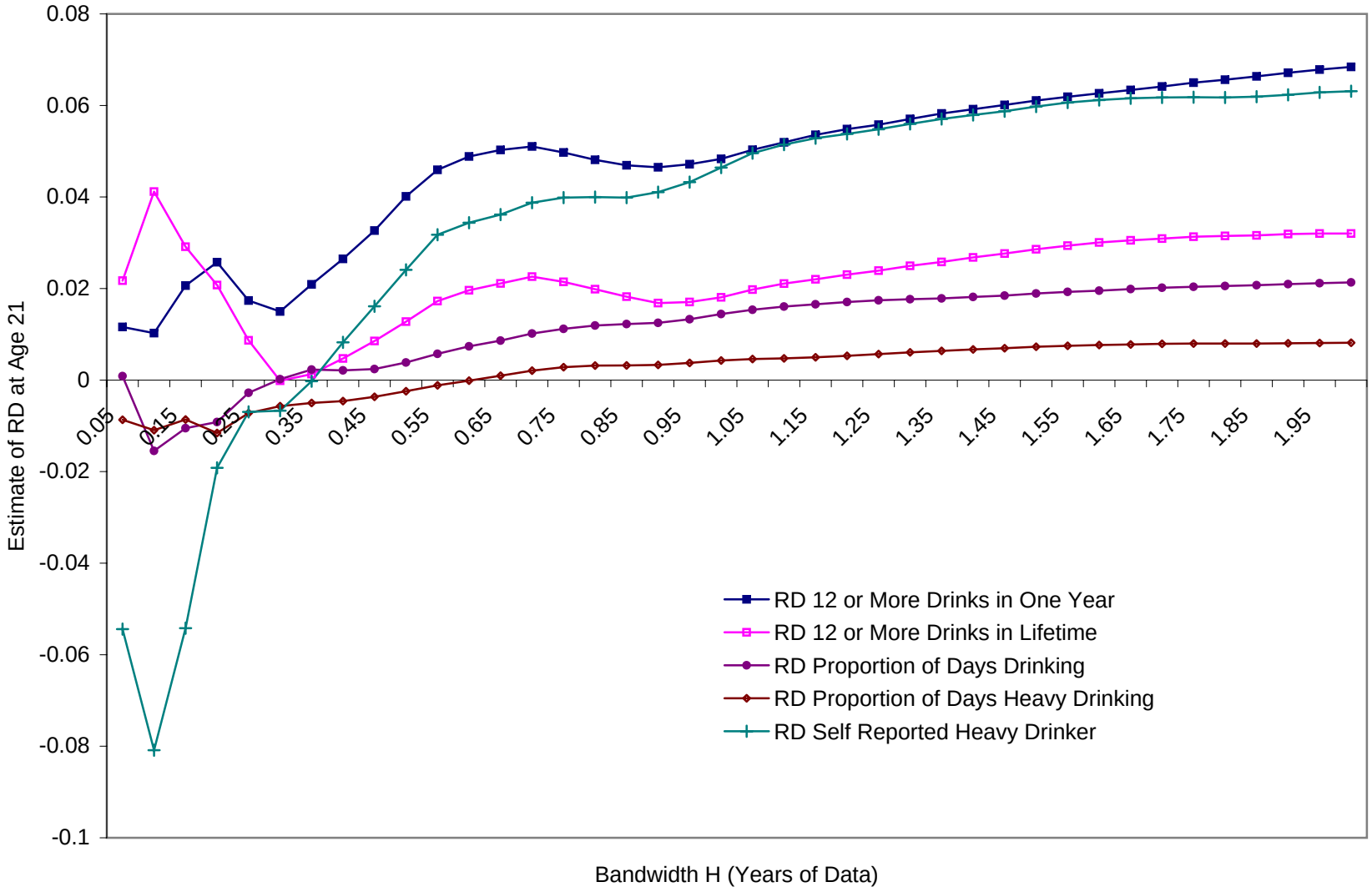


Notes: Number of deaths in the US between 1997 and 2003 occurring x days from the person's birthday.

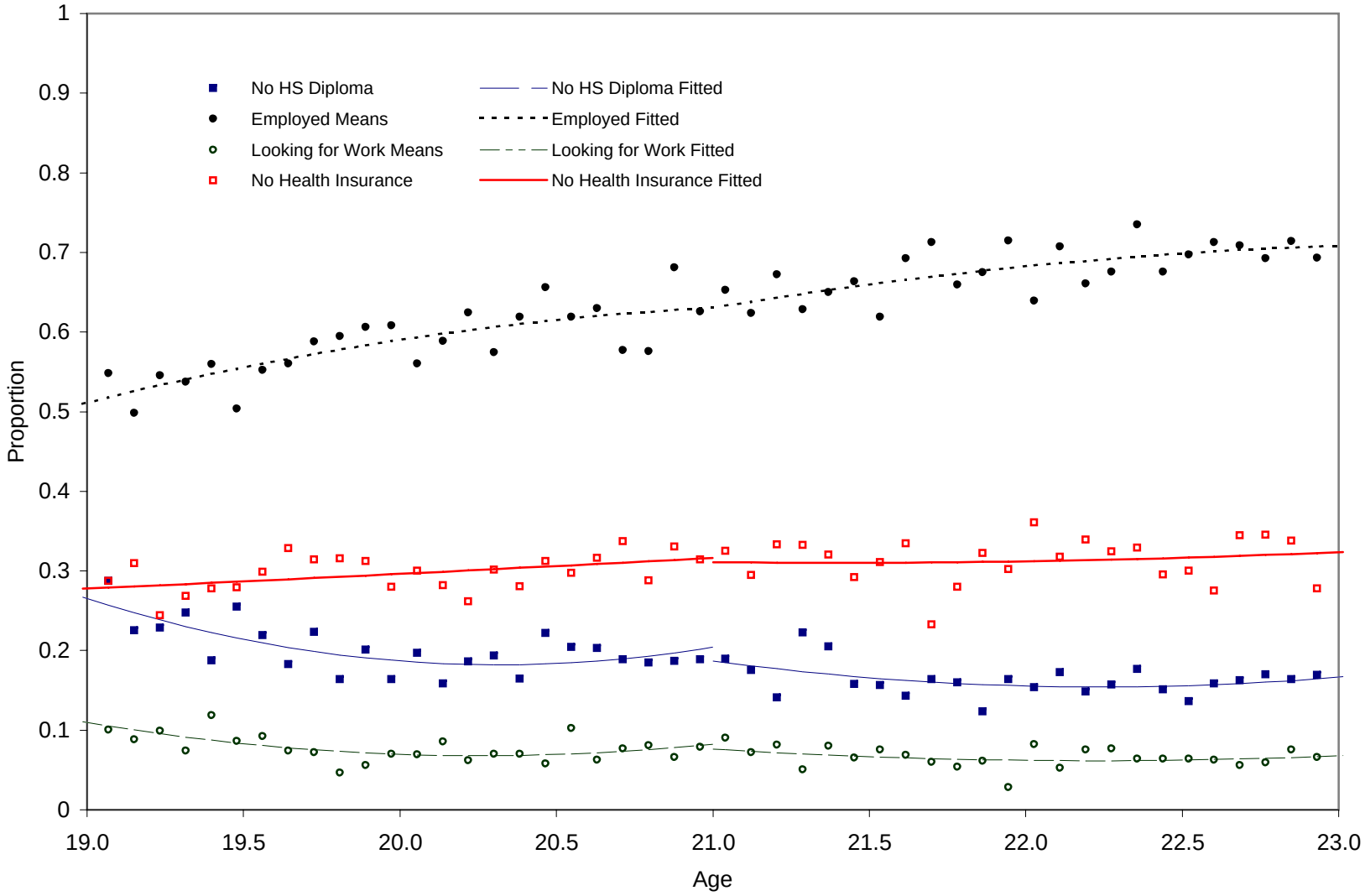
Appendix B: Assessing Fit of Different Polynomials on Age Profile of Drinking



Appendix C: Evaluating the Sensitivity of the Local Linear Regressions to the Choice of Bandwidth



Appendix D: Age Profile of Sample Surveyed in NHIS

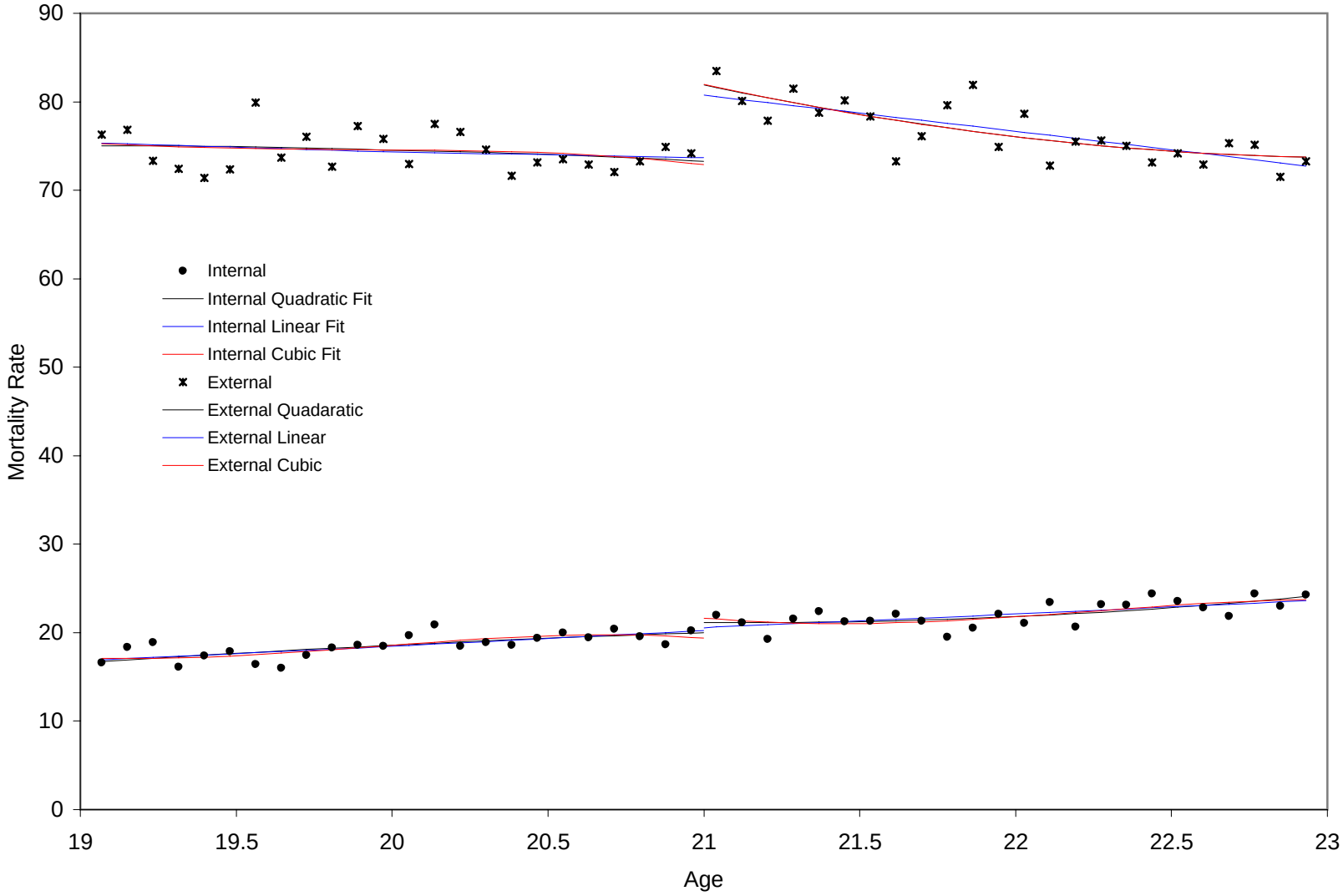


Appendix E: ICD-9 and ICD-10 Codes Used to Create Cause-of-Death Categories

	ICD-9	ICD-10
External Deaths	'8', '9', '292', '304', '305', '850', '851', '852', '853', '854', '855', '856', '857', '858', '3321', '3576', '291', '303', '305', '860', '3575', '4255', '5353', '5710', '5711', '5712', '5713', '7903'	'V', 'W', 'X', 'Y', 'Z', 'F10', 'K70', 'X45', 'X65', 'Y15', 'Y91', 'K70', 'T51', 'X46', 'X65', 'Y15', 'Y90', 'Y91', 'G312', 'G621', 'I426', 'K292', 'R780', 'E244', 'G721', 'K852', 'K860', 'Z502', 'Z714', 'Z721', 'K860', 'T518', 'T519', 'F11', 'F12', 'F13', 'F14', 'F15', 'F16', 'F17', 'F18', 'F19', 'F55', 'T40', 'T41', 'T43', 'F55', 'X40', 'X42' and not in 'F116', 'F126', 'F136', 'F146', 'F156', 'F166', 'F176', 'F171', 'F172', 'F186', 'F196'
Subcategories of External Deaths		
Mention of Alcohol	'291', '303', '3050', '860', '3575', '4255', '5353', '5710', '5711', '5712', '5713', '7903'	'F10', 'K70', 'X45', 'X65', 'Y15', 'Y91', 'K70', 'T51', 'X46', 'X65', 'Y15', 'Y90', 'Y91', 'G312', 'G621', 'I426', 'K292', 'R780', 'E244', 'G721', 'K852', 'K860', 'Z502', 'Z714', 'Z721', 'K860', 'T518', 'T519'
Homicide	'96'	'X85', 'X86', 'X87', 'X88', 'X89,"X9', 'Y0'
Suicide	'95'	'X6', 'X7', 'X80', 'X81', 'X82', 'X83', 'X84', 'X870'
MVA	'81', '820', '821', '822', '823', '824', '825'	'V0', 'V1', 'V2', 'V3', 'V4', 'V5', 'V6', 'V7', 'V8'
Deaths with a Mention of Drugs	'292', '304', '850', '851', '852', '853', '854', '855', '856', '857', '858', '3321', '3051', '3052', '3053', '3054', '3055', '3056', '3057', '3058', '3059', '3576'	'F11', 'F12', 'F13', 'F14', 'F15', 'F16', 'F17', 'F18', 'F19', 'F55', 'T40', 'T41', 'T43', 'F55', 'X40', 'X42' and not in 'F116', 'F126', 'F136', 'F146', 'F156', 'F166', 'F176', 'F171', 'F172', 'F186', 'F196'
Other	External Deaths group - (Mention of alcohol, Homicide, Suicide, MVA, Deaths with a mention of drugs)	External Deaths group - (Mention of alcohol, Homicide, Suicide, MVA, Deaths with a mention of drugs)

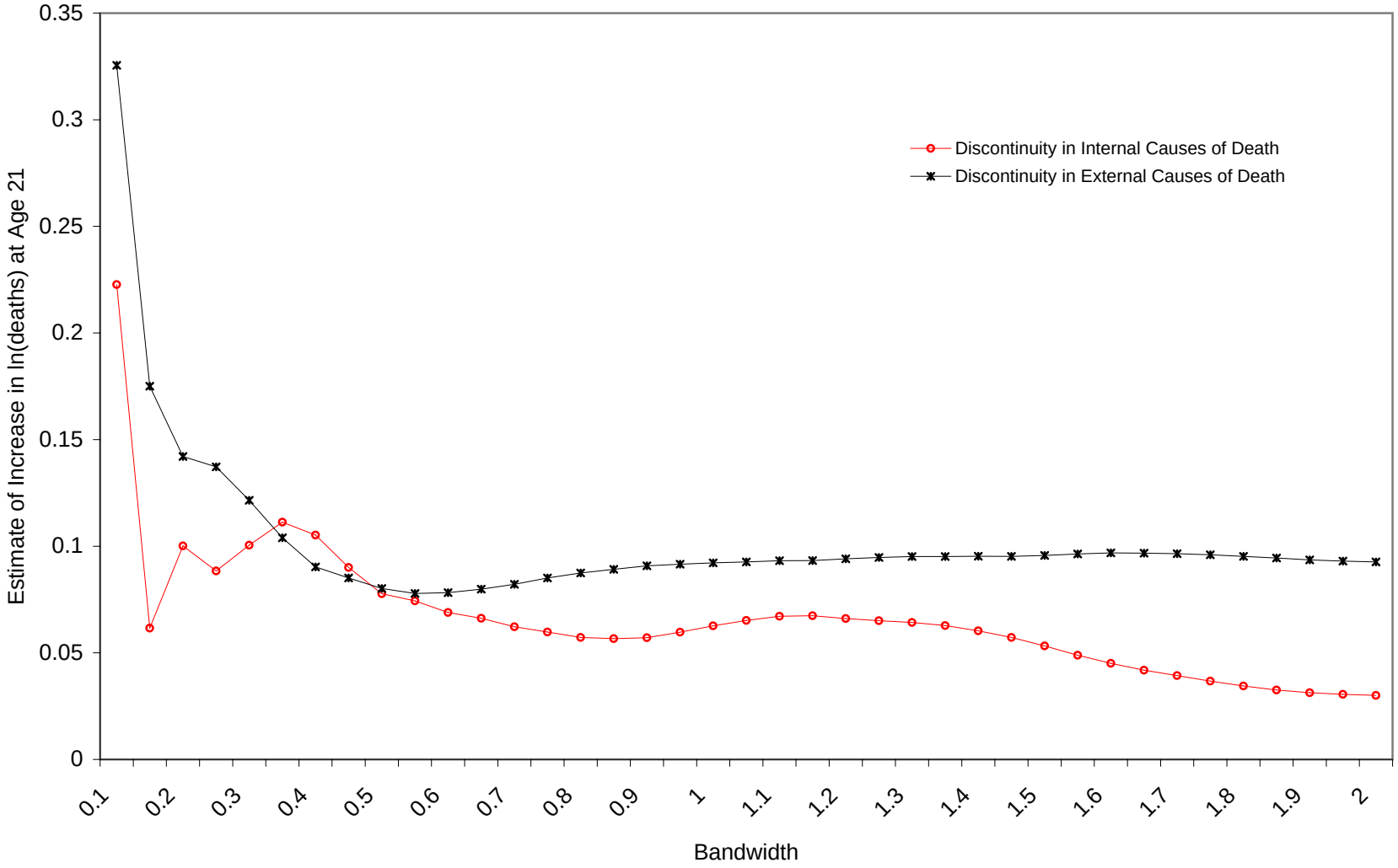
Notes: The order of precedence is homicide, suicide, MVA, deaths with a mention of alcohol, deaths with a mention of drugs. A death is coded as due to a particular ICD code if the code appears on any line of the death certificate.

Appendix F: Comparison of the Fit of Different Polynomials for Internal and External Causes of Death



Notes: See notes from Figure 4, All three polynomials are fully interacted with a dummy for over 21.

Apppendix G: Nonparametric Estimates of Discontinuity in Internal and External Deaths with Different Bandwidths



Notes: See notes to Table 3. The range of the running variable (age) is equal to 2. The parametric estimate for external deaths is 0.104 and for internal deaths 0.022

Appendix H: RDD Estimates for Outcomes With 0 Deaths in Some Periods

	Alcohol			Drugs		
	Log(x+.5)	Log(x+1)	Level	Log(x+.5)	Log(x+1)	Level
	(1)	(2)	(3)	(1)	(2)	(3)
Over 21	0.346	0.244	0.543	0.067	0.055	0.199
	[0.116]**	[0.082]**	[0.185]**	[0.082]	[0.068]	[0.289]
Age	-0.327	-0.212	-0.333	0.12	0.102	0.446
	[0.186]	[0.128]	[0.260]	[0.143]	[0.117]	[0.465]
Age Squared	-0.201	-0.132	-0.221	0.014	0.014	0.086
	[0.088]*	[0.061]*	[0.121]	[0.071]	[0.058]	[0.228]
Age*Over 21	0.159	0.086	-0.035	-0.085	-0.076	-0.417
	[0.266]	[0.187]	[0.416]	[0.193]	[0.160]	[0.670]
Age Sq*Ov 21	0.269	0.183	0.367	-0.011	-0.007	0.013
	[0.128]*	[0.089]*	[0.197]	[0.095]	[0.079]	[0.329]
Birthday	1.865	1.569	7.593	0.348	0.299	1.17
	[0.083]**	[0.059]**	[0.143]**	[0.056]**	[0.047]**	[0.206]**
Birthday + 1	1.629	1.346	5.594	-0.104	-0.107	-0.83
	[0.082]**	[0.059]**	[0.143]**	[0.056]	[0.047]*	[0.205]**
Constant	0.041	0.49	0.864	1.29	1.438	3.632
	[0.082]	[0.057]**	[0.116]**	[0.060]**	[0.050]**	[0.203]**
Observations	1460	1460	1460	1460	1460	1460
R-squared	0.04	0.04	0.08	0.04	0.04	0.04

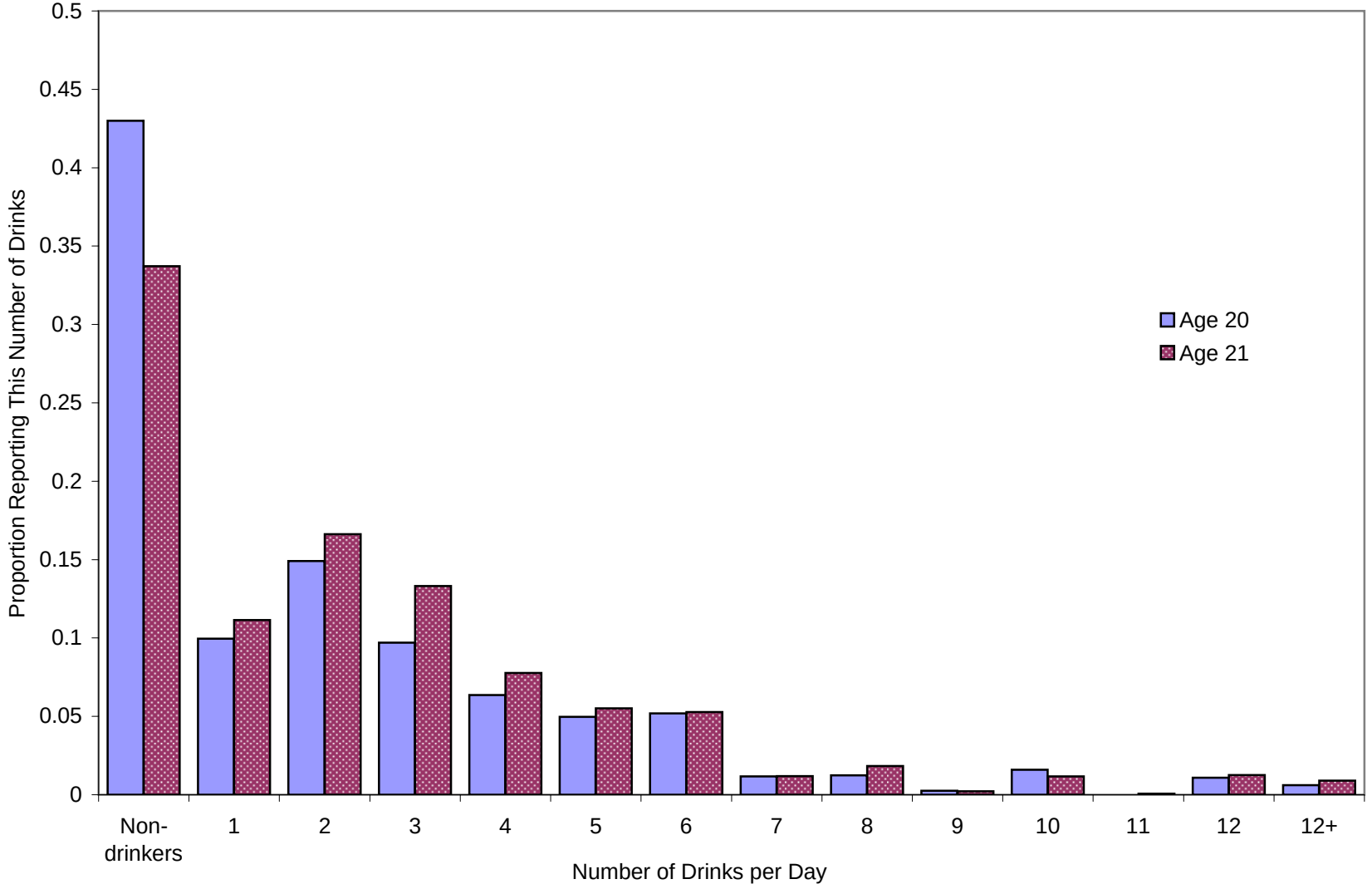
Notes: See notes to Table 3. There are 276 observations with no deaths due to alcohol and 15 observations with no deaths due to drugs. Model (1) in each panel has the log of the number of deaths + .5 which is the same specification as model (2) in for the corresponding outcome in Table 3. Model (2) has the log of the number of deaths + 1 as a dependent variable. Model (3) in has the dependent variable in levels. The level regressions imply a similar sized change in percentage terms as the regressions in logs. For the alcohol case the levels model implies a 63 percent change, which is larger than the 41 percent (%change = exp(B)-1) change in the regression with Log(x+.5) as a dependent variable. In the Drugs regression the levels model implies a 5.4% change.

Appendix I: RDD Estimates of Mortality for Different Time Periods

	All Deaths			All External Deaths			All Internal Deaths		
Years	1990-2004	1990-1996	1997-2004	1990-2004	1990-1996	1997-2004	1990-2004	1990-1996	1997-2004
	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
Over 21	0.081	0.073	0.087	0.095	0.089	0.100	0.032	0.011	0.054
	[0.013]	[0.018]	[0.017]	[0.015]	[0.020]	[0.021]	[0.031]	[0.042]	[0.040]
Age	-0.030	-0.029	-0.027	-0.051	-0.052	-0.048	0.038	0.063	0.022
	[0.020]	[0.028]	[0.028]	[0.024]	[0.032]	[0.034]	[0.048]	[0.070]	[0.066]
Age Squared	-0.015	-0.017	-0.011	-0.015	-0.018	-0.011	-0.023	-0.017	-0.028
	[0.010]	[0.014]	[0.014]	[0.011]	[0.015]	[0.016]	[0.023]	[0.034]	[0.032]
Age*Over 21	-0.025	-0.007	-0.047	-0.023	-0.009	-0.040	-0.013	-0.012	-0.039
	[0.030]	[0.041]	[0.041]	[0.034]	[0.045]	[0.048]	[0.069]	[0.101]	[0.090]
Age Sq*Ov 21	0.026	0.024	0.026	0.021	0.022	0.019	0.047	0.039	0.062
	[0.014]	[0.020]	[0.020]	[0.016]	[0.022]	[0.023]	[0.033]	[0.049]	[0.044]
Birthday	0.274	0.061	0.440	0.291	0.039	0.485	0.220	0.181	0.272
	[0.010]	[0.013]	[0.013]	[0.010]	[0.014]	[0.015]	[0.022]	[0.031]	[0.027]
Birthday + 1	0.423	0.513	0.339	0.407	0.498	0.321	0.502	0.605	0.432
	[0.010]	[0.013]	[0.013]	[0.010]	[0.014]	[0.015]	[0.022]	[0.031]	[0.027]
Constant	5.034	4.297	4.379	4.802	4.076	4.134	3.436	2.642	2.809
	[0.009]	[0.012]	[0.011]	[0.011]	[0.014]	[0.015]	[0.021]	[0.029]	[0.029]
Observations	1460	1460	1460	1460	1460	1460	1460	1460	1460
R-squared	0.09	0.05	0.05	0.11	0.04	0.08	0.20	0.12	0.10

Notes: See notes to Table 3.

Appendix J: Reported Average Number of Drinks per Day



Notes: See notes from Figure 2. There are 3,950 twenty year olds in the sample and 4,206 twenty one year olds in the sample.

Appendix K: Alcohol Consumption - Measures of Participation

	12 or More Drinks in Lifetime					12 or More Drinks in One Year					Any Heavy Drinking in Last Year				
	Parametric Models				Local Linear	Parametric Models				Local Linear	Parametric Models				Local Linear
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
Over 21	0.0418	0.0316	0.0268	0.0198	0.0199	0.0796	0.0657	0.0611	0.0603	0.0461	0.0761	0.0527	0.0492	0.0262	0.0398
	[0.0242]	[0.0301]	[0.0292]	[0.0423]	[0.0179]	[0.0254]	[0.0313]	[0.0301]	[0.0438]	[0.0218]	[0.0248]	[0.0304]	[0.0291]	[0.0430]	[0.0201]
Age	0.0081	0.0293	0.0244	0.1235		0.0140	0.0273	0.0229	0.1198		0.0116	0.0688	0.0623	0.1403	
	[0.0385]	[0.0482]	[0.0471]	[0.1159]		[0.0396]	[0.0491]	[0.0477]	[0.1174]		[0.0361]	[0.0445]	[0.0431]	[0.1080]	
Age Sq	-0.0265	-0.0239	-0.0247	0.0980		-0.0176	-0.0173	-0.0167	0.1033		-0.0141	0.0098	0.0084	0.1048	
	[0.0190]	[0.0236]	[0.0231]	[0.1355]		[0.0194]	[0.0238]	[0.0232]	[0.1366]		[0.0175]	[0.0211]	[0.0205]	[0.1224]	
Age*Over21	0.0693	0.0446	0.0597	-0.0874		0.0521	0.0554	0.0675	-0.1058		-0.0139	-0.0683	-0.0544	-0.0853	
	[0.0544]	[0.0674]	[0.0655]	[0.1727]		[0.0571]	[0.0701]	[0.0678]	[0.1786]		[0.0554]	[0.0673]	[0.0646]	[0.1726]	
Age Sq*Over 21	0.0054	0.0096	0.0020	-0.0655		-0.0075	-0.0103	-0.0184	-0.0507		0.0041	-0.0127	-0.0181	-0.1686	
	[0.0259]	[0.0319]	[0.0311]	[0.1935]		[0.0272]	[0.0332]	[0.0321]	[0.2001]		[0.0261]	[0.0316]	[0.0303]	[0.1905]	
Month After 21	-0.0392	-0.0224	-0.0168	-0.0246		-0.0688	-0.0441	-0.0379	-0.0505		-0.0576	-0.0359	-0.0242	-0.0165	
	[0.0312]	[0.0378]	[0.0367]	[0.0419]		[0.0327]	[0.0394]	[0.0379]	[0.0432]		[0.0318]	[0.0384]	[0.0369]	[0.0424]	
21st Birthday			0.1290	0.1270				0.2186	0.2154				-0.3156	-0.3136	
			[0.1405]	[0.1406]				[0.1405]	[0.1406]				[0.1386]	[0.1387]	
21st Birthday + 1			-0.0470	-0.0487				-0.0437	-0.0466				0.1374	0.1393	
			[0.1492]	[0.1493]				[0.1592]	[0.1593]				[0.1671]	[0.1673]	
Age Cubic				-0.0582					-0.0677					-0.0148	
				[0.0624]					[0.0644]					[0.0607]	
Age^3*Over 21				0.0407					0.0398					0.0320	
				[0.0448]					[0.0451]					[0.0397]	
Constant	0.6483	0.6487	0.5503	0.5671		0.5503	0.5477	0.4470	0.4635		0.3150	0.3247	0.2389	0.2522	
	[0.0163]	[0.0204]	[0.0245]	[0.0303]		[0.0169]	[0.0211]	[0.0248]	[0.0308]		[0.0156]	[0.0199]	[0.0225]	[0.0287]	
Covariates	No	No	Yes	Yes	No	No	No	Yes	Yes	No	No	No	Yes	Yes	No
Weights	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No
Observations	16,107	16,107	16,107	16,107		16,107	16,107	16,107	16,107		16,107	16,107	16,107	16,107	
R-squared	0.02	0.03	0.1	0.1		0.02	0.03	0.11	0.11		0.01	0.01	0.1	0.1	
Prob > Chi-Squared			0.00	0.61				0.00	0.56				0.00	0.67	

Notes: The first column of each block contains the regression from the corresponding figure. Standard errors in brackets. Birthday is a dummy for 21st birthday and Birthday + 1 is a dummy for the day after the 21st birthday. Covariates include dummies for Census Region, Race, Gender, Health Insurance, Employment Status and Looking for Work. Weights are the NHIS adult sample weights and reduce the precision of the regressions significantly as the weights vary substantially across observations. People reporting five or more drinks on one day (not necessarily in one sitting) are coded as heavy drinkers. Bandwidths from the left and the right for each outcome are: 12 or more One Year (0.81,0.75), 12 or More in Lifetime (1.28, 0.88) and proportion reporting Heavy Drinking (1.06, 0.72).

Appendix L: Alcohol Consumption - Measures of Intensity

	Proportion of Days Drinking					Proportion of Days Heavy Drinking					Drinks per Day on Days Drinking				
	Parametric Models				Local Linear	Parametric Models				Local Linear	Parametric Models				Local Linear
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
Over 21	0.0245	0.0180	0.0182	0.0119	0.0107	0.0120	0.0075	0.0075	0.0021	0.0026	0.2387	0.2068	0.2465	0.2806	0.1886
	[0.0086]	[0.0097]	[0.0095]	[0.0135]	[0.0072]	[0.0061]	[0.0063]	[0.0062]	[0.0091]	[0.0048]	[0.2810]	[0.3403]	[0.3291]	[0.4782]	[0.2024]
Age	0.0056	0.0085	0.0068	-0.0071		0.0056	0.0057	0.0045	0.0134		0.2774	0.6407	0.4749	0.7006	
	[0.0116]	[0.0138]	[0.0137]	[0.0338]		[0.0081]	[0.0088]	[0.0088]	[0.0216]		[0.3538]	[0.4608]	[0.4358]	[1.1732]	
Age Sq	-0.0052	-0.0042	-0.0045	-0.0217		-0.0007	-0.0007	-0.0013	0.0097		0.1531	0.3581	0.2595	0.5438	
	[0.0055]	[0.0066]	[0.0065]	[0.0388]		[0.0039]	[0.0041]	[0.0041]	[0.0249]		[0.1730]	[0.2144]	[0.2035]	[1.2958]	
Age*Over21	0.0101	0.0140	0.0168	0.0724		-0.0123	-0.0034	-0.0014	0.0087		-0.8909	-1.4498	-1.1870	-1.7552	
	[0.0192]	[0.0220]	[0.0216]	[0.0558]		[0.0133]	[0.0144]	[0.0142]	[0.0370]		[0.5763]	[0.6656]	[0.6372]	[1.7127]	
Age Sq*Over 21	-0.0029	-0.0055	-0.0065	-0.0371		0.0019	-0.0012	-0.0012	-0.0340		-0.0387	-0.1217	-0.0498	0.0571	
	[0.0090]	[0.0104]	[0.0101]	[0.0625]		[0.0062]	[0.0067]	[0.0066]	[0.0408]		[0.2608]	[0.2937]	[0.2836]	[1.8047]	
Month After 21	-0.0245	-0.0220	-0.0147	-0.0078		-0.0163	-0.0118	-0.0070	-0.0039		-0.3742	-0.5580	-0.3151	-0.3719	
	[0.0111]	[0.0120]	[0.0122]	[0.0138]		[0.0066]	[0.0067]	[0.0067]	[0.0080]		[0.3226]	[0.3317]	[0.3222]	[0.3904]	
21st Birthday			-0.0758	-0.0740				-0.0463	-0.0455				-2.3836	-2.3989	
			[0.0200]	[0.0201]				[0.0132]	[0.0133]				[0.6654]	[0.6681]	
21st Birthday + 1			-0.0497	-0.0481				-0.0239	-0.0231				-1.7425	-1.7555	
			[0.0287]	[0.0288]				[0.0074]	[0.0075]				[0.3517]	[0.3547]	
Age Cubic				0.0209					0.0033					-0.2196	
				[0.0201]					[0.0131]					[0.5550]	
Age^3*Over 21				-0.0057					0.0036					0.0956	
				[0.0127]					[0.0081]					[0.4105]	
Constant	0.0853	0.0836	0.0602	0.0579		0.0371	0.0340	0.0188	0.0203		3.8570	3.8943	2.9378	2.9747	
	[0.0051]	[0.0059]	[0.0072]	[0.0090]		[0.0036]	[0.0039]	[0.0048]	[0.0058]		[0.1550]	[0.2174]	[0.2161]	[0.2919]	
Covariates	No	No	Yes	Yes	No	No	No	Yes	Yes	No	No	No	Yes	Yes	No
Weights	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No
Observations	16,107	16,107	16,107	16,107		15,825	15,825	15,825	15,825		9,906	9,906	9,906	9,906	
R-squared	0.02	0.02	0.07	0.07		0.00	0.01	0.05	0.05		0.00	0.00	0.07	0.07	
Prob > Chi-Squared			0.00	0.56				0.00	0.72				0.00	0.92	

Notes: See notes to Appendix K. People can report their drinking for the last week, month or year. For people who reported any drinking 71% of people just over 21 reported about their drinking in the last week or month rather than the last year. The probability of reporting drinking over the last week or last month goes up at age 21. For the dependent variable "Drinks per Day" only people who reported drinking are included in this analysis, so there is a composition change in the sample at age 21 due to the increase in the number of people who reported that they drink. The dependant variable is the number of drinks the respondent reported drinking on average on the days that they drank. Bandwidths from the left and the right for each outcome are: proportion days drinking (0.87, 0.75), drinks per day on days drinking (0.64,1.42), and proportion days heavy drinking (1.02, 0.73).

Appendix M: Discontinuity in Log Deaths at Age 21

	Deaths Due to All Causes				Deaths Due to External Causes				Deaths Due to Internal Causes			
	Parametric Models			Local Linear	Parametric Models			Local Linear	Parametric Models			Local Linear
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
Over 21	0.0960	0.0870	0.0910	0.0740	0.1100	0.1000	0.0960	0.0824	0.0630	0.0540	0.0940	0.0656
	[0.018]	[0.017]	[0.023]	[0.0161]	[0.022]	[0.021]	[0.028]	[0.0207]	[0.040]	[0.040]	[0.053]	[0.0309]
Age	-0.0270	-0.0270	-0.0740		-0.0480	-0.0480	-0.0730		0.0220	0.0220	-0.1280	
	[0.028]	[0.028]	[0.069]		[0.034]	[0.034]	[0.085]		[0.066]	[0.066]	[0.174]	
Age Sq	-0.0110	-0.0110	-0.0710		-0.0110	-0.0110	-0.0410		-0.0280	-0.0280	-0.2160	
	[0.014]	[0.014]	[0.083]		[0.016]	[0.016]	[0.098]		[0.032]	[0.032]	[0.201]	
Age*Over21	-0.0660	-0.0470	0.0210		-0.0590	-0.0400	0.0320		-0.0560	-0.0390	0.0240	
	[0.043]	[0.041]	[0.101]		[0.050]	[0.048]	[0.119]		[0.090]	[0.090]	[0.232]	
Age Sq*Over 21	0.0340	0.0260	0.0600		0.0270	0.0190	-0.0100		0.0700	0.0620	0.3590	
	[0.020]	[0.020]	[0.118]		[0.024]	[0.023]	[0.137]		[0.044]	[0.044]	[0.269]	
21st Birthday		0.4400	0.4430			0.4850	0.4930			0.2720	0.2570	
		[0.013]	[0.018]			[0.015]	[0.020]			[0.027]	[0.036]	
21st Birthday + 1		0.3390	0.3420			0.3210	0.3290			0.4320	0.4180	
		[0.013]	[0.018]			[0.015]	[0.019]			[0.027]	[0.035]	
Age Cubic			-0.0200				-0.0100				-0.0630	
			[0.027]				[0.032]				[0.066]	
Age^3*Over 21			0.0280				0.0300				0.0270	
			[0.039]				[0.045]				[0.088]	
Constant	4.3790	4.3790	4.3710		4.1340	4.1340	4.1290		2.8090	2.8090	2.7840	
	[0.011]	[0.011]	[0.015]		[0.015]	[0.015]	[0.020]		[0.029]	[0.029]	[0.039]	
Obs	1460	1460	1460		1460	1460	1460		1460	1460	1460	
R-squared	0.04	0.05	0.05		0.06	0.08	0.08		0.10	0.10	0.10	
Prob > Chi-Squared		0.000	0.735			0.000	0.788			0.000	0.525	

Notes: Robust standard errors in brackets. The dependent variable is the log of the number of deaths that occurred x days from the person's 21st birthday. External deaths include all deaths with mention of an injury, alcohol use, or drug use (see online Appendix E for ICD-9 Codes). The Internal Death category includes all deaths not coded as external. The first three columns give the estimates from polynomial regressions on age interacted with a dummy for being over 21. The age variable is centered on 21, so the Over 21 variable gives us an estimate of the discontinuous increase at age 21. In the fourth column we present the results of a local linear regression procedure with a rule-of-thumb bandwidth for each side of age 21. For this procedure, we follow Fan and Gijbels (1996) and fit a 4th order polynomial separately on each side of the age-21 cutoff. We use the fit of this regression to estimate the average second derivative of the expectation function (D), and the mean squared error of this function (σ2). The rule-of-thumb bandwidth is h = c [σ2 R / D], where c is a constant that depends on the kernel (c=3.44 for a triangular kernel), and R is the range of the running variable (i.e., the range of ages used to estimate the polynomial on each side). We then use this bandwidth, and a triangular kernel, to fit local linear regressions on each side of age 21, and estimate the limit of the expectation function from the left and the right of age 21. The local linear regressions have 2 fewer observations because the 21st birthday and the day after the 21st birthday have been dropped. The bottom row gives the results of a Wald test of the hypothesis that the coefficients on the variables added to the model in that column are all equal to 0. The running variable, age -21, is measured in years so it has a span of 2 on either side of the discontinuity. For the local linear regression the bandwidth (h) from the left and from the right for each variable are as follows All Cause (0.55, 0.96); External Causes (0.53, 0.84); Internal Causes (1.07, 1.17). Death Rate 20 is the death rate at age 20 and 11 months.

Appendix N: Discontinuity in Log Deaths by External Cause of Death (Alcohol, Homicide, and Suicide)

	Alcohol				Homicide				Suicide			
	Parametric Models			Local Linear	Parametric Models			Local Linear	Parametric Models			Local Linear
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
Over 21	0.388	0.346	0.406	0.441	0.009	0.002	-0.003	-0.014	0.160	0.154	0.135	0.105
	[0.119]	[0.116]	[0.156]	[0.117]	[0.045]	[0.045]	[0.061]	[0.041]	[0.059]	[0.059]	[0.086]	[0.045]
Age	-0.327	-0.327	-0.001		0.077	0.077	-0.046		-0.041	-0.041	-0.017	
	[0.186]	[0.186]	[0.460]		[0.072]	[0.072]	[0.182]		[0.103]	[0.103]	[0.279]	
Age Sq	-0.201	-0.201	0.207		0.026	0.026	-0.127		-0.015	-0.015	0.015	
	[0.088]	[0.088]	[0.528]		[0.034]	[0.034]	[0.206]		[0.048]	[0.048]	[0.309]	
Age*Over21	0.074	0.159	-0.847		-0.180	-0.165	0.109		-0.024	-0.012	0.057	
	[0.269]	[0.266]	[0.664]		[0.102]	[0.102]	[0.258]		[0.133]	[0.134]	[0.354]	
Age Sq*Over 21	0.304	0.269	0.707		0.004	-0.003	-0.037		0.022	0.017	-0.127	
	[0.129]	[0.128]	[0.768]		[0.048]	[0.048]	[0.295]		[0.063]	[0.063]	[0.398]	
21st Birthday		1.865	1.75			0.607	0.633			0.166	0.182	
		[0.083]	[0.110]			[0.031]	[0.042]			[0.038]	[0.051]	
21st Birthday + 1		1.629	1.516			0.020	0.045			0.309	0.325	
		[0.082]	[0.109]			[0.031]	[0.042]			[0.037]	[0.051]	
Age Cubic			0.136				-0.051				0.010	
			[0.173]				[0.067]				[0.099]	
Age^3*Over 21			-0.417				0.113				0.028	
			[0.252]				[0.096]				[0.128]	
Constant	0.041	0.041	0.096		2.687	2.687	2.667		2.245	2.245	2.248	
	[0.082]	[0.082]	[0.110]		[0.032]	[0.032]	[0.044]		[0.046]	[0.046]	[0.069]	
Obs	1460	1460	1460		1460	1460	1460		1460	1460	1460	
R-squared	0.03	0.04	0.04		0.01	0.01	0.01		0.02	0.02	0.02	
Prob > Chi-Squared		0.000	0.228			0.000	0.495			0.000	0.8922	

Notes: See notes to Appendix M. There are 276 observations where there are no deaths coded as due to alcohol; for this variable .5 was added to the dependent variable before taking the log. The running variable, age -21, is measured in years so it has a span of 2 on either side of the discontinuity. For the local linear regression the bandwidth (h) from the left and from the right for each variable are as follows: alcohol (0.85, 0.53); homicide (0.63, 0.99); suicide (1.68, 0.63).

Appendix O: Discontinuity in Log Deaths by External Cause of Death (MVA, Drugs, Other External Causes)

	Motor Vehicle Accidents				Drugs				Other External Causes			
	Parametric Models			Local Linear	Parametric Models			Local Linear	Parametric Models			Local Linear
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
Over 21	0.158	0.143	0.145	0.139	0.070	0.067	0.004	-0.016	0.087	0.098	0.098	0.074
	[0.033]	[0.032]	[0.044]	[0.032]	[0.081]	[0.082]	[0.107]	[0.078]	[0.060]	[0.059]	[0.075]	[0.043]
Age	-0.133	-0.133	-0.217		0.120	0.120	0.237		-0.075	-0.075	0.002	
	[0.052]	[0.052]	[0.136]		[0.143]	[0.143]	[0.347]		[0.092]	[0.092]	[0.218]	
Age Sq	-0.019	-0.019	-0.124		0.014	0.014	0.160		-0.059	-0.059	0.037	
	[0.025]	[0.025]	[0.152]		[0.071]	[0.071]	[0.415]		[0.045]	[0.045]	[0.262]	
Age*Over21	-0.026	0.004	0.155		-0.091	-0.085	0.056		-0.028	-0.051	-0.205	
	[0.078]	[0.075]	[0.187]		[0.191]	[0.193]	[0.473]		[0.139]	[0.138]	[0.322]	
Age Sq*Over 21	0.026	0.014	0.036		-0.009	-0.011	-0.479		0.098	0.107	0.107	
	[0.037]	[0.036]	[0.216]		[0.095]	[0.095]	[0.558]		[0.066]	[0.066]	[0.376]	
21st Birthday		0.589	0.600			0.348	0.392			0.075	0.062	
		[0.022]	[0.029]			[0.056]	[0.075]			[0.045]	[0.058]	
21st Birthday + 1		0.663	0.674			-0.104	-0.061			-1.024	-1.036	
		[0.022]	[0.028]			[0.056]	[0.075]			[0.045]	[0.057]	
Age Cubic			-0.035				0.049				0.032	
			[0.049]				[0.139]				[0.088]	
Age^3*Over 21			0.063				0.058				-0.064	
			[0.071]				[0.185]				[0.125]	
Constant	3.220	3.220	3.206		1.290	1.290	1.309		2.024	2.024	2.037	
	[0.023]	[0.023]	[0.033]		[0.060]	[0.060]	[0.076]		[0.038]	[0.038]	[0.048]	
Obs	1460	1460	1460		1460	1460	1460		1460	1460	1460	
R-squared	0.15	0.16	0.16		0.04	0.04	0.04		0.01	0.01	0.01	
Prob > Chi-Squared		0.000	0.666			0.000	0.643			0.000	0.877	

Notes: See notes to Appendix M. There are 15 observations where there are 0 deaths coded as due to drug use; for this variable .5 was added to the count before taking the log. The running variable, age -21, is measured in years so it has a span of 2 on either side of the discontinuity. For the local Linear Regression the bandwidth (h) from the left and from the right for each variable are as follows: MVA (0.66, 0.67); Drugs (0.58, 1.16); Other External Causes (0.98, 1.25).

Appendix P: Alcohol Consumption by Race, Gender and Educational Attainment

	Male (1)	Female (2)	White (3)	Black (4)	Hispanic (5)	HS Drop Out (6)	HS Diploma or More (7)
RDD 12 or More Drinks in One Year	0.0509	0.0862	0.0675	-0.0520	0.0762	0.0326	0.1201
	[0.0448]	[0.0434]	[0.0386]	[0.0806]	[0.0665]	[0.0759]	[0.0567]
Constant	0.6398	0.4534	0.6299	0.351	0.4507	0.4758	0.5232
	[0.0302]	[0.0295]	[0.0267]	[0.0497]	[0.0423]	[0.0473]	[0.0386]
Observations	7,194	8,913	9,216	2,294	3,806	2,920	4,601
R-squared	0.04	0.03	0.04	0.03	0.01	0.01	0.03
RDD 12 or More Drinks in Life	0.0071	0.0604	0.0280	-0.0998	0.0640	-0.0282	0.0809
	[0.0434]	[0.0418]	[0.0359]	[0.0830]	[0.0661]	[0.0731]	[0.0538]
Constant	0.7195	0.5763	0.7332	0.4859	0.5324	0.6112	0.6382
	[0.0293]	[0.0287]	[0.0248]	[0.0516]	[0.0426]	[0.0457]	[0.0374]
Observations	7,194	8,913	9,216	2,294	3,806	2,920	4,601
R-squared	0.03	0.03	0.04	0.04	0.01	0.01	0.03
RDD Proportion of Days Drinking	0.0064	0.0314	0.0242	-0.0162	0.0000	-0.0353	0.0081
	[0.0164]	[0.0100]	[0.0126]	[0.0221]	[0.0203]	[0.0238]	[0.0173]
Constant	0.119	0.0474	0.0991	0.0433	0.0633	0.0925	0.0748
	[0.0105]	[0.0052]	[0.0077]	[0.0145]	[0.0138]	[0.0183]	[0.0106]
Observations	7,194	8,913	9,216	2,294	3,806	2,920	4,601
R-squared	0.02	0.02	0.03	0.02	0.01	0.01	0.01
RDD Proportion of Days Binge Drinking	0.0039	0.0123	0.0099	-0.0157	0.0008	-0.0187	0.0081
	[0.0111]	[0.0061]	[0.0088]	[0.0087]	[0.0112]	[0.0148]	[0.0173]
Constant	0.054	0.0139	0.0428	0.0158	0.0198	0.0406	0.0748
	[0.0071]	[0.0028]	[0.0054]	[0.0069]	[0.0072]	[0.0117]	[0.0106]
Observations	7,014	8,811	9,011	2,264	3,770	2,856	4,601
R-squared	0.01	0.00	0.01	0.01	0.00	0.00	0.01
RDD Average Drinks Per Day	0.4107	0.1293	-0.0428	-0.1652	1.0255	-0.3408	-0.5161
	[0.5784]	[0.2329]	[0.4119]	[0.5490]	[0.9779]	[1.3515]	[0.4782]
Constant	4.744	2.7656	4.1099	2.824	3.7624	5.4248	4.0217
	[0.3586]	[0.1386]	[0.2768]	[0.4265]	[0.3937]	[0.9521]	[0.3360]
Observations	4,950	4,956	6,515	1,008	1,930	1,408	2,674
R-squared	0.00	0.00	0.00	0.00	0.01	0.01	0.00

Notes: The regression include no covariates other than the quadratic in age interacted with the dummy for over age 21. All regressions are weighted.

Appendix Q: Discontinuity in Log Deaths by Gender, Race and Education

	Gender		Race			Education			
	Male	Female	White	Black	Hispanic	HS Drop Out	HS Completed	Some College	Education Missing
Over 21	0.097	0.057	0.144	0.019	0.006	0.043	0.088	0.155	0.083
	[0.021]	[0.035]	[0.022]	[0.039]	[0.044]	[0.039]	[0.027]	[0.039]	[0.050]
Age	-0.033	-0.005	-0.106	0.054	0.128	-0.009	-0.054	-0.152	0.068
	[0.033]	[0.063]	[0.036]	[0.061]	[0.074]	[0.056]	[0.042]	[0.070]	[0.081]
Age Sq	-0.016	0.004	-0.033	-0.001	0.040	-0.029	0.032	0.035	-0.284
	[0.016]	[0.031]	[0.017]	[0.030]	[0.036]	[0.088]	[0.061]	[0.092]	[0.117]
Age*Over21	-0.054	-0.041	0.012	-0.085	-0.231	0.043	0.009	-0.207	0.017
	[0.048]	[0.085]	[0.053]	[0.090]	[0.105]	[0.027]	[0.020]	[0.034]	[0.039]
Age Sq*Over 21	0.033	0.010	0.044	0.018	-0.008	-0.065	-0.021	0.258	0.080
	[0.023]	[0.042]	[0.025]	[0.044]	[0.052]	[0.042]	[0.029]	[0.046]	[0.057]
21st Birthday	0.564	-0.106	0.479	0.629	0.069	0.589	0.308	0.609	0.345
	[0.015]	[0.024]	[0.017]	[0.030]	[0.031]	[0.030]	[0.019]	[0.025]	[0.036]
21st Birthday + 1	0.346	0.336	0.479	-0.218	0.306	0.184	0.388	0.204	0.718
	[0.015]	[0.024]	[0.017]	[0.029]	[0.031]	[0.030]	[0.019]	[0.025]	[0.036]
Constant	4.100	2.939	3.772	2.908	2.633	2.951	3.475	2.819	2.312
	[0.014]	[0.026]	[0.015]	[0.025]	[0.032]	[0.025]	[0.018]	[0.030]	[0.035]
Obs	1460	1460	1460	1460	1460	1460	1460	1460	1460
R-squared	0.06	0.00	0.07	0.03	0.01	0.08	0.05	0.29	0.02
Rate per 100,000	138	46	80	154	102	NA	NA	NA	NA

Notes: See notes to Appendix M.