

**Appendix**  
**Cigarette Smoking and Mortality in Adults Aged 70 Years and Older: Results From the NIH-AARP Cohort**  
**Nash et al.**

**Appendix Table 1.** Age at Smoking Cessation and Mortality, by Sex, in Participants of the NIH-AARP<sup>a</sup> Study Aged Over 70 years

Cause of death	Smoking status					
	Current (n=4,706 Males, 4,885 Females)	Quit 60-69y (n=4,790 Males, 3,622 Females)	Quit 50-59y (n=11,700 Males, 7,346 Females)	Quit 40-49y (n=14,304 Males, 7,120 Females)	Quit 30-39y (n=15,738 Males, 5,815 Females)	Never (n=29,513 Males, 31,640 Females)
<b>Death from all causes</b>						
Number of deaths (%)						
Males	1,726 (36.7)	1,504 (31.4)	3,144 (26.9)	3,149 (22.01)	2,081 (17.8)	4,095 (13.9)
Females	1,449 (29.7)	839 (23.2)	1,409 (19.8)	1,065 (15.0)	682 (11.7)	3,283 (10.4)
Rate per 100,000						
Males	6,520.64 (6,212.53, 6,828.74)	5,229.48 (4,964.68, 5,494.28)	4,404.86 (4,231.74, 4,538.35)	3,508.2 (3,376.62, 3,621.04)	2,767.97 (2,648.91, 2,852.70)	2,128.41 (2,063.22, 2,193.60)
Females	5,030.88 (4,771.08, 5,290.67)	3,689.99 (3,440.12, 3,939.87)	3,031.32 (2,873, 3,189.65)	2,343.27 (2,202.33, 2,484.21)	1,787.42 (1,653.23, 1,921.61)	1,542.49 (1,489.69, 1,595.30)
Multivariable-adjusted hazard ratio <sup>b</sup>						
Males	1.00 (ref)	0.80 (0.75, 0.86)	0.67 (0.64, 0.72)	0.54 (0.51, 0.58)	0.43 (0.41, 0.46)	0.33 (0.32, 0.35)
Females	1.00 (ref)	0.73 (0.67, 0.79)	0.60 (0.56, 0.65)	0.47 (0.43, 0.51)	0.36 (0.33, 0.4)	0.29 (0.28, 0.31)
<b>Death from lung cancer</b>						
Number of deaths (%)						
Males	331 (7.0)	235 (4.9)	438 (3.7)	319 (2.2)	205 (1.3)	89 (0.3)
Females	299 (6.1)	140 (3.9)	192 (2.6)	122 (1.7)	55 (1.0)	91 (0.3)
Rate per 100,000						
Males	1,246.51 (1,112.01, 1,381.00)	828.55 (722.43, 934.67)	611.97 (554.65, 669.29)	354.77 (315.84, 393.70)	201.12 (173.58, 228.65)	46.19 (36.59, 55.78)
Females	1,028.29 (911.43, 1,145.15)	619.44 (516.76, 722.12)	412.5 (354.13, 470.86)	267.26 (219.79, 314.74)	143.42 (105.51, 181.34)	42.85 (34.04, 51.67)
Multivariable-adjusted hazard ratio <sup>b</sup>						
Males	1.00 (ref)	0.67 (0.57, 0.79)	0.50 (0.43, 0.58)	0.29 (0.25, 0.34)	0.17 (0.14, 0.20)	0.04 (0.03, 0.05)
Females	1.00 (ref)	0.61 (0.50, 0.74)	0.40 (0.34, 0.48)	0.26 (0.21, 0.32)	0.14 (0.11, 0.19)	0.04 (0.03, 0.05)
<b>Death from other smoking related cancers<sup>c</sup></b>						
Number of deaths (%)						
Males	93 (2.0)	67 (1.4)	175 (1.5)	177 (1.2)	178 (1.1)	222 (0.8)
Females	55 (1.1)	21 (0.6)	63 (0.9)	49 (0.7)	20 (0.3)	135 (0.4)

**Appendix**  
**Cigarette Smoking and Mortality in Adults Aged 70 Years and Older: Results From the NIH-AARP Cohort**  
**Nash et al.**

Rate per 100,000							
Males	608.29	462.7	452.94	398.16	355.39	267.62	
	(514.49, 702.09)	(383.9, 541.5)	(403.61, 502.27)	(356.92, 439.41)	(318.77, 392.00)	(244.51, 290.74)	
Females	353.5	230.44	238.03	239.24	158.49	166.9	
	(285, 422)	(167.75, 293.12)	(193.74, 282.33)	(194.47, 284.02)	(118.71, 198.27)	(149.45, 184.35)	
Multivariable-adjusted hazard ratio <sup>b</sup>							
Males	1.00 (ref)	0.75 (0.58, 0.97)	0.77 (0.63, 0.95)	0.64 (0.52, 0.79)	0.58 (0.47, 0.71)	0.41 (0.33, 0.50)	
Females	1.00 (ref)	0.75 (0.51, 1.10)	0.64 (0.46, 0.89)	0.68 (0.49, 0.95)	0.52 (0.36, 0.75)	0.48 (0.36, 0.62)	
Death from respiratory infection							
Number of deaths (%)							
Males	263 (5.6)	229 (4.8)	357 (3.1)	255 (1.8)	167 (1.1)	130 (0.4)	
Females	277 (5.7)	165 (4.6)	245 (3.3)	114 (1.6)	39 (0.7)	127 (0.4)	
Rate per 100,000							
Males	996.12	798.15	497.9	283.1	163.86	67.64	
	(875.54, 1,116.69)	(694.58, 901.72)	(446.25, 549.56)	(248.35, 317.85)	(139, 188.72)	(56.01, 79.27)	
Females	969.06	729.18	528.68	250.68	103.05	59.38	
	(854.64, 1083.49)	(617.84, 840.52)	(462.46, 594.90)	(204.59, 296.78)	(70.7, 135.4)	(49.04, 69.71)	
Multivariable-adjusted hazard ratio <sup>b</sup>							
Males	1.00 (ref)	0.81 (0.67, 0.96)	0.51 (0.43, 0.59)	0.30 (0.25, 0.35)	0.18 (0.14, 0.21)	0.07 (0.06, 0.09)	
Females	1.00 (ref)	0.75 (0.62, 0.91)	0.55 (0.46, 0.65)	0.26 (0.21, 0.33)	0.11 (0.08, 0.15)	0.06 (0.05, 0.07)	
Death from heart disease							
Number of deaths (%)							
Males	411 (8.7)	377 (7.9)	894 (7.6)	915 (6.4)	777 (4.9)	1,257 (4.3)	
Females	311 (6.4)	188 (5.2)	316 (4.3)	244 (3.4)	162 (2.8)	815 (2.6)	
Rate per 100,000							
Males	1,554.8	1,307.17	1,245.52	1,016.55	763.66	653.35	
	(1,404.23, 1,705.36)	(1,174.96, 1,439.37)	(1,163.86, 1,327.17)	(950.68, 1,082.42)	(709.95, 817.37)	(617.23, 689.47)	
Females	1,083.88	821	680.01	537.85	426.25	381.39	
	(963.02, 1,204.75)	(703.56, 938.44)	(605.01, 755)	(470.27, 605.42)	(360.59, 491.90)	(355.19, 407.60)	
Multivariable-adjusted hazard ratio <sup>b</sup>							
Males	1.00 (ref)	0.83 (0.73, 0.96)	0.80 (0.71, 0.90)	0.66 (0.59, 0.74)	0.50 (0.45, 0.57)	0.43 (0.38, 0.48)	
Females	1.00 (ref)	0.75 (0.63, 0.90)	0.62 (0.53, 0.73)	0.50 (0.42, 0.59)	0.40 (0.33, 0.49)	0.33 (0.29, 0.38)	
Death from stroke							
Number of deaths (%)							

**Appendix**  
**Cigarette Smoking and Mortality in Adults Aged 70 Years and Older: Results From the NIH-AARP Cohort**  
**Nash et al.**

Males	68 (1.4)	57 (1.2)	119 (1.0)	131 (0.9)	139 (0.9)	209 (0.7)
Females	64 (1.3)	27 (0.8)	59 (0.8)	58 (0.8)	41 (0.7)	246 (0.8)
Rate per 100,000						
Males	259.78	196.07	165.66	145.5	136.4	108.73
	(197.94, 321.62)	(145.08, 247.05)	(135.89, 195.43)	(120.58, 170.42)	(113.72, 159.08)	(93.99, 123.48)
Females	227.04	118.44	127.72	129.21	107.35	115.29
	(171.24, 282.84)	(73.73, 163.15)	(95.12, 160.32)	(95.92, 162.50)	(74.48, 140.21)	(100.87, 129.71)
Multivariable-adjusted hazard ratio <sup>b</sup>						
Males	1.00 (ref)	0.75 (0.53, 1.07)	0.64 (0.48, 0.86)	0.57 (0.42, 0.76)	0.54 (0.40, 0.72)	0.43 (0.32, 0.56)
Females	1.00 (ref)	0.52 (0.33, 0.81)	0.57 (0.40, 0.81)	0.57 (0.40, 0.82)	0.48 (0.32, 0.71)	0.48 (0.36, 0.64)

<sup>a</sup>NIH-AARP: National Institutes of Health-AARP Study

<sup>b</sup>Multivariable-adjusted hazard ratios adjusted for age at baseline, sex, education level, and alcohol use

<sup>c</sup>Other smoking cancers to include all other cancers determined by the Surgeon General's report to be causally associated with cancer, including bladder, esophageal, stomach, head and neck, colorectal, kidney and renal pelvis, and pancreatic cancers, and acute myeloid leukemia.

**Appendix**  
**Cigarette Smoking and Mortality in Adults Aged 70 Years and Older: Results From the NIH-AARP Cohort**  
**Nash et al.**

**Appendix Table 2.** Time Since Smoking Cessation and Mortality Among NIH-AARP Study Participants Aged Over 70y

Cause of death	Smoking status				
	Current <sup>a</sup> (n=9,849)	Quit 1-4 years ago (n=1,718)	Quit 5-10 years ago (n=46,414)	Quit 10+ years ago (n=72,109)	Never (n=60,973)
Death from all causes					
Number of deaths (%)	3,243 (32.9)	518 (30.2)	1,151 (26.1)	13,283 (18.4)	7,378 (12.1)
	5,870.2	5,798.75	4,465.41	2,769.32	1,880.01
Rate per 100,000	(5,664.05, 6,076.34)	(5,247.49, 6,350.01)	(4,204.39, 4,726.44)	(2,721.1, 2,817.53)	(1,836.23, 1,923.79)
Multivariable-adjusted hazard ratio <sup>b</sup>	1.00 (ref)	1.35 (1.26, 1.46)	1.07 (1.01, 1.14)	0.66 (0.64, 0.69)	0.44 (0.42, 0.46)
Excluding previous conditions	1.00 (ref)	1.41 (0.89, 2.22)	0.88 (0.58, 1.34)	0.8 (0.67, 0.95)	0.67 (0.55, 0.81)
Death from lung cancer					
Number of deaths (%)	641 (6.5)	112 (6.5)	191 (4.3)	1,344 (1.9)	180 (0.3)
	1,145.83	1,186.64	725	284.75	44.75
Rate per 100,000	(1,055.26, 1,236.4)	(946.61, 1,426.67)	(621.05, 828.95)	(269.15, 300.34)	(38.07, 51.43)
Multivariable-adjusted hazard ratio	1.00 (ref)	1.91 (1.61, 2.25)	1.19 (1.02, 1.39)	0.48 (0.44, 0.52)	0.08 (0.06, 0.09)
Excluding previous conditions	1.00 (ref)	1.76 (1.26, 2.47)	1.27 (0.95, 1.71)	0.49 (0.41, 0.57)	0.10 (0.07, 0.12)
Death from other smoking related cancers <sup>c</sup>					
Number of deaths (%)	209 (2.1)	29 (1.7)	84 (1.9)	1143 (1.6)	619 (1.0)
	390.55	374.46	326.34	229.9	161.18
Rate per 100,000	(336.64, 444.47)	(223.98, 524.93)	(255.66, 397.03)	(216.31, 243.49)	(148.25, 174.12)
Multivariable-adjusted hazard ratio	1.00 (ref)	1.29 (1, 1.67)	1.08 (0.87, 1.33)	0.81 (0.73, 0.9)	0.62 (0.56, 0.7)
Excluding previous conditions	1.00 (ref)	1.41 (0.89, 2.22)	0.88 (0.58, 1.34)	0.80 (0.67, 0.95)	0.67 (0.55, 0.81)
Death from respiratory infection					
Number of deaths (%)	547 (5.6)	85 (4.9)	197 (4.5)	1,181 (1.6)	257 (0.4)
	971.6	964.72	752.52	255.94	64.07
Rate per 100,000	(888.48, 1,054.73)	(738.91, 1,190.52)	(646.36, 858.69)	(240.95, 270.92)	(56.06, 72.07)
Multivariable-adjusted hazard ratio	1.00 (ref)	1.68 (1.4, 2.01)	1.36 (1.16, 1.58)	0.46 (0.42, 0.51)	0.11 (0.1, 0.13)
Excluding previous conditions	1.00 (ref)	2.02 (1.34, 3.05)	0.89 (0.57, 1.38)	0.43 (0.35, 0.53)	0.19 (0.15, 0.24)
Death from heart disease					
Number of deaths (%)	741 (7.5)	121 (7.0)	261 (5.9)	3,570 (5.0)	2,072 (3.4)
	1,357.85	1,316	1,028.76	730.86	538.39
Rate per 100,000	(1,258.15, 1,457.55)	(1,060.42, 1,571.58)	(902.61, 1,154.91)	(706.35, 755.36)	(514.76, 562.02)
Multivariable-adjusted hazard ratio	1.00 (ref)	1.30 (1.12, 1.52)	1.00 (0.88, 1.14)	0.71 (0.67, 0.76)	0.51 (0.47, 0.55)
Excluding previous conditions	1.00 (ref)	1.15 (0.84, 1.59)	0.87 (0.67, 1.14)	0.63 (0.56, 0.71)	0.53 (0.47, 0.60)
Death from stroke					
Number of deaths (%)	134 (1.4)	14 (0.8)	44 (1.0)	589 (0.8)	455 (0.7)

**Appendix**  
**Cigarette Smoking and Mortality in Adults Aged 70 Years and Older: Results From the NIH-AARP Cohort**  
**Nash et al.**

Rate per 100,000	244.28 (202.11, 286.45)	176.24 (75.88, 276.61)	178.2 (124.45, 231.94)	123.66 (113.42, 133.89)	111.31 (100.85, 121.77)
Multivariable-adjusted hazard ratio	1.00 (ref)	1.01 (0.68, 1.49)	0.94 (0.7, 1.27)	0.62 (0.53, 0.72)	0.54 (0.46, 0.63)
Excluding previous conditions	1.00 (ref)	0.74 (0.34, 1.59)	0.65 (0.36, 1.18)	0.57 (0.45, 0.71)	0.50 (0.4, 0.64)

<sup>a</sup>Current smokers includes participants who reported quitting smoking in the past year

<sup>b</sup>Multivariable-adjusted hazard ratios adjusted for age at baseline, sex, education level, and alcohol use

<sup>c</sup>Other smoking cancers to include all other cancers determined by the Surgeon General's report to be causally associated with cancer, including bladder, esophageal, stomach, head and neck, colorectal, kidney and renal pelvis, and pancreatic cancers, and acute myeloid leukemia.

NIH-AARP, National Institutes of Health-AARP Study

**Appendix**  
**Cigarette Smoking and Mortality in Adults Aged 70 Years and Older: Results From the NIH-AARP Cohort**  
**Nash et al.**

**Appendix Table 3.** Lifetime Smoking History and Mortality in Current and Former Smokers Participating in the NIH-AARP<sup>a</sup> Study, Aged Over 70 Years

Cause of death	Lifetime pack-years of smoking (Quartile)			
	1 (n=23,726)	2 (n=24,476)	3 (n=24,294)	4 (n=24,566)
Pack years of smoking, mean (SD)	3.17 (1.96)	12.84 (3.7)	27.70 (5.05)	57.96 (18.65)
Death from all causes				
Number of deaths (%)				
Current smokers	78 (19.0)	329 (21.4)	771 (29.2)	1,997 (39.9)
Former smokers	3,238 (13.9)	3,719 (16.2)	4,489 (20.7)	5,572 (28.5)
Rate per 100,000				
Current smokers	2,988.03 (2,324.35, 3,651.7)	3,369.67 (3,005.37, 3,733.97)	5,001.41 (4,646.25, 5,356.57)	6,997.6 (6,690.35, 7,304.85)
Former smokers	2,117.74 (2,044.8, 2,190.69)	2,498.45 (2,418.14, 2,578.75)	3,272.84 (3,177.1, 3,368.59)	4,747.02 (4,622.35, 4,871.68)
Multivariable-adjusted hazard ratio <sup>b</sup>				
Current smokers	1.00 (ref)	1.13 (0.88, 1.45)	1.68 (1.33, 2.12)	2.33 (1.86, 2.92)
Former smokers	1.00 (ref)	1.18 (1.12, 1.23)	1.53 (1.46, 1.60)	2.18 (2.09, 2.28)
Death from lung cancer				
Number of deaths (%)				
Current smokers	10 (2.4)	49 (3.2)	131 (5.0)	440 (8.8)
Former smokers	153 (0.7)	284 (1.2)	535 (2.5)	852 (4.4)
Rate per 100,000				
Current smokers	380.52 (144.59, 616.44)	499.49 (359.57, 639.42)	840.24 (695.43, 985.04)	1,549.04 (1,404.14, 1,693.93)
Former smokers	100.07 (84.21, 115.92)	191.62 (169.37, 213.87)	390.37 (357.29, 423.45)	724.01 (675.39, 772.64)
Multivariable-adjusted hazard ratio				
Current smokers	1.00 (ref)	1.32 (0.67, 2.60)	2.2 (1.15, 4.18)	4.13 (2.20, 7.73)
Former smokers	1.00 (ref)	1.88 (1.55, 2.29)	3.77 (3.15, 4.51)	6.85 (5.76, 8.14)
Death from other smoking related cancers <sup>c</sup>				
Number of deaths (%)				
Current smokers	4 (1.0)	18 (1.2)	33 (1.3)	93 (1.9)
Former smokers	181 (0.8)	223 (1.0)	246 (1.1)	248 (1.3)
Rate per 100,000				
Current smokers	389.2 (147.92, 630.48)	299.78 (190.62, 408.95)	473.62 (365.03, 582.21)	535.1 (449.94, 620.25)
Former smokers	241.49 (216.85, 266.13)	298.39 (270.63, 326.15)	356.7 (325.08, 388.32)	423.58 (386.37, 460.79)
Multivariable-adjusted hazard ratio				

**Appendix**  
**Cigarette Smoking and Mortality in Adults Aged 70 Years and Older: Results From the NIH-AARP Cohort**  
**Nash et al.**

Current smokers	1.00 (ref)	0.77 (0.37, 1.57)	1.23 (0.64, 2.38)	1.32 (0.69, 2.50)
Former smokers	1.00 (ref)	1.22 (1.07, 1.40)	1.45 (1.27, 1.66)	1.7 (1.48, 1.94)
Death from respiratory infection				
Number of deaths (%)				
Current smokers	11 (2.7)	34 (2.2)	121 (4.6)	374 (7.5)
Former smokers	151 (0.7)	248 (1.1)	477 (2.2)	808 (4.1)
Rate per 100,000				
Current smokers	413.38 (168.61, 658.16)	348.32 (231.17, 465.46)	787.09 (646.06, 928.12)	1,302.94 (1,170.75, 1,435.12)
Former smokers	98.74 (82.99, 114.49)	166.51 (145.79, 187.24)	347.66 (316.46, 378.86)	687.88 (640.44, 735.32)
Multivariable-adjusted hazard ratio				
Current smokers	1.00 (ref)	0.83 (0.42, 1.64)	1.89 (1.02, 3.51)	3.13 (1.72, 5.71)
Former smokers	1.00 (ref)	1.67 (1.36, 2.04)	3.43 (2.85, 4.12)	6.6 (5.54, 7.86)
Death from heart disease				
Number of deaths (%)				
Current smokers	28 (6.8)	79 (5.1)	177 (6.7)	438 (8.8)
Former smokers	834 (3.6)	1,036 (4.5)	1,179 (5.4)	1,463 (7.5)
Rate per 100,000				
Current smokers	1,083.2 (681.86, 1,484.53)	807.95 (629.69, 986.2)	1,137.1 (968.51, 1,305.7)	1,530.86 (1,387.33, 1,674.39)
Former smokers	545.21 (508.2, 582.21)	695.84 (653.47, 738.21)	859.33 (810.28, 908.39)	1,247.76 (1,183.81, 1,311.71)
Multivariable-adjusted hazard ratio				
Current smokers	1.00 (ref)	0.75 (0.49, 1.16)	1.07 (0.72, 1.6)	1.41 (0.96, 2.06)
Former smokers	1.00 (ref)	1.28 (1.17, 1.4)	1.57 (1.43, 1.71)	2.25 (2.06, 2.45)
Death from stroke				
Number of deaths (%)				
Current smokers	3 (0.7)	16 (1.0)	37 (1.4)	76 (1.5)
Former smokers	198 (0.9)	171 (0.8)	200 (0.9)	193 (1.0)
Rate per 100,000				
Current smokers	115.75 (-15.27, 246.77)	163.72 (83.47, 243.98)	251.12 (169.85, 332.38)	263.57 (204.25, 322.9)
Former smokers	129.52 (111.48, 147.57)	114.77 (97.56, 131.97)	145.7 (125.51, 165.89)	164.79 (141.54, 188.04)
Multivariable-adjusted hazard ratio				
Current smokers	1.00 (ref)	1.45 (0.42, 4.97)	2.25 (0.69, 7.31)	2.35 (0.74, 7.46)
Former smokers	1.00 (ref)	0.89 (0.72, 1.09)	1.12 (0.92, 1.36)	1.25 (1.02, 1.52)

<sup>a</sup>NIH-AARP: National Institutes of Health-AARP Study

<sup>b</sup>Multivariable-adjusted hazard ratios adjusted for age at baseline, sex, education level, and alcohol use

**Appendix**  
**Cigarette Smoking and Mortality in Adults Aged 70 Years and Older: Results From the NIH-AARP Cohort**  
**Nash et al.**

<sup>c</sup>Other smoking cancers to include all other cancers determined by the Surgeon General's report to be causally associated with cancer, including bladder, esophageal, stomach, head and neck, colorectal, kidney and renal pelvis, and pancreatic cancers, and acute myeloid leukemia.

**Appendix**  
**Cigarette Smoking and Mortality in Adults Aged 70 Years and Older: Results From the NIH-AARP Cohort**  
**Nash et al.**

**Appendix Table 4.** Amount Smoked Aged Over 70 and Mortality Among Current Smokers in the NIH-AARP<sup>a</sup> Study

Cause of death	Amount smoked per day				
	≤10/d (n=3,816)	11-20/d (n=3,269)	21-30/d (n=1,357)	31-40/d (n=709)	40+/d (n=440)
<b>Death from all causes</b>					
Number of deaths (%)	1,091 (28.6)	1,095 (33.5)	516 (38.0)	308 (43.4)	165 (37.5)
	4,699.21	5,845.76	6,666.64	7,952.04	6,507.98
Rate per 100,000	(4,419.98, 4,978.44)	(5,498.24, 6,193.28)	(6,089.17, 7,244.11)	(7,054.09, 8,849.99)	(5,467, 7,548.96)
Multivariable-adjusted hazard ratio <sup>b</sup>	1.00 (ref)	1.23 (1.13, 1.34)	1.39 (1.25, 1.54)	1.64 (1.44, 1.86)	1.29 (1.09, 1.52)
+ age at initiation	1.00 (ref)	1.21 (1.12, 1.32)	1.36 (1.22, 1.51)	1.59 (1.4, 1.81)	1.34 (1.13, 1.58)
+ pack-years under the age of 70y	1.00 (ref)	1.11 (1.01, 1.21)	1.09 (0.97, 1.22)	1.13 (0.98, 1.31)	0.87 (0.72, 1.05)
<b>Death from lung cancer</b>					
Number of deaths (%)	187 (4.9)	222 (6.8)	120 (8.8)	68 (9.6)	33 (7.5)
	804.87	1,177.3	1,538.65	1,784.53	1,347.67
Rate per 100,000	(689.36, 920.39)	(1,021.94, 1,332.66)	(1,262.33, 1,814.97)	(1,356.28, 2,212.78)	(865.96, 1,829.38)
Multivariable-adjusted hazard ratio	1.00 (ref)	1.44 (1.19, 1.75)	1.88 (1.5, 2.37)	2.13 (1.61, 2.81)	1.54 (1.06, 2.23)
+ age at initiation	1.00 (ref)	1.41 (1.16, 1.72)	1.82 (1.45, 2.3)	2.05 (1.55, 2.71)	1.66 (1.14, 2.41)
+ pack-years under the age of 70y	1.00 (ref)	1.21 (0.99, 1.48)	1.28 (0.99, 1.64)	1.16 (0.84, 1.6)	0.77 (0.5, 1.18)
<b>Death from other smoking related cancers<sup>c</sup></b>					
Number of deaths (%)	48 (1.3)	59 (1.8)	21 (1.6)	15 (2.1)	5 (1.1)
	206.88	314.96	274.57	355.77	171.33
Rate per 100,000	(148.29, 265.46)	(234.36, 395.55)	(156.83, 392.31)	(173.98, 537.55)	(17.39, 325.28)
Multivariable-adjusted hazard ratio	1.00 (ref)	1.33 (1, 1.76)	1.07 (0.72, 1.57)	1.25 (0.77, 2)	1.13 (0.63, 2.03)
+ age at initiation	1.00 (ref)	1.29 (0.97, 1.73)	1.00 (0.66, 1.53)	1.13 (0.66, 1.93)	1.04 (0.55, 1.95)
+ pack-years under the age of 70y	1.00 (ref)	1.33 (1, 1.76)	1.06 (0.71, 1.56)	1.23 (0.76, 1.98)	1.16 (0.65, 2.09)
<b>Death from respiratory infection</b>					
Number of deaths (%)	169 (4.4)	187 (5.7)	88 (6.5)	63 (8.9)	33 (7.5)
	722.03	998.71	1,149.48	1,669.94	1,318.54
Rate per 100,000	(613.04, 831.02)	(854.99, 1,142.43)	(908.27, 1,390.69)	(1,252.48, 2,087.4)	(849.33, 1,787.75)
Multivariable-adjusted hazard ratio	1.00 (ref)	1.35 (1.09, 1.66)	1.54 (1.19, 1.99)	2.19 (1.63, 2.93)	1.71 (1.17, 2.49)
+ age at initiation	1.00 (ref)	1.3 (1.05, 1.6)	1.45 (1.12, 1.88)	1.99 (1.49, 2.67)	1.75 (1.2, 2.55)
+ pack-years under the age of 70y	1.00 (ref)	1.11 (0.90, 1.37)	0.98 (0.74, 1.29)	1.09 (0.78, 1.51)	0.74 (0.47, 1.15)
<b>Death from heart disease</b>					
Number of deaths (%)	238 (6.2)	265 (8.1)	118 (8.7)	63 (8.9)	38 (8.6)
	1,030.18	1,410.46	1,517.5	1,571.13	1544
Rate per 100,000	(899.08, 1,161.27)	(1,240.02, 1,580.9)	(1,242.68, 1,792.33)	(1,179.21, 1,963.04)	(1,026.62, 2,061.38)
Multivariable-adjusted hazard ratio	1.00 (ref)	1.38 (1.16, 1.65)	1.46 (1.17, 1.83)	1.54 (1.16, 2.04)	1.34 (0.95, 1.89)
+ age at initiation	1.00 (ref)	1.37 (1.15, 1.64)	1.46 (1.17, 1.82)	1.52 (1.14, 2.01)	1.31 (0.93, 1.85)
+ pack-years under the age of 70y	1.00 (ref)	1.31 (1.09, 1.57)	1.30 (1.02, 1.66)	1.29 (0.94, 1.77)	1.12 (0.77, 1.64)

**Appendix**  
**Cigarette Smoking and Mortality in Adults Aged 70 Years and Older: Results From the NIH-AARP Cohort**  
**Nash et al.**

Death from stroke					
Number of deaths (%)	53 (1.4)	41 (1.3)	25 (1.8)	8 (1.1)	5 (1.1)
	224.08	218.73	327	218.3	193.37
Rate per 100,000	(163.7, 284.47)	(151.59, 285.88)	(198.34, 455.66)	(65.19, 371.41)	(19.62, 367.11)
Multivariable-adjusted hazard ratio	1.00 (ref)	0.98 (0.65, 1.47)	1.45 (0.9, 2.34)	0.93 (0.44, 1.96)	0.80 (0.32, 2.02)
+ age at initiation	1.00 (ref)	0.98 (0.65, 1.48)	1.43 (0.89, 2.31)	0.95 (0.45, 2)	0.86 (0.34, 2.17)
+ pack-years under the age of 70y	1.00 (ref)	0.9 (0.59, 1.37)	1.19 (0.7, 2.03)	0.69 (0.3, 1.59)	0.60 (0.22, 1.64)

<sup>a</sup>NIH-AARP: National Institutes of Health-AARP Study

<sup>b</sup>Multivariable-adjusted hazard ratios adjusted for age at baseline, sex, education level, and alcohol use

<sup>c</sup>Other smoking cancers to include all other cancers determined by the Surgeon General's report to be causally associated with cancer, including bladder, esophageal, stomach, head and neck, colorectal, kidney and renal pelvis, and pancreatic cancers, and acute myeloid leukemia.