## **Supplementary Online Content**

Tom SE, Phadke M, Hubbard RA, Crane PK, Stern Y, Larson EB. Association of demographic and early-life socioeconomic factors by birth cohort with dementia incidence among US adults born between 1893 and 1949. *JAMA Netw Open.* 2020;3(7):e2011094. doi:10.1001/jamanetworkopen.2020.11094

- eTable 1. Age-Specific Dementia Incidence by Birth Cohort
- eTable 2. Association of Birth Cohort With Time to Incident Dementia, Stratified by Sex

**eTable 3.** Association of Birth Cohort, Early-Life Socioeconomic Status, Parental Education, *APOE* Status, and Vascular Risk Factors With Incident Dementia

This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. Age-Specific Dementia Incidence by Birth Cohort<sup>a</sup>

Age group	No. of person-years	No. of cases	Rate per 1000 person-years (95% CI) <sup>b</sup>
65-69 years			
All	1868	7	3.7 (1.8, 7.9)
Pre-WWI			
WWI and Spanish			
influenza			
Pre-Great	724	4	5.5 (2.1, 14.7)
Depression			
Great Depression	431	1	2.3 (0.3, 16.5)
WWII and postwar	713	2	2.8 (0.7, 11.2)
70-74 years			
All	5648	44	7.8 (5.8, 10.5)
Pre-WWI			
WWI and Spanish	49	0	
influenza		V	
Pre-Great	3030	26	8.6 (5.8, 12.6)
Depression			
Great Depression	2083	13	6.2 (3.6, 10.7)
WWII and postwar	487	5	10.3 (4.3, 24.7)
75-79 years			
All	7156	106	14.8 (12.2, 17.9)
Pre-WWI			
WWI and Spanish	1295	17	13.1 (8.2, 21.1)
influenza			
Pre-Great	3780	60	15.9 (12.3, 20.4)
Depression			
Great Depression	2078	29	14.0 (9.7, 20.1)
WWII and postwar	3	0	
80-84 years			
All	6564	239	36.4 (32.1, 41.3)
Pre-WWI	300	8	26.7 (13.4, 53.4)
WWI and Spanish	2238	87	38.9 (31.5, 48.0)
influenza			(====, ====)
Pre-Great	3229	125	38.7 (32.5, 46.1)
Depression			
Great Depression	798	19	23.8 (15.2, 37.4)
WWII and postwar			
85-89 years			
All	4035	212	52.5 (45.9, 60.1)
Pre-WWI	739	39	52.8 (38.6, 72.3)
WWI and Spanish	1638	94	57.4 (46.9, 70.2)
influenza			
Pre-Great	1646	79	48.0 (38.5, 59.8)
Depression			

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Great Depression	12	0	
WWII and postwar			
≥90 years			
All	1883	122	64.8 (54.2, 77.4)
Pre-WWI	845	62	73.4 (57.2, 94.1)
WWI and Spanish	814	47	57.7 (43.4, 76.8)
influenza			
Pre-Great	224	13	58.2 (33.8, 100.2)
Depression			
Great Depression			
WWII and postwar			

<sup>a</sup>n = 3174. 95% confidence intervals shown for Pre-Great Depression birth cohort as an example; sample with information on birth cohort, age, sex, height, childhood financial stability, ability to afford needs, childhood household crowding, education, and parental education.

<sup>&</sup>lt;sup>b</sup>Delta method to calculate standard errors.

eTable 2. Association of Birth Cohort With Time to Incident Dementia, Stratified by Sex

Birth Cohort	Women (n = 2512) HR (95% CI)	Men (n = 1765) HR (95% CI)	P value <sup>a</sup>
Pre-WWI	1.00 (0.73, 1.38)	0.70 (0.46, 1.07)	.41
WWI and Spanish influenza	1.19 (0.93, 1.53)	0.91 (0.67, 1.23)	.17
Pre-Great Depression	Reference	Reference	NA
Great Depression	0.75 (0.54, 1.03)	0.67 (0.46, 0.97)	.98
WWII and postwar	0.87 (0.33, 2.26)	0.49 (0.15, 1.63)	.59

<sup>&</sup>lt;sup>a</sup>P value from the interaction of sex and birth cohort in a pooled-sex model that includes birth cohort, age, sex, height, childhood financial stability, ability to afford needs, childhood household crowding, and education.

**eTable 3.** Association of Birth Cohort, Early-Life Socioeconomic Status, Parental Education, *APOE* Status, and Vascular Risk Factors With Incident Dementia

Characteristic	Model 1 (n = 3174) HR (95% CI)	Model 2 (n = 3720) HR (95% CI)	Model 3 (n = 4065) HR (95% CI)
Birth cohort			
Pre-WWI	1.00 (0.74, 1.36)	0.96 (0.73, 1.26)	0.92 (0.70, 1.20)
WWI and Spanish Flu	1.07 (0.85, 1.34)	1.06 (0.86, 1.31)	1.04 (0.85, 1.27)
Pre-Depression	Reference	Reference	Reference
Great Depression	0.67 (0.50, 0.88)	0.71 (0.54, 0.92)	0.70 (0.54, 0.90)
WWII - later	0.76 (0.34, 1.72)	0.56 (0.22, 1.43)	0.61 (0.28, 1.36)
Woman	1.16 (1.00, 1.36)	1.11 (0.97, 1.27)	1.09 (0.95, 1.26)
Height			
Quartile 1 (shortest)	1.81 (1.37, 2.40)	1.68 (1.28, 2.14)	1.70 (1.33, 2.18)
Quartile 2	1.40 (1.05, 1.87)	1.43 (1.10, 1.86)	1.41 (1.10, 1.81)
Quartile 3	1.64 (1.22, 2.19)	1.58 (1.21, 2.07)	1.60 (1.24, 2.07)
Quartile 4 (tallest)	Reference	Reference	Reference
Childhood family finances			
Quartile 1 (least stable)	0.76 (0.59, 0.98)	0.73 (0.58, 0.91)	0.70 (0.57, 0.87)
Quartile 2	0.77 (0.61, 0.96)	0.82 (0.67, 1.00)	0.79 (0.65, 0.96)
Quartile 3	0.93 (0.76, 1.13)	0.96 (0.80, 1.15)	0.92 (0.77, 1.09)
Quartile 4 (most stable)	Reference	Reference	Reference
Ability to afford needs			
Neither basics nor small luxuries	1.19 (0.88, 1.61)	1.19 (0.92, 1.55)	1.17 (0.91, 1.50)
Basics only	1.10 (0.91, 1.32)	1.20 (1.02, 1.41)	1.14 (0.98, 1.34)
Basics and small luxuries	Reference	Reference	Reference
Childhood household crowding (increasing)	0.91 (0.83, 1.00)	0.89 (0.82, 0.97)	0.92 (0.85, 1.00)
Up to high school (vs college+)	0.86 (0.73, 1.00)	1.20 (1.04, 1.39)	1.23 (1.07, 1.41)
Parental education			
Q1	1.05 (0.84, 1.32)		
Q2	1.19 (0.95, 1.50)		
Q3	1.03 (0.82, 1.30)		
Q4	Reference		
APOE (any vs none)		1.69 (1.47, 1.95)	
Baseline vascular risk factors			
BMI			0.99 (0.98, 1.01)
Systolic blood pressure			1.00 (1.00, 1.00)
Ever use of hypertension medication			0.96 (0.83, 1.10)
Ever smoked			0.89 (0.78, 1.01)

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Diabetes		1.11 (0.90, 1.37)
Heart disease		0.97 (0.82, 1.15)
Cerebrovascular disease		1.02 (0.82, 1.26)

Model 1 includes birth cohort, age, sex, height, childhood financial stability, ability to afford needs, childhood household crowding, education, and parental education.

Model 2 includes birth cohort, age, sex, height, childhood financial stability, ability to afford needs, childhood household crowding, education, and *APOE* genotype status.

Model 3 includes birth cohort, age, sex, height, childhood financial stability, ability to afford needs, childhood household crowding, education, and vascular risk factors.