

Supplementary Information

Inflammatory markers and mortality among US adults with obstructive lung function

Earl S. Ford,¹ Timothy J. Cunningham,¹ David M. Mannino²

¹ Division of Population Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, Atlanta, GA, USA.

² Department of Preventive Medicine and Environmental Health, University of Kentucky College of Public Health, Lexington, Kentucky, USA.

Correspondence:

Earl Ford, Centers for Disease Control and Prevention, 4770 Buford Highway, MS F78, Atlanta, GA 30341, USA

Tel: +1 770-488-2484

Fax: +1 770-488-5965

Email: eford@cdc.gov

Table S1 Hazard ratios (95% confidence interval) for dichotomized inflammatory markers among adults aged 40-79 years with obstructive lung function, National Health and Nutrition Examination Survey III Linked Mortality Study 1988-1994 to 2006

	White blood cell count $\geq 7.30 \times 10^9/L$	C-reactive protein $>3 \text{ g/L}$	Fibrinogen $\geq 3.04 \text{ g/L}$
Model 1	1.64 (1.22, 2.20)	1.45 (1.09, 1.92)	1.74 (1.32, 2.29)
Model 2	1.62 (1.19, 2.21)	1.48 (1.13, 1.96)	1.82 (1.36, 2.43)
Model 3	1.33 (0.96, 1.84)	1.36 (1.02, 1.82)	1.63 (1.24, 2.15)
Model 4	1.29 (0.92, 1.80)	1.40 (1.06, 1.86)	1.58 (1.22, 2.05)
Model 5	1.31 (0.95, 1.81)	1.26 (0.95, 1.66)	1.49 (1.17, 1.91)

Model 1 is adjusted for age.

Model 2 is adjusted for variables in model 1 plus sex, race or ethnicity, and education.

Model 3 is adjusted for variables in model 2 plus smoking status, alcohol use, and leisure-time physical activity.

Model 4 is adjusted for variables in model 3 plus systolic blood pressure, high-density lipoprotein cholesterol, non-high-density lipoprotein cholesterol, body mass index, and urinary albumin-creatinine ratio.

Model 5 is adjusted for variables in model 4 plus health status, diabetes, history of myocardial infarction, history of stroke, history of cancer, and severity of chronic obstructive pulmonary disease.

Table S2 Hazard ratios (95% confidence interval) for quartiles of inflammatory markers and number of elevated inflammatory markers among adults aged 40-79 years with obstructive lung function, National Health and Nutrition Examination Survey III Linked Mortality Study 1988-1994 to 2006

	Q1	Q2	Q3	Q4	P adjusted Wald F
White blood cell count					
Approximate quartile boundaries	≤5.95	6.00-7.25	7.30-8.85	≥8.90	
Model 1	1.00	1.37 (0.93, 2.00)	1.61 (1.01, 2.56)	2.35 (1.43, 3.85)	0.005
Model 2	1.00	1.41 (0.96, 2.07)	1.63 (1.01, 2.65)	2.35 (1.42, 3.88)	0.007
Model 3	1.00	1.30 (0.88, 1.91)	1.39 (0.84, 2.32)	1.73 (1.03, 2.91)	0.208
Model 4	1.00	1.27 (0.88, 1.83)	1.38 (0.84, 2.28)	1.59 (0.93, 2.72)	0.399
Model 5	1.00	1.18 (0.85, 1.63)	1.32 (0.83, 2.10)	1.59 (0.97, 2.61)	0.304
Fibrinogen					
Approximate quartile boundaries	≤2.54	2.55-3.03	3.04-3.56	≥3.57	
Model 1	1.00	1.02 (0.65, 1.60)	1.62 (1.07, 2.45)	1.90 (1.21, 2.97)	0.001
Model 2	1.00	1.01 (0.64, 1.60)	1.69 (1.10, 2.57)	1.97 (1.26, 3.08)	0.001
Model 3	1.00	0.91 (0.57, 1.45)	1.46 (0.97, 2.20)	1.64 (1.05, 2.55)	0.005
Model 4	1.00	0.90 (0.58, 1.39)	1.35 (0.92, 1.97)	1.66 (1.11, 2.48)	<0.001
Model 5	1.00	0.91 (0.59, 1.40)	1.31 (0.89, 1.93)	1.54 (1.05, 2.25)	0.003
Elevated inflammatory marker count					
Count	0	1	2	3	
Model 1	1.00	1.34 (0.77, 2.34)	1.81 (1.08, 3.06)	2.87 (1.63, 5.04)	<0.001
Model 2	1.00	1.41 (0.81, 2.44)	1.93 (1.15, 3.24)	2.92 (1.69, 5.04)	<0.001
Model 3	1.00	1.28 (0.75, 2.18)	1.66 (1.00, 2.75)	2.28 (1.32, 3.95)	0.007
Model 4	1.00	1.21 (0.73, 2.01)	1.50 (0.93, 2.43)	2.35 (1.44, 3.84)	0.001
Model 5	1.00	1.17 (0.71, 1.94)	1.44 (0.89, 2.32)	2.08 (1.29, 3.37)	0.003

Model 1 is adjusted for age.

Model 2 is adjusted for variables in model 1 plus sex, race or ethnicity, and education.

Model 3 is adjusted for variables in model 2 plus smoking status, alcohol use, and leisure-time physical activity.

Model 4 is adjusted for variables in model 3 plus systolic blood pressure, high-density lipoprotein cholesterol, non-high-density lipoprotein cholesterol, body mass index, and urinary albumin-creatinine ratio.

Model 5 is adjusted for variables in model 4 plus health status, diabetes, history of myocardial infarction, history of stroke, history of cancer, and severity of chronic obstructive pulmonary disease.