

# Sickle cell trait tied to increased pulmonary embolism risk

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(HealthDay)—For African-Americans, sickle cell trait is associated with an increased risk of pulmonary embolism, but not deep vein thrombosis, according to a study published online Nov. 13 in the *Journal of Thrombosis and Haemostasis*.

Aaron R. Folsom, M.D., from the University of Minnesota in Minneapolis, and colleagues examined the correlation of [sickle cell trait](#) with [deep vein thrombosis](#) and [pulmonary embolism](#) in middle-aged African-Americans participating in the Atherosclerosis Risk in Communities Study. Participants were followed from 1987 through 2011 for incident hospitalized pulmonary embolism (111 participants) or isolated deep vein thrombosis (138 participants). The authors compared sickle cell trait (heterozygosity for hemoglobin S, 268 participants) with no sickle cell trait (3,748 participants).

The researchers found that after adjustment for age, sex, ancestry, hormone replacement therapy (women), body mass index, diabetes, and estimated [glomerular filtration rate](#), the hazard ratio for venous thromboembolism for participants with versus without sickle cell trait was 1.50 (95 percent confidence interval, 0.96 to 2.36). The hazard ratios were 2.05 (95 percent confidence interval, 1.12 to 3.76) and 1.15 (95 percent confidence interval, 0.58 to 2.27), respectively, for pulmonary embolism and deep vein thrombosis without pulmonary embolism.

"Because neonatal screening for sickle hemoglobin is being conducted in

the United States currently, consideration should be paid to the increased pulmonary embolism risk of individuals with sickle cell trait," the authors write.

**More information:** [Abstract](#)  
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