

Uranium exposure tied to lupus

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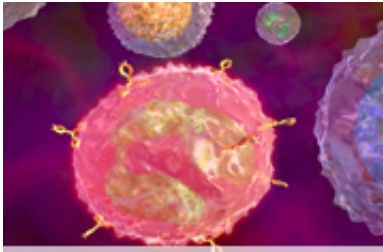


Image courtesy of Blausen Medical

(HealthDay)—High uranium exposure is associated with systemic lupus erythematosus (SLE), according to a study published online Aug. 7 in *Arthritis & Rheumatology*.

Pai-Yue Lu-Fritts, M.D., from the University of Kentucky in Lexington, and colleagues analyzed data from community members with high prior [uranium](#) exposure participating in the Fernald Community Cohort (FCC). American College of Rheumatology classification criteria, laboratory testing, and medical record review were used to identify SLE cases. Controls were matched (4:1) to each case based on age, race, and sex. Autoantibody screens were conducted.

The researchers found that in the FCC there were 4,187 individuals with background uranium exposure, 1,273 with moderate exposure, and 2,756 with higher exposure. Confirmed SLE was seen in 23 of 31 individuals with a lupus diagnostic code, and in two of 43 other individuals

prescribed hydroxychloroquine. The female-to-male ratio was 5.25:1. Twelve of the 25 SLE cases were in the higher exposure group. SLE was associated with higher uranium exposure (odds ratio, 3.92; P = 0.031).

"Potential explanations for this relationship include possible autoimmune or estrogen effects of uranium, somatic mutation, epigenetic effects, or effects of some other unidentified accompanying exposure," the authors write.

More information: [Abstract](#)
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