EMBARGOED FOR RELEASE UNTIL
NOVEMBER 2, 2023 AT 4:30 PM ET

WILDFIRE AIR POLLUTION MAY INCREASE RISKS OF HOSPITALIZATION AND DEATH AMONG PATIENTS ON DIALYSIS

Highlights

• Among individuals receiving in-center hemodialysis treatment in Washington, Oregon, and California, exposure to wildfire-related air pollution was associated with elevated risks of hospitalization and mortality.
• Results from the study will be presented at ASN Kidney Week 2023 November 1–November 5.

Philadelphia, PA (November 2, 2023) — In analyses of data from western US states, increases in wildfire-related air pollution around dialysis clinics were linked to higher rates of hospitalizations and deaths among patients. The research will be presented at ASN Kidney Week 2023 November 1–November 5.

Wildfires, which are increasing in frequency and severity, are major sources of air pollution that may disproportionately impact vulnerable populations such as individuals with kidney failure who are undergoing hemodialysis.

In the study of 79,963 patients who received in-center hemodialysis treatment at 191 Fresenius Kidney Care clinics in Washington, Oregon, and California during 2005–2018, scientists investigated the risk of all-cause hospitalization and mortality associated with wildfire exposure, using 2 metrics: wildfire smoke and wildfire-related fine particulate matter (aerodynamic diameter <2.5 microns).

Exposure to wildfire smoke plume was associated with a 3% higher risk of all-cause hospitalization the following day. The risk of death increased by 5% on the day of exposure. Exposure to wildfire-related fine particulate matter was linked to a similar increase in risk.

“This research sheds light on the health risks faced by hemodialysis patients during wildfire events,” said corresponding author Hyeonjin Song, a PhD student at the University of Maryland, College Park. “The most recent US National Climate Assessment suggests that wildfire seasons will continue to get longer with a corresponding increase in
frequency and intensity of wildfire events in response to ongoing climate change. We need to pay attention to how such hazards impact the most vulnerable among us and enhance our preparedness activities to minimize the disease burden.”

Study: “Exposure to Wildfire-Related Particulate Matter and Risk of Hospitalization and Mortality Among Hemodialysis Patients”

The world's premier nephrology meeting, ASN Kidney Week, brings together approximately 12,000 kidney professionals from across the world. The largest nephrology meeting provides participants with exciting and challenging opportunities to exchange knowledge, learn the latest scientific and medical advances, and listen to engaging and provocative discussions with leading experts in the field.

About ASN
Since 1966, ASN has been leading the fight to prevent, treat, and cure kidney diseases throughout the world by educating health professionals and scientists, advancing research and innovation, communicating new knowledge and advocating for the highest quality care for patients. ASN has nearly 21,000 members representing 140 countries. For more information, visit www.asn-online.org and follow us on Facebook, X, LinkedIn, and Instagram.

# # #