

# Study reveals risk of death after hurricanes for people on dialysis

July 14 2022

---



Credit: Pixabay/CC0 Public Domain

Many individuals with kidney failure rely on dialysis, but access to this life-sustaining therapy can be impeded by extreme weather events—such as hurricanes—that disrupt power, water, and transportation systems. A

recent study in *JASN* found that patients undergoing dialysis face a higher risk of dying in the 30 days after a hurricane.

Because [climate change](#) is expected to intensify [extreme weather events](#) like hurricanes, it's important to understand and address the toll that hurricanes take on people who need dialysis. To provide insights, Matthew Blum, MD (Johns Hopkins School of Medicine) and his colleagues analyzed information on [patients](#) requiring maintenance dialysis who were registered in the United States Renal Data System and who initiated treatment between 1997 and 2017 in one of 108 hurricane-afflicted counties.

The researchers identified 187,388 patients and 27 hurricanes, and 29,849 patients were exposed to at least one hurricane. A total of 105,398 deaths were recorded in 529,339 person-years of follow-up on dialysis. (This means that among 529 patients, there were approximately 105 deaths over one year.) Hurricane exposure was associated with a 13% higher risk of death after adjusting for demographic and socioeconomic factors. Also, patients' risk of dying was highest immediately after a hurricane and waned over time.

"Our findings suggest that dialysis-dependent patients are vulnerable during hurricanes and highlight the need to safeguard this population, especially given the predicted increased hurricane intensity with climate change," said Dr. Blum. "Anything that disrupts someone's ability to obtain dialysis—including [extreme weather](#)—can put them at risk of death. There are groups such as the Kidney Community Emergency Response Coalition that seek to prepare for these events."

The article is titled "Hurricanes and mortality among patients receiving dialysis."

Dr. Blum's co-authors include Yijing Feng, MHS, G. Brooke Anderson,

Ph.D., Dorry L. Segev, MD, Ph.D., Mara McAdams-DeMarco, Ph.D., and Morgan E. Grams, MD, Ph.D.

**More information:** "Hurricanes and mortality among patients receiving dialysis," *Journal of the American Society of Nephrology* (2022). [DOI: 10.1681/ASN.2021111520](https://doi.org/10.1681/ASN.2021111520)

Provided by American Society of Nephrology

Citation: Study reveals risk of death after hurricanes for people on dialysis (2022, July 14) retrieved 26 April 2024 from <https://medicalxpress.com/news/2022-07-reveals-death-hurricanes-people-dialysis.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.