Supplemental Material

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Supplemental Figure 8. Lag-specific association between exposure to hurricane and tropical storm and risk of missed appointments. Exposure is based on alternative hurricane and tropical storm definitions (distance to storm track at 150 km or less, distance to storm track at 200 km or less, and distance to storm track at 250 km or less).

Inclement weather type	Number of counties and study period	Number of county-days (A)	Number of missing values (B)	% of Missingness (A/B)
Rainfall	27 counties, Warmer months (Apr to Oct), 2001-2019	98,755	17	0.0%
Hurricane and tropical storm	27 counties, Warmer months (May to Oct), 2001-2019	69,899	0	0.0%
Snowfall	13 counties, Colder months (Nov to Mar), 2001-2019	27,083	1,591	5.9%
Snow depth	13 counties, Colder months (Nov to Mar), 2001-2019	27,083	2,237	8.3%
Sustained wind speed	27 counties, All months, 2001-2019	147,077	137	0.1%
Peak wind speed	27 counties, All months, 2001-2019	147,077	1,187	0.8%

Supplemental Table 1. Number of county-days and missingness for each inclement weather

Supplemental Table 2. Summary of the follow-up periods of the 60,135 kidney failure patients during 2001-2019

	Follow-up period (days per person)
Min	0
1 st quartile	42
Median	384
Mean (SD)	793 (1,041)
3 rd quartile	1,157
Max	6,938
Total	48,044,318

Voor	Number of Kidney		
rear	failure patients		
2001	4,368		
2002	4,953		
2003	5,418		
2004	6,426		
2005	6,398		
2006	6,973		
2007	7,298		
2008	7,783		
2009	8,484		
2010	9,172		
2011	9,824		
2012	10,182		
2013	11,432		
2014	11,962		
2015	12,428		
2016	12,812		
2017	13,410		
2018	13,752		
2019	13,983		

Supplemental Table 3. Number of kidney failure patients per year

Supplemental Table 4. Association between 7-day cumulative exposure (lag 0-6) to inclement weather and missed hemodialysis appointment (incidence rate ratios (RR) and 95% confidence intervals (CI)) stratified by sex and race/ethnicity

	RR (95% CI)			
	Hurricane and	Wind Advisory	Wind Advisory	
	Tropical Storm	(sustained winds)	(wind gusts)	
Female	1.65 (1.20, 2.28)	1.30 (1.26, 1.35)	1.37 (1.30, 1.44)	
Male	1.44 (1.05, 1.97)	1.26 (1.23, 1.30)	1.32 (1.26, 1.39)	
Hispanic	1.21 (0.68, 2.15)	1.34 (1.27, 1.41)	1.44 (1.32, 1.57)	
Non-Hispanic Black	1.30 (0.96, 1.75)	1.26 (1.23, 1.30)	1.30 (1.25, 1.36)	
Non-Hispanic White	2.43 (1.63, 2.43)	1.33 (1.27, 1.39)	1.42 (1.33, 1.52)	
Asian	-	1.89 (1.73, 2.07)	1.98 (1.72, 2.28)	
Other	-	1.66 (1.45, 1.90)	2.80 (2.18, 3.59)	

* We were not able to do subgroup analysis for Asian and Other due to small sample size

Supplemental Figure 1. Lag-specific association between exposure to inclement weather type and risk of missed hemodialysis stratified by sex and race/ethnicity. Regression models included the day of the week as the covariate and an offset variable equaling the natural log of the monthly average number of scheduled appointments for each county.



Supplemental Figure 2. Lag-specific association between exposure to hurricane and tropical storm and risk of missed appointments stratified by sex and race/ethnicity.

Regression models included the day of the week as the covariate and an offset variable equaling the natural log of the monthly average number of scheduled appointments for each county.



* We were not able to do subgroup analysis for Asian and Other due to small sample size

Supplemental Figure 3. Lag-specific association between exposure to snowfall and risk of missed appointments stratified by sex and race/ethnicity. Regression models included the day of the week as the covariate and an offset variable equaling the natural log of the monthly average number of scheduled appointments for each county.



Supplemental Figure 4. Lag-specific effects on missed hemodialysis appointments in incidence rate ratios (RR) and 95% confidence intervals (CI) for snow depth over 7 days of lag stratified by sex and race/ethnicity. Regression models included the day of the week as the covariate and an offset variable equaling the natural log of the monthly average number of scheduled appointments for each county.



Supplemental Figure 5. Lag-specific association between exposure to wind advisory (sustained winds) and risk of missed appointments stratified by sex and race/ethnicity. Regression models included the day of the week as the covariate and an offset variable equaling the natural log of the monthly average number of scheduled appointments for each county.



Supplemental Figure 6. Lag-specific association between exposure for exposure to wind advisory (wind gusts) and risk of missed appointments stratified by sex and race/ethnicity. Regression models included the day of the week as the covariate and an offset variable equaling the natural log of the monthly average number of scheduled appointments for each county.



Supplemental Figure 7. Association between seven-day cumulative (lag 0-6) exposure to inclement weather type and risk of missed hemodialysis appointment stratified by sex and race/ethnicity. Inclement weather types were analyzed as a continuous variable. Incidence RRs are presented as black lines with 95% CI as grey region.





Supplemental Figure 8. Lag-specific association between exposure to hurricane and tropical storm and risk of missed appointments. Exposure is based on alternative hurricane and tropical storm definitions (distance to storm track at 150 km or less, distance to storm track at 200 km or less, and distance to storm track at 250 km or less). Regression models included the day of the week as the covariate and an offset variable equaling the natural log of the monthly average number of scheduled appointments for each county.

