

Cover windows with plywood: Check.

Buy spare batteries: Check.

Get dialysis: Check.

When a hurricane is looming, people with diabetes need to have a very different "To Do" list, health experts say.

One recent study of diabetics affected by Superstorm Sandy showed those who planned ahead and received dialysis on the eve of a storm were [28 percent less likely to die](#) during the month following the disaster.

A second study of New York City patients determined more than a [quarter of them missed a dialysis session](#), while two-thirds of them couldn't receive dialysis at their regular facility and had to go elsewhere.

The two studies, taken together, show disaster preparedness means something very different to both diabetic patients and dialysis facilities.

Both are vulnerable in a storm: Diabetics on dialysis typically need to receive three treatments a week to filter their blood of waste and to remove excess fluid from the body. The process takes about four hours – it can't be rushed – and relies on facilities that have access to electricity and water.

"Disasters affect all of the population, but patients with specific needs such a dialysis are especially vulnerable," said Naoka Murakami of New York's Mount Sinai Beth Israel, which assessed the preparedness of adults at five city clinics during Sandy's landfall.

Typically a dialysis center sees one set of patients on Mondays, Wednesdays and Fridays, and a second set on Tuesdays, Thursdays and Saturdays. If a conventional blizzard knocks out service for a day, a center catches up by seeing patients on Sunday.

But Sandy's aftermath lasted much longer, with widespread power outages, closed roads and contaminated water supplies.

That means patients need to know where they could get their next treatment if the storm were to knock out power or water to their regular dialysis center.

RELATED: [Study reveals the hidden toll on Superstorm Sandy victims](#)

That's exactly what happened in the wake of Super Storm Sandy, according to the Mount Sinai study.

When forced to get their dialysis elsewhere because of power outages, a quarter of the patients surveyed didn't have their insurance information with them to use at the back-up facility, and more than half couldn't provide a detailed list of their medications.

Focusing on the storm-related needs of diabetics has moved front and center in emergency preparedness because of the problems encountered during Hurricane Katrina. There, a loss of city water and vast transportation problems upended the network of diabetic treatment. [Some 44 percent of diabetics missed one dialysis session and 17 percent missed three sessions, one study showed.](#)

Knowing the outer bands of Hurricane Sandy were likely to arrive that Sunday, [Fresenius Medical Care](#), one of the largest providers of dialysis kept some of its 69 Jersey centers open Saturday night to make extra slots available to patients.

"We called people and said, "Hey, if you can't come Sunday for whatever reason, come Saturday night," said Ken Nelson, who ran the company's Sandy response operation.

Patients were also contacted to make sure they had the phone number to the company's patient action line, and that they had and understood their personalized emergency diet plans.

(Since the build-up of potassium in the blood can be dangerous, patients are told what foods to avoid if they're uncertain when they'll receive their next treatment.)

When the storm hit, their Hoboken center took on three feet of water and had to close. In Atlantic City, the city's water system was compromised by the floodwaters.

A clinic in Paramus was ready to open once it got certification from the federal government. In response to the Sandy crisis, federal officials sent an inspector out, who certified the clinic in time for it to accommodate 400 diabetics in New York City whose local facilities had been damaged.

Most of the clinics reopened quickly, but like any business, the company then encountered problems with employees being unable to find gas to get to work.

"I had managers saying, 'My nurses want to come in, but they have no gas,' Nelson said. The company ended up sending six tanker trucks of gas for employees to use – both in their cars, and as fuel for their personal generators.

In all, the company ended up distributing 70,000 gallons of fuel to its 700 employees to keep its clinics open and fully staffed, Nelson said.

Kathleen O'Brien may be reached at kobrien@njadvancemedia.com, or at (732) 902-4557. Follow her on [Twitter @OBrienLedger](#) . Find NJ.com on [Facebook](#) .

...

