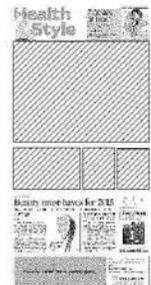


The story of one man's close call — and how he survived (tip: Dial 911)



JOSHUA MCKERROW/SUN MEDIA GROUP

Jeff and Cathy Shields in their Edgewater home. Paramedics arrived within four minutes of Cathy's phone call to 911.



BY WENDI WINTERS | Baltimore Sun Media Group

June 21, 2014, was a balmy Sunday afternoon.

For Jeff and Cathy Shields of Edgewater the nice weather was an excuse to get some chores done. Jeff Shields, a retired marine worker and yacht captain, headed outside to vacuum their cars.

His wife, a former nurse, went to work cleaning the bathroom. Chores done, they sat down in the living room. Cathy glanced at Jeff.

“Are you OK?” Cathy recalls asking him.

“I’m not sure,” Jeff said. He described having a strange feeling under his neck, spreading out like a bib. He had a pain in the back of his upper teeth.

Cathy would suspect — and she was right — that Jeff was experiencing a heart attack. The decisions the two of them made and the care he received that day were key to his survival, doctors say. Here’s a look at Jeff’s experience as one of about 720,000 Americans who have a heart attack each year, according to the Centers for Disease Control and Prevention.

Cathy, who retired from Anne Arundel Medical Center in 2010 after more than 26 years in the intensive care unit and operating rooms, gave him two aspirin. (For maximum effect, a person having a heart attack is supposed to chew the aspirin before swallowing it.)

Then she dialed 911.

The couple did the right thing — they called for an ambulance instead of driving to the hospital themselves.

“Don’t ever get behind the wheel of a car if you think you are having a heart attack,” says Dr. Marco Mejia, an interventional cardiologist at the heart catheterization lab at Anne Arundel Medical Center.

“Don’t let anyone else drive you, either. ... It’s unlikely you’ll survive the ride. If Cathy had tried to drive Jeff here, he’d have arrested — had a heart attack — in the car. She’d have to pull over to the shoulder to See **HEART ATTACK**, page 5

call 911 and do CPR. How many people know how to do that? She didn’t have a defibrillator in the car.

“If you have any suspicion you’re having a heart attack, call 911. When the paramedics arrive, they can tell if you are having a heart attack.”

The paramedics stationed two miles away at the Woodland Beach Volunteer Fire Department arrived within four minutes of the call. They



Jeffrey Shields,

quickly loaded Shields into the ambulance. En route to the Anne Arundel Medical Center, they placed wires on his chest and transmitted results from an EKG (electrocardiogram) to physicians in the emergency room.

The emergency room doctors viewed the EKG and determined a heart attack was taking place. They immediately activated the center’s heart at-

tack team.

The team, including Mejia and Julia Blackburn, director of interventional radiology, prepared the catheterization lab to do an emergency angioplasty and stenting.

During the procedure, an interventional cardiologist cuts a small incision in the patient’s groin and inserts a catheter or long tube under it. Using an X-ray, the doctor guides the catheter toward blood vessels that have become blocked. A small balloon inside the catheter is inflated to widen the blocked blood vessels and encourage blood to flow. A mesh tube, known as a stent, is sometimes inserted to keep the blood vessels open after the catheter is withdrawn and the incision closed.

The unit handled over 120 heart attacks last year, a number that’s been gradually increasing.

“After the [paramedic] put the EKG on

me, he told me I was having a heart attack," says Shields.

"When he got here, he arrested," says Mejia, "He ... needed to be defibrillated for 20 seconds."

That means the paddles were applied to Shields' chest and his heart was shocked into beating again.

The medical team prepared him for the next step. In the catheterization lab, lying on a long narrow bed beneath X-ray scanners, Shields arrested again. He was defibrillated a second time.

Working quickly, the team began the catheterization procedure to clear the blocked artery. A balloon opened the artery and a stent was inserted.

Three days later, Shields's condition had stabilized and he was at Johns Hopkins Hospital. There, on June 25, he underwent a quadruple bypass surgery, performed by Dr. John Conte.

Since his recovery from the bypass operation, Shields returns to Anne Arundel Medical Center frequently for cardiac rehabilitation.

"He has to do 30 minutes of routine physical activity every day of the week. He doesn't get Sunday off," Mejia says.

Heart disease is the leading cause of death for people of most ethnicities in the United States. Overall, about a quarter of the deaths in this country can be attributed to heart disease. The numbers have, however, been dropping since the early 2000s.

"It is a slow decline, but we are headed in the right direction," said Dr. Michael Miller, director of the Center for Preventive Cardiology at the University of Mary-

land School of Medicine. He attributes the decline to a reduction in cigarette smoking in the older population and small but important changes in diet and lifestyle.

"That, and people are getting to the hospital earlier," he said. "Discovering the clot and opening the blood vessel can prevent significant heart damage."

Mejia said Shields "has had a full recovery. His heart was not significantly damaged. How he takes care of himself now affects how well he does in the long term. He's under orders to reduce stress and get adequate sleep. He is on a healthy, common-sense diet of low fat, lean meats, unprocessed foods. He is taking medications and has regular, routine follow-up appointments."

Mejia says, "It was a great example of team effort. From the time the call was made at 2 p.m. that day until his angioplasty was completed was 72 minutes. The average is usually 90 to 120 minutes. But five to 10 minutes — every minute — makes a difference between life and death when someone is having a heart attack."

According to a CDC survey, more than 90 percent of respondents recognized chest pain as a symptom of a heart attack. But fewer than 30 percent knew that upper body pain or discomfort in the arms, back, neck, jaw or upper stomach were also systems, as was the case with Shields.

"One reason Jeff's heart attack turned into a success story is because he and his wife were educated about the symptoms," said Mejia. "They took it seriously."

Baltimore Sun reporter Susan Reimer contributed to this article.