

### **Third generation of Harris family diagnosed with leukemia**

After fighting and winning a battle with Acute Myeloid Leukemia (AML) at the age of 19 in 2006, James River High School graduate Josh Harris thought he could put thoughts of the cancer behind him.

He was wrong— not once, but twice.

First, his mother was diagnosed with AML in 2016.

Then, his 9-month-old son received the same diagnosis.

“I’m still in shock,” Harris said. “He didn’t display any of the symptoms.”

The diagnosis for his son, Holden, came on March 7 following a trip to an urgent care center. Harris explained that his son had been sick for several days with a temperature well over 100 degrees when he and his wife, Jessica, decided to seek medical attention. At first, they thought he might have just been suffering from teething-associated ailments, but that assumption was quickly rendered false when in the middle of the urgent care center, a rash of broken blood vessels underneath Holden’s skin started to appear— something that happens when one’s blood chemistry is out of balance.

Upon recognizing the signs, Harris immediately alerted the doctor to the fact that both he and his mother had previously been diagnosed with AML.

From there, a complete blood count was ordered. The numbers didn’t look right, the doctor said, before running them again.

Once he was able to get a good look at the blood count numbers, Harris said his “heart dropped.” “I knew what went along with the numbers,” Harris said.

Harris was told that he needed to promptly take his son to the Children’s Hospital of Richmond at VCU.

After arriving at the hospital and having the doctors assess the situation, Harris said that they were “intrigued” by the fact that the cancer had been passed down through three generations due to a genetic mutation. They were so intrigued that they plan on putting information about Harris, his mother, and his son into a database to help other medical professional better understand the cancer and the genetic mutation that caused it.

Holden is currently in the middle of a 28-day period of treatment. Once the treatment has been completed, his bone marrow will be reviewed to determine whether or not he still has AML. If he does, further treatments will be required. Because it’s the exact same cancer that he had, Harris noted that the doctors who are treating Holden plan to run tests on him to more precisely target the treatment.

Although he's still in "disbelief" over the diagnosis, Harris said that there is a silver lining to the diagnosis. "We were very fortunate in one regard— how it played out," he said. "At least it was caught early."

Despite what he's going through, Harris describes his son as a "very happy baby."

Due to all of his smiling and giggling, he said no one would even know Holden was sick.

Someone who keeps him in a good mood is his two-and-a-half-year-old sister Piper.

"His big sister acts goofy and makes him laugh," Harris said. "They enjoy getting attention from each other."

As he considers the coming days and weeks that his son will be facing, Harris said that it's a path he knows all too well.

"It just gives me a different perspective," he said of the fact that he previously had AML. "I know what the road to recovery will be like. I know what he will be feeling."

With that being said, Harris has a reason to be hopeful. After only four days of treatment, Holden's cancerous cells have decreased substantially.

Harris explained that although it was difficult to watch his mother battle the same cancer he had 10 years earlier, it did bring them closer together.

"It connected us," he said. "I could relate to what she was going through."

After a round of chemotherapy, she luckily went into remission.

Since Holden's diagnosis, Harris said that he has been "overwhelmed" by the outpouring of support from people who want to help out in any way possible.

To channel the support, Holden's aunt stepped up and set up a GoFundMe page to help offset the medical expenses associated with his treatment. The page can be found at <https://www.gofundme.com/holden-our-hearts>.

Harris and his family currently live in Richmond.

### **Harris celebrates remission and first birthday**

Holden Harris, the son of Botetourt County native Josh Harris, recently had two things to celebrate.

After undergoing two rounds of chemotherapy to treat Acute Myeloid Leukemia (AML), the news came that Holden was in remission. It came in time for his first birthday, which was last Wednesday.

“We never thought we’d be going through this around his birthday,” Josh said.

Just like any other 1-year-old, Holden smashed his birthday cake while his family fawned over him.

“It was the best possible scenario considering the situation. It’s all we could have asked for,” Josh said of news of Holden’s remission.

The attending doctor who is heading up Holden’s treatment reported that this is the first time in the past three years that he has had a leukemia patient who has gone into remission after just the initial induction.

Currently at home recovering, Holden has to go into the clinic during the week to have his blood counts checked and his bandages changed. The next round of chemotherapy will commence once his blood counts recover. In total, three more rounds of it will be required. As the rounds proceed, the strength of the chemotherapy will increase. The process is called “intensification.” While being administered the additional rounds, he will be required to remain in the hospital for six to eight days.

Josh reports that his son is handling the tough situation phenomenally well.

“He doesn’t act like anything is holding him back. He wants to go as much as he can and just be a normal kid,” Josh said. “He’s still that happy-go-lucky kid.”

The only setbacks that Holden has faced so far have been low-grade fevers and nausea.

To date, three generations of the Harris family have been diagnosed with leukemia. First it was Josh, then it was his mother, and lastly, it was Holden.

Josh overcame his battle with AML at the age of 19 in 2006. Ten years later, his mother was also diagnosed with it.

Holden was diagnosed on March 7 of this year following a trip to an urgent care center because he had been sick for several days with a temperature of well over 100 degrees.

Despite the good news about Holden’s remission, another revelation loomed large over the entire Harris family. Genetic testing revealed that both Josh and Holden have the same mutation of the CEBPA gene, which means that the AML that they both had was familial and was being passed down hereditarily.

It was also recently confirmed that Josh’s mother has the same mutation of the CEBPA gene as well.

According to the genetic counselor that the family spoke to, there are only 11 families in the medical literature with a mutation of the CEBPA gene. However, none of the 11 other families have the exact same mutation that they have.

Josh explained that testing for the gene only started in 2016 and that there’s a shortage of published information in it at the moment.

There is a 50/50 chance that the mutation will be passed down from parent to child. Because of that chance, Josh has started the process of having his daughter, Piper, tested to determine whether or not she has the same mutation. His siblings are also undergoing similar testing.

Just because the mutation is present, there isn't a guarantee that a person will develop AML. Two mutations are needed in order to develop it.

One of the things that still puzzles him, Josh explained, is the fact that he, his mother, and his son all developed AML at different points in their lives. Right now, the medical establishment doesn't have an answer.

Harris, his wife Jessica, and two children currently reside in Richmond.