

**MARTHA
ANN
LILLARD**
1948-



**SURVIVAL
IN AN
IRON
LUNG**

In the 1940s, poliomyelitis panicked Americans. Just like Covid today, polio stopped ordinary life in its tracks. Thousands were paralyzed when the virus attacked their nervous systems. In the worst cases, breathing muscles stopped working, and patients were placed in an iron lung that fits the human body from the neck down. While many people weaned themselves off the machines, Martha Ann Lillard of Shawnee never did.

Days after celebrating her 5th birthday party at Joyland Amusement Park in June 1953, Lillard woke up with a sore throat and a neck that ached so bad she couldn't raise her head off the pillow. A spinal tap confirmed the diagnosis of polio. She spent six months in the hospital, placed in a giant metal tank, a ventilator informally called the iron lung, to help her breathe.

When Franklin Delano Roosevelt was stricken with polio, also known as infantile paralysis, his best friend encouraged citizens to send in ten cents to help people fight the disease, thus the March of Dimes was founded. In the late 1940s, polio yearly disabled about 35,000 people. The worst year was 1952, when 58,000 were affected, 21,269 paralyzed and 3,145 died.

Since the source of transmission was unknown, swimming pools were closed and parents kept their children at home, trying to hide from an unseen and deadly enemy – not daring even to venture upon the streets. Sound familiar? A polio vaccine developed by Dr. Jonas Salk was introduced in April 1955, and millions of Americans were vaccinated. It stemmed the fear and tamed the virus. Since 1979, polio has been eradicated in the United States, but it remains endemic in Pakistan, Nigeria and Afghanistan.

The seven-foot iron lung ventilators were created in a Boston hospital in August 1955. Patients lie inside with only the head resting outside; a seal around the patient's neck creates a vacuum. The bellows at the base of the device create negative pressure so that the user's lungs fill with air and positive pressure to allow the person to breathe out.

Seven decades later, Lillard sleeps in her iron lung nightly. She tried every kind of ventilation, but believes the iron lung is the most efficient, best and most comfortable way. Her iron lung has portholes and windows on the side and a pressure gauge on top. Her grandfather invented a motorized pulley system that closes the bed tray into the tank. He attached a real mirror above the neck slot to view the rest of the room. A local engineer built a mechanism that tightens the collar around her neck. These innovations have helped her live longer, despite the hardships of depending on aging machinery to survive. Lillard's immediate need is for collars that create the critical tight seal around the neck. They aren't being manufactured anymore, so she's bought up all the back stock she could find.

If the iron lung loses power, she could die, like Dianne Odell did in Memphis in 2008 during a storm. Once Lillard ran out of power and her emergency generator failed to turn on, leaving her trapped in the unheated device. Surprisingly, emergency services had no idea what an iron lung was.

Parents today have no idea what polio was like, so it's hard to convince someone that lives are at risk if they don't vaccinate. There is no reason children should suffer from a disease that was essentially eradicated during the Eisenhower administration.