

Helping To Save Premature Babies

by Sydney Richards



Since the beginning of time, babies have been born prematurely. Early on people didn't realize that this happens often and it was taken lightly. In fact, in the early 1900's premature babies were put in incubators and were used as circus sideshows. But for the past years doctors and inventors have teamed up to address the dangers that these babies face.

So what does it mean to be a premature baby? A baby who is born premature is one that isn't fully developed and delivers before the normal 40-week gestation. "Complications of premature birth may include: difficulty breathing, episodes of stopped breathing (apnea), bleeding in the brain (intracranial hemorrhage), fluid accumulation in the brain (hydrocephalus), cerebral palsy and other neurological problems, vision problems, intestinal problems, developmental delays, and learning disabilities." (Revolutionhealth.com).

The most threatening of these problems listed above is breathing. When babies are born prematurely, their lungs aren't fully developed. The disease that these babies have is called Infant Respiratory Distress Syndrome or IRDS. To address the respiratory problems of premature babies, people began to explore ways of breathing for them. When doctors try to help the babies breathe, they can cause damage because their lungs are so delicate and conventional ventilators are so powerful.

One very famous case of IRDS was of Patrick Bouvier Kennedy. He was the son of John F. Kennedy and Jacqueline Kennedy. At the time, many people didn't realize that being born prematurely was a big deal. Patrick was born almost six weeks before he was due and he couldn't get medical attention due to the lack of advances in the area of premature babies. He died two days after he was born. Although it was a tragic loss, it did open the eyes of research to IRDS and premature babies.

With this new awareness of the plight of premature babies, people started to invent machines and equipment to help save these fragile babies. J. Bert Bunnell invented a high frequency ventilator and also founded a business, Bunnell Incorporated. The machine is used to move gas in and out of the lungs without hurting the baby. "The Life Pulse breathes for babies a bit like a dog pants. That is, it takes much smaller breaths, but it takes a whole lot of them. This strategy has proven to be much more gentle and to better promote lung growth and healing in fragile, sick babies," says Evan Richards who works at Bunnell Incorporated.

The ventilator Bunnell invented has proven to be a great success. "I have witnessed the benefits of HFJV because, prior to having this ventilator, some of our micropremies died because we were unable to ventilate them," says Rita Rinaldo, registered nurse from

Toronto. “I thank God that there are dedicated people like Bert who are determined to develop and produce a product that saves lives.”

Bert Bunnell has had a pretty tough life himself just like the babies he saves today. During his years in college he found out that he had malignant melanoma at 21 years of age. He went to the doctor and they said to him, “They found a tumor. It’s melanoma. I hope you aren’t busy on Monday because we have you scheduled for surgery.” He was also told that the cancer might spread into his lungs. He began to learn all he could about the lungs. Fortunately they caught the cancer just in time to save his life.

After the scare of finding out that he had cancer, Bunnell focused back on college. He went to MIT for a science degree in chemical engineering. His new passion for learning about the lungs led him to focus on the lungs of premature babies. He soon graduated and continued on with his studies to find a solution to help save the lungs and lives of these fragile babies.

Bunnell returned to Utah and began studying the use of the ventilator in a newborn intensive care unit at a children’s hospital in Salt Lake City, Utah. The Life Pulse began saving the lives of babies who would often die or suffer severe lung injury before Bunnell’s ventilator came along. Dr. Bunnell’s life was spared from cancer and now he is helping to spare the lives of thousands of babies.

It may seem like a tough business to have to see babies suffer the way they do, but there may be few things more exciting than saving the life of a baby. And Bunnell Incorporated is the perfect place for someone who feels this way.