

Diabetes

In 2003, Congressman Murtha found out through the Air Force Surgeon General that 144,000 Air Force personnel and members of their family have diabetes. This alarming figure, coupled with the fact that over 23 million Americans are living with the disease, has made him a staunch advocate for diabetes research and care.

Diabetes is the fifth leading cause of death by disease and currently has no cure. In 2007, the American Diabetes Association reported that diabetes cost the United States \$174 billion in medical expenditures and lost productivity. This is a 32% increase from the last study completed in 2002.

According to the American Diabetes Association, in 2006 there were approximately 40,500 diabetics in the 12th Congressional District alone, and the medical and indirect costs added up to \$366 million.

Determined to reverse the diabetes epidemic in the military as well as throughout Western Pennsylvania, he has directed over \$135 million for diabetes research, prevention, education and outreach. This funding is having significant success on military installations and across the nation.

The University of Pittsburgh Medical Center's Diabetes Institute is looking at the lifestyle factors and choices of type 2 diabetics. Researchers and doctors have attributed a poor diet and lack of exercise, which contribute to a growing rate of obesity, as key factors in the rise of type 2 diabetes nationally. Under the leadership of Dr. Linda Siminerio, the Diabetes Institute is developing educational awareness programs for both patients and doctors, as well as providing diabetes specialists and dietitians to work one-on-one with rural communities and medical facilities to deliver care to diabetics and their families. Dr. Siminerio and her team are attacking type 2 diabetes with education and outreach, and their efforts are already showing signs of success.

Learn more about diabetes from the American Diabetes Association.

There are two main kinds of diabetes:

Type 1 is usually diagnosed in children and young adults, and was previously known as juvenile diabetes. In type 1 diabetes, the body does not produce insulin. Insulin is a hormone that is needed for the body to convert sugar (glucose), starches and other food into energy needed for daily life. Insulin takes the sugar from the blood into the cells. When glucose builds up in the blood instead of going into cells, it can cause two problems:

- * Right away, your cells may be starved for energy.
- * Over time, high blood glucose levels may hurt your eyes, kidneys, nerves or heart.

Type 2 diabetes is the most common form of diabetes. In type 2 diabetes, either the body does not produce enough insulin or the cells ignore the insulin.

At Children's Hospital of Pittsburgh, researchers have begun human clinical trials for a cure to Type 1 diabetes after successfully "curing" type 1 diabetes in mice. The research at Children's Hospital is headed by Dr. Massimo Trucco, a world-renowned diabetes researcher. Dr. Trucco and his team have discovered that type 1 diabetes may be triggered by a common virus in children who are genetically predisposed to the disease. They are looking at extracting the islet cells of an individual, engineering them to produce insulin, and transplanting those insulin producing islet cells back into the body. This technique has already proven successful in a mouse model.

Believing that education is key to attacking the diabetes epidemic, Congressman Murtha has also secured funding for the Joslin Diabetes Center for an outreach diagnostic program through the Department of Veterans Affairs.

To learn more about diabetes and weight management, visit the following websites:

- * American Diabetes Association (ADA)
- * National Institute of Diabetes & Digestive & Kidney Diseases
- * National Diabetes Education Program
- * National Diabetes Information Clearinghouse (NDIC)
- * American Association of Diabetes Educators (AADE)
- * Juvenile Diabetes Research Foundation International (JDRF)
- * University of Pittsburgh Diabetes Institute