

HEALTH

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FREE

Hitting 100

“Over that time, Vital Records has documented 2.5 million births and 640,000 deaths in Utah.”

Utah Vital Records Turns 100!

Tucked inside a secured storage room just off of North Temple in Salt Lake City lies 100 years worth of human history in the Beehive State.

In this small vault at the Utah Department of Health (UDOH), rows of birth and death certificates dating back to 1905 are bound in hard covers and stacked on shelves that stretch from floor to ceiling.

Some 20 yards away, many of the same paper birth certificates that have become worn and faded can now be accessed with a few keystrokes on a desktop computer.

This paper to gigabyte contrast illustrates the evolution of an important government office celebrating its 100-year anniversary in March 2005. Since its creation in 1905 by the Utah Legislature, the Office of Vital Records and Statistics has documented the birth and death of nearly every Utahn. Over time those records have grown to include marriages, divorces, adoptions, paternities (adding a father to a birth certificate), and stillbirths.

These records gathered over the past century have come to represent a variety of important benefits to the citizens of Utah.

“Without public health’s dedication to collecting vital statistics information on every birth and death in the state, there would be chaos trying to prove these vital events occurred,” said Dr. David N. Sundwall, Executive Director, UDOH. “Not only is this information useful to public health, but also to law enforcement, insurers, community planners, educators and policy makers.”

“We’re able to gather and analyze information that can improve lives,” said Jeff Duncan, director, Office of Vital Records and Statistics, UDOH.

So while the method of keeping these records has evolved over time, the office’s core mission and purpose has remained constant throughout its 100-year history.

From a legal standpoint, birth and death certificates are the recognized method for proving one’s existence and demise. The data pulled from the office’s records has often been the impetus for public health programs that have improved the quality of life for many Utahns. The office also documents scrapbook-worthy moments of every citizen in the state. Think of it this way: if a couple were to marry, travel abroad for the first time, have a baby and suffer the death of a loved one, they’d have four reasons to contact the Office of Vital Records.

“You touch people’s lives at these very emotional times,” said Barry Nangle, director, Center for Health Data, UDOH.

It’s been a dynamic first century for this small government agency that was originally created only to record births and deaths. Over that time, Vital Records has documented 2.5 million births and 640,000 deaths in Utah. In many ways, the office has also provided a barometer of the state’s public health by tracking trends such as the drastic decrease in death rates for infectious diseases (from a peak of 236.7 per 100,000 people in 1920 to 8.1 in 2000) and infant mortality rates (from 71.4 per 100,000 live births in 1920 to a record low of 4.9 in 2003).

Vital Records Origins

An early example of vital statistics' potential impact on policy making came in the 19th century when forward-thinking health practitioners used geographic data to determine that plagues and epidemics were concentrated in economically depressed areas within cities.

"Death certificates were used to show that," Nangle said. "The conclusion that it was unsanitary conditions really followed from that information on where deaths were occurring."

Here in Utah, information gleaned from birth and death records have provided a variety of important health discoveries. Since the mid 1970s, information from those records has been entered into the Utah Population Database managed at the University of Utah. Studies on gene mapping have relied heavily on statistics from the database. Population database records have also been combined with records from the Utah Cancer Registry to discover genes for both breast cancer and cystic fibrosis in Utah. The records have also been used to study the health effects of nuclear testing on Utah's downwinders.

Those same records provide a proven tool for developing meaningful public health policies. Initiatives like the push for prenatal care among expecting mothers that began in the late 1980s (see accompanying story), often have their root in the raw data found within the voluminous records gathered, sorted and analyzed by the office.

"Utah enjoys a good reputation nationally for basing public health policies on sound and reliable information," said Dr. Sundwall. "Collecting birth and death data has been the foundation for public health research, intervention and policy for more than 100 years."

Manual labor counting

While the laws governing the collection of vital records and much of the core information gathered by the office has remained constant, continued technology improvements have allowed the office to document and analyze important records with increasing efficiency. That process has evolved from paper to mechanical devices and eventually to computers.

"Even back in 1905 they had a way of going through the records and doing statistics. As soon as business machines of any kind came on the scene they were used in this business," Nangle said.

The assorted mechanized tools were many. Card sorters were a technology used in the 1960s. Cards with holes punched in them to represent a statistical category were then sorted into piles by the card sorters. By counting the piles, statisticians could gather information like the number of infant deaths in one year.

In the 1970s, McBee Cards helped statisticians pull data from birth and death records. The process was cumbersome and time consuming. Statisticians would have to take their boxes of cards from the old UDOH office at 300 W. North Temple to the Utah State Capitol. There the cards could be processed through a machine that would then compile the information into a statistical table.

"It was a disaster if you dropped one of those boxes. It could cost you several days of work," Nangle said. "It would take you half a day to get a statistical table."

Thanks to computer programs, those long hours of work have been reduced to a matter of minutes.

The marriage of the law and statistics

The office's two greatest contributions to Utah citizens over the past 100 years lie in unique juxtaposition. Vital Records houses documents that are the foundation for an unlikely mix of both legal and statistical importance. This marriage of the law and statistics requires a unique set of skills for the 36 individuals who work there.

"If you work in vital records, you've got to know about the legal use of the record but you've also got to know health statistics," Nangle said. "I think people who come to work in this field are shocked that you have to master both disciplines."

From a legal standpoint, birth and death certificates are often used to settle a myriad of disputes. That means legal wrangling over burial rites or estate holdings inevitably lead back to the office's safely guarded records. In a very real sense, someone may claim their Aunt Matilda died, but only the Office of Vital Records and Statistics can provide the legal proof.

Hitting the century mark

The Office of Vital Records and Statistics will mark its 100-year anniversary March 9, 2005, with a celebration at the Utah Department of Health. The celebration will feature displays of old records and some of the automation equipment used to compile statistical information over the past century.

The office also plans to present a Heritage Birth Certificate, signed by Governor Jon M. Huntsman Jr. to some Utahns who, like Vital Records, will reach centenarian status this year. And just in case you were wondering, 16 of the 126 centenarians will turn 100 this year. The oldest of the group will turn 110 in October. That's a statistic Jeopardy whiz Ken Jennings probably didn't even know.

Computers and innovations

Over the past 100 years, as the agency relied more and more on electronic records, employees mastered a third discipline called informatics – the study of computer applications in healthcare.

“Now, you have to be an expert in information technology,” Nangle said. “That specialty didn’t exist in 1979.”

Duncan, the director of Vital Records, is proof of that evolving connection. He earned his Master’s Degree in Medical Informatics from the University of Utah in 1995. Ironically, the growth in IT (information technology) has helped the office maintain its small staff despite a workload that more than doubled during the past 20 years.

Under Nangle’s direction, the office in 1999 transformed the collection of birth records into a completely electronic format. Vital Records’ electronic vault currently stores birth records dating back to 1963. Eventually, birth records dating back to the very first certificate from 1905 will be stored in the database.

“It’s kind of scary. There’s no paper anymore,” Nangle said of the 1999 conversion to computer registrations. “At that time in our office we had paper records that were almost 100 years old. I think everyone wondered in 1999 if this was going to be OK in 100 years.”

The office has a number of backups and safeguards in place to ensure the electronic birth certificates started in 1999 don’t go the way of digital demons. Had they not made the switch, office officials say housing more records would have been impossible.

“We just ran out of space to store the paper records,” Nangle said. “We had to do something because we were bringing in 100,000 pieces of paper a year; that takes up a lot of room.”

The internet has made it easier to order certified copies of births online. The office uses SILVER – the Secure Internet Link for Vital Event Records online at: www.health.utah.gov/vitalrecords/silver

On SILVER you will find everything you’ll need for ordering a birth certificate. You can even pay for birth certificates online using a credit card with no additional fee.

The office is also moving to electronic death registration, thanks to a grant from the Social Security Administration. By September 2006, Duncan expects Vital Records will be able to register at least 30 percent of all deaths electronically.

The records connection

While improved technology has allowed office employees to take on an increasing workload, the joy they receive from doing their jobs has remained constant.

Carolyn Lucas, a Vital Records employee since 2001 finds satisfaction in helping strangers find their natural-born parents or children through the State Adoption Registry. She’s a mother of six. Two of her own children were adopted.

“That’s why I wanted to do this job,” she said. “I have a feel for the parents that are looking for their children and the children

that are looking for their parents. I’ve told my children as soon as they’re 21 I’d help them find their parents, too.”

Very literally, Vital Records employees are the guardians of important records. Lucas is one of two people in the state authorized to view the sealed adoption files in her office.

That privilege gives her the chance to be the link that unites parents and children, many who have spent years searching for each other.

“When she called me she sounded like she was smiling the whole time,” said Jill Bartschi, 30, who Lucas phoned in October 2004 to inform her that her birth mother had been found. Mother and daughter were reunited Oct. 15, 2004, and have formed an instant bond.

“Had I known about vital records I would have used the adoption registry much sooner,” Bartschi said.

Happy 100th Birthday to Fern Lois Bates Robison!

Fern was born at home March 12, 1905, in Wanship, Utah. She had three brothers and two sisters. As a child she remembers having the mumps, red measles and German measles. Her family also came down with Spanish influenza in 1918 and all recovered. Fern’s father, Ephraim Bates ran sheep and farming operations in Wanship and was a member of the Utah State Legislature. Fern attributes her longevity to working hard on a family ranch in Nevada for 50 years. Fern was responsible for coordinating numerous ranch operations. Among those, she would make sure breakfast, dinner and supper were promptly served at “6, 12 and 6.” Before each meal she would ring a large dinner bell hanging from a tree outside the commissary. Fern says she wouldn’t trade her experiences on the ranch for anything. She has three children, 15 grandchildren, 46 great-grandchildren and 10 great great-grandchildren!



Here, Fern delights at seeing her original birth record in the 1905 Vital Records book.

In addition to the state adoption records, birth, death, marriage and divorce records with sensitive personal information are kept closely guarded from the public.

“The details of those have to be confidential, so this place is full of secrets,” Nangle said. “That makes it an interesting place to work.”

Identity theft and fraud

The Office of Vital Records and Statistics plays an important role in preventing identity theft and fraud. The Office takes several precautions to prevent fraud. Birth and death records are monitored closely. For example, every morning office staff review newspaper obituaries and then locate and flag the decedent's birth certificate. This prevents some individuals, who falsely represent themselves, from getting a birth certificate for someone that is about their same age who has died.

When records indicate any potential fraud, the person is detained and the authorities are notified. Obtaining a birth certificate illegally is a third degree felony in Utah. Only immediate family members or a designated legal representative with appropriate ID are entitled to request a certified copy of a vital record.

The next 100 years

As Vital Records embarks on its second century, Duncan predicts the growing trend of paperless record keeping will continue.

“Someday, I think everything's going to be paperless,” he said. “That will improve the timeliness of the data we collect.”

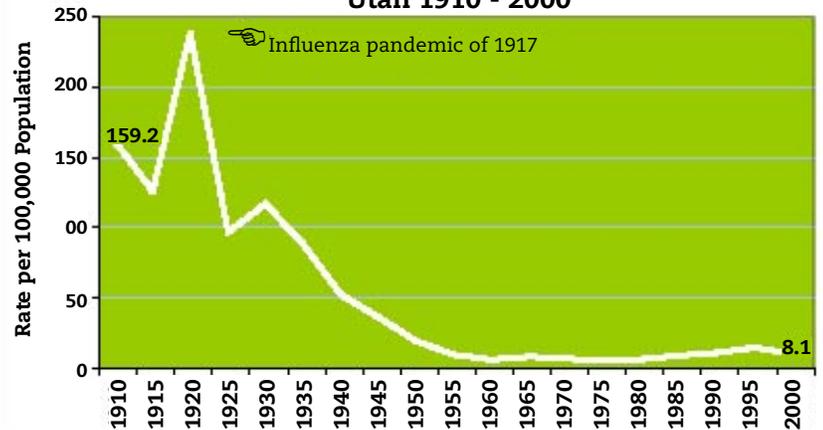
“There's a lot of people that need that a lot faster, like an epidemiologist who can use that information to spot a serious flu outbreak,” Duncan said. “I think in the future, we'll be able to get them a cause of death in a matter of days.”

How to contact vital records

The state office is located in the Cannon Health Building at 288 N. 1460 W., Salt Lake City, Utah. The customer service counter is open Monday-Friday, 9:00 a.m. to 4:00 p.m. Your local health department also has a vital records office.

Information for this cover story was provided by the UDOH Office of Public Information and Marketing.

Crude Death Rates for Infectious Diseases, Utah 1910 - 2000



“It may be truly said that the early adoption of accurate registration of births and deaths was hastened by fears of cholera, and by the intelligent realization that one must know the localization as well as the number of the enemy to be fought.”

Sir Arthur Newsholme in his 1927 book:
Evolution of Preventive Medicine

Happy 100th Birthday to Helen Louise Nicholson!

Helen was born at home March 19, 1905 in Salt Lake City. She was the second of eight children. Helen has vivid childhood recollections playing run sheep run, kick the can, softball and sledging down 2nd North all the way past the railroad tracks. She remembers the Spanish influenza outbreak of 1917 and that families were quarantined.

Helen says her secret of living to 100 is “eating and sleeping” (and obviously having a sense of humor!) Staying active and playing golf didn't hurt either. Helen loved to golf at Willowcreek where she had a hole-in-one August 8, 1967. She lives at Cottonwood Creek Retirement Community in Murray.



Helen shows grandson Craig Morrison her original birth record in the 1905 Vital Records book.

Birth Records Reveal Prenatal Health Problems

In 1973, about 13 babies died in Utah for every 1,000 live births – the lowest infant mortality rate in the nation. Nine years later, the state’s infant death rate had plummeted from first to 27th.

Public health officials wanted to know why, so they turned to data from the Utah Department of Health’s (UDOH) Office of Vital Records and Statistics. Using infant death records, they discovered mothers who received little or no prenatal care were having babies that required significant hospital care after their births. The statistics they analyzed also showed that infant mortality and low birth weights had worsened in the 1980s.

From that raw data was born arguably the most widely known public health education campaign in the history of the state. Baby Your Baby began in 1988 and continues today. The program offers financial assistance for low-income women to

receive proper prenatal care through Medicaid. The program features regular media campaigns intended to educate all expecting mothers about the importance of proper care during their pregnancies.

“It was the data that provided the justification for getting financial support for this campaign,” said Stephen McDonald, program manager, UDOH, who helped lead the public development of Baby Your Baby.

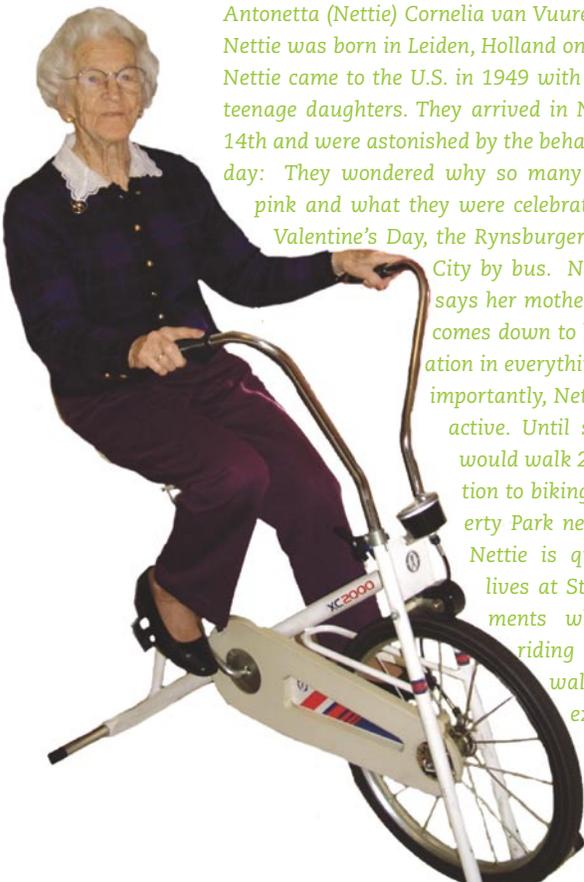
Since 1988, the program has evolved and garnered international attention. Borrowing from a Japanese method of issuing expecting mothers a prenatal record book, Utah developed the Baby Your Baby Health Keepsake – the first book of its kind in the U.S. Fifteen years later, the Keepsake is still given free of charge to any expecting mother in Utah. It helps women document each

TOP 10 BABY NAMES

2004	1905-1910	
Emma	Mary	girls
Madison	Ruth	
Emily	Edna	
Olivia	Helen	
Abigail	Alice	
Brooklyn	Edith	
Hannah	Hazel	
Samantha	Mildred	
Elizabeth	Thelma	
Sarah	Eva	
Ethan	William	boys
Jacob	George	
Joshua	Joseph	
Samuel	John	
Isaac	James	
Andrew	Charles	
William	David	
Tyler	Melvin	
Benjamin	Arthur	
Nathan	Kenneth	

Happy 100th Birthday to Nettie Rynsburger!

Antonetta (Nettie) Cornelia van Vuuren Rynsburger - Nettie was born in Leiden, Holland on February 2, 1905. Nettie came to the U.S. in 1949 with her husband and two teenage daughters. They arrived in New York on February 14th and were astonished by the behavior of Americans that day: They wondered why so many people were wearing pink and what they were celebrating. A few days after Valentine’s Day, the Rynsburgers arrived in Salt Lake City by bus. Nettie’s daughter, Oeke, says her mother’s secret to a long life comes down to hard work and moderation in everything. Perhaps even more importantly, Nettie has always stayed active. Until she turned 90, Nettie would walk 20 to 25 blocks in addition to biking 10 times around Liberty Park nearly every day. Today, Nettie is quite independent and lives at St. Joseph’s Villa Apartments where you’ll find her riding her stationary bike, walking and doing floor exercises every day.



prenatal visit, lists what they should expect at each visit and allows women to track their pregnancies and list any questions. When a baby is born, the book can be used as a child health book. The Keepsake book has become so successful that Japanese officials said they may now re-model their own prenatal record book after Utah’s book.

“We’ve received a lot of wonderful feedback from people saying how it helped them,” McDonald said.

While health officials won’t take all the credit, they’re certain Baby Your Baby has been one of the contributing factors for the state’s current low rate of 5 infant deaths per 1,000 live births.

“Utah is still in the top five (nationally),” said McDonald. “Thanks to Vital Records, Utah health professionals, legislators and others had the information they needed to find a problem and start a program to address it.”

For information about Baby Your Baby, visit www.babyyourbaby.org or call 1-800-826-9662

Reuniting through vital records

Angela Bergin used to peruse the obituaries looking for her first child – a son she placed for adoption 21 years ago.

One of Jill Bartschi's many desperate attempts to reunite with her birth mother included a letter to celebrity talk show host Oprah Winfrey.

In the end, all one needed was \$25 and to contact the Office of Vital Records.

Their lifelong searches ended last fall, when Bergin found her son and Bartschi found her mother through the Adoption Registry at the Utah Department of Health's Office of Vital Records and Statistics.

For \$25, anyone over age 21 who has placed a child for adoption or been adopted themselves can fill out a one-page questionnaire that is placed in the office's sealed files. Adoption Specialist, Carolyn Lucas, is keeper of those files and can use the information gleaned from the one-page form to help reunite parents, children and siblings separated at birth as long as both parties register.

These personal reunions represent the human side of the office's massive records. The office celebrates its 100-year anniversary in March 2005. The State Adoption Registry, however, has a much younger history that began in 1987. Today, the office receives about 10 adoption registry forms a month. Last year, Bergin and Bartschi were two of seven cases reunited through registry records.

"I get all excited because I'm the one who gets to find them," Lucas said. "I'll go around the office saying, 'I got a match! I got a match!'"

Bergin, 40, and Deid Hymas, 21, met face-to-face for the first time in 21 years at a Village Inn Restaurant on Nov. 10, 2004. Hymas anxiously entered the restaurant where his birth mother had been nervously waiting for the emotional reunion.

The two made eye contact and Hymas approached the table where his mother was seated.

"I stood up and I said, 'Can I hug you?'" Bergin said while recalling their first words to each other that day. "He goes, 'Yes, you can.' It was very emotional. I cried and I cried some more."

"It was too easy," said Hymas, "to find not only my birth mother but my birth father all in the same week."

Despite such reunions, Lucas laments that happy endings like these don't occur often enough.

"The problem is, not that many people know that it's out there," Lucas said. "People still aren't using it enough." Lucas suggests any parent or child who has ever thought of re-uniting with a biological family member take the simple steps to at least register.

"The more that register, the faster we're going to find matches," she said.

Jill Bartschi, 30, had tried almost every other method of finding her biological mother before a friend urged her to visit the office and fill out her paperwork with the State Adoption Registry.

"I figured I can get let down for \$25 again, that's no big deal," Bartschi said. She filled out and signed the one page form.

"As the life of an animal or plant cannot be studied from a series of photographs alone showing the stages of its growth, so the life of the American people cannot be studied from a series of censuses unaided by registration."

-Walter F. Willcox, former Chief Statistician in the Washington Census Office.

Bartschi's search for her birth mother Linda Selman ended in October 2004 when Lucas called Selman with the good news.

Selman, now 47, and Bartschi met face-to-face Oct. 15, 2004, and have formed an instant bond.

"It's incredible," Selman said. "I imagine it's pretty much like what it would feel like to jump out of an airplane if you're skydiving—the rush you get."

Reaching 100

The average life expectancy for a baby born in the U.S. in 1905 was 52 years. A baby born in the U.S. today can expect to live about 77 years. Utah has the 3rd highest life expectancy in the U.S. How long can you expect to live? Try the Life Expectancy Calculator®, an online tool developed by the Harvard Medical School and Boston Medical Center. Go to www.livingto100.com. In the process, you'll learn what you can do to live longer.