Predicting future number of very old difficult

Researchers trying to predict future numbers of the very old have missed the mark lately.

Plotting trends with the oldest old has always been a tough assignment as Americans overall moved toward increasingly longer lives in the 20th century. But the numbers are important for everything from retirement fund planning to public programs like Medicare and Social Security.

Some researchers want to bump the very old age bracket’s startup to 90 from 85 in light of increased longevity. A report from the Census Bureau published in November by the National Institute on Aging used the new threshold, noting in 2010 there were 1.9 million 90-plussers — triple the 1980 number — and that by midcentury there could be as many as 9 million.

Just what it means to make it to 90, or even 80, in terms of likely additional years of life remains unclear.

Another report issued by the Centers for Disease Control and Prevention noted that the risk of death in any particular year among people 85 and older declined by 38 percent over the past 75 years.

For most of the past century, demographers and actuaries have thought that mortality rates leveled off a bit as folks passed 80. From ages 30 to 80, a person’s risk of death doubles for every eight additional years. A person who makes it to 80, the theory goes, is somehow harder, has better genes or leads a better lifestyle than those who succumb earlier.

But a recent study that charted birth and death dates for 9 million people born between 1875 and 1895 shows the mortality curve was just as steep among the very old all the way up to age 106, when the sample got too small to reliably measure.

The study, based on records from the Social Security Administration Death Master File, was published last month by University of Chicago longevity researchers Leonid Gavrilov and Natalia Gavrilova in the North American Actuarial Journal. The National Institute on Aging sponsored their work.

According to the Census report done last fall, a 90-year-old today can expect to live 4.5 more years, compared to 3.2 years in 1929-31. Those who reach 100 are projected to live another 2.3 years, on average, up from 1.5 years at the start of the Great Depression.

The Gavrilovs point to another Census finding that confirms the very old aren’t less likely to die than those in younger age brackets. In 2005, the bureau projected that by 2010, the U.S. would have 114,000 centenarians. The actual census count was 53,364.

Earlier estimates for the 90-plus population were also too high.
The bureau is studying why the estimates were so far off. Census projections are based on one or more annual surveys of a population sample.