



America is on the go. We drive over 2.6 trillion miles per year, 6.5 times more than in the late 1940s. We fly 630 billion miles per year, nearly 80 times as much as back then. But travel isn't our only interest—safety is, too. Advances in auto safety have cut deaths per billion miles driven from an annual average of 82.7 in 1946–50 to 15.9 in 1996–2000, a reduction of over 80 percent.

**EXHIBIT 10. We Get Around**

**Transportation: Scope and Safety**

U.S. Annual Averages	1946–50	1966–70	1996–2000
Billions of miles driven	398	1,020	2,624
Motor vehicle fatalities	32,966	54,318	41,755
Deaths per billion miles driven	82.7	53.3	15.9
Billions of miles flown	8	110	630
Airline fatalities	140	145	90
Deaths per billion miles flown	16.7	1.3	0.14



The advance in airline safety is even more impressive. Including all causes—from engine failure to bad weather to terrorist acts—deaths per billion miles flown by commercial aircraft were down from 16.7 in 1946–50 to 0.14 in 1996–2000. That's a reduction of over 99 percent. With a death rate less than 1 percent that of travel by car, air travel is by far the safest form of transportation yet.



**A Balanced Life**

Amid headlines about terrorist attacks, it's easy to forget how far the United States has come in making life safer and more secure.

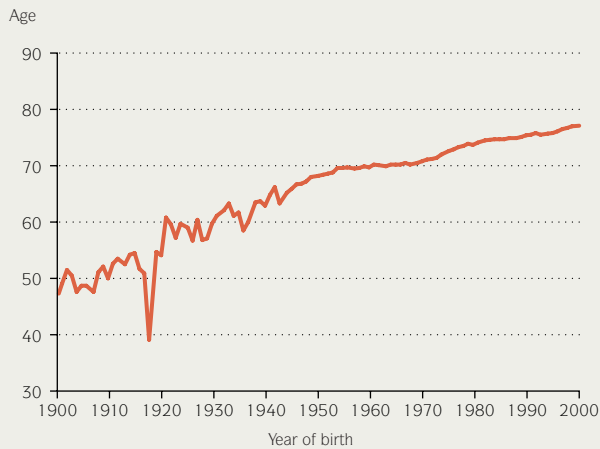
In the five-year period ending in 2000, deaths on American roads averaged 15.9 per billion miles driven, compared with 53.3 in the five years ending in 1970 and 82.7 for the immediate post-World War II period. *(See Exhibit 10.)* The skies have been getting safer, too. The five-year average for deaths per billion passenger miles flown fell from 16.7 in 1950 to 1.3 in 1970 to 0.14 in 2000.

The toll of death and disease has been dramatically reduced. Annual deaths per 1 million people are at an all-time low. The age-adjusted death rate has fallen by 40 percent since 1950. And since 1900 it's dropped by two-thirds, evidence of the steady progress we've made. Fatalities from nearly all major diseases have declined sharply from their peak rates. *(See Exhibit 11 on the following page.)*

The rate of fatalities due to natural causes fell from 1,349 per 100,000 people in 1950 to 826 in 1999, the most recent data available. Accidents and deaths are declining both at home and on the job. So are fatalities associated with natural disasters.

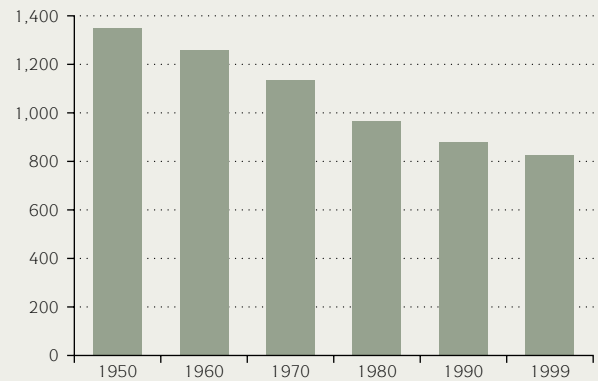
## EXHIBIT 11. A Matter of Life and Death

### Life Expectancy



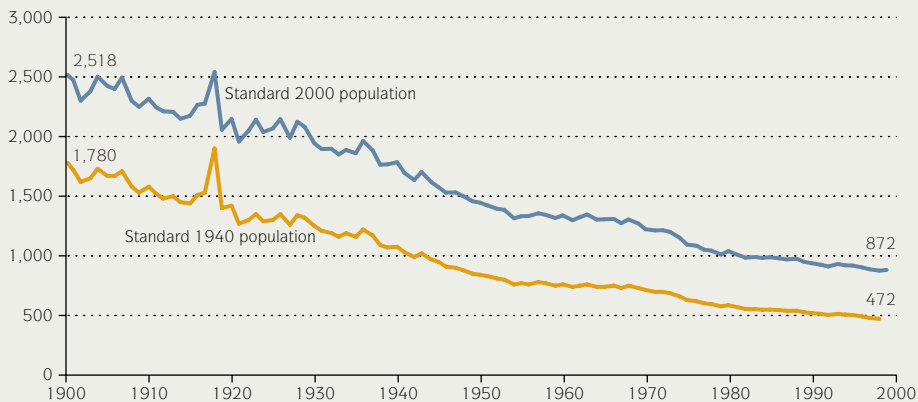
### Deaths Due to Natural Causes

Per 100,000 people



### Age-Adjusted Death Rates

Per 100,000 people



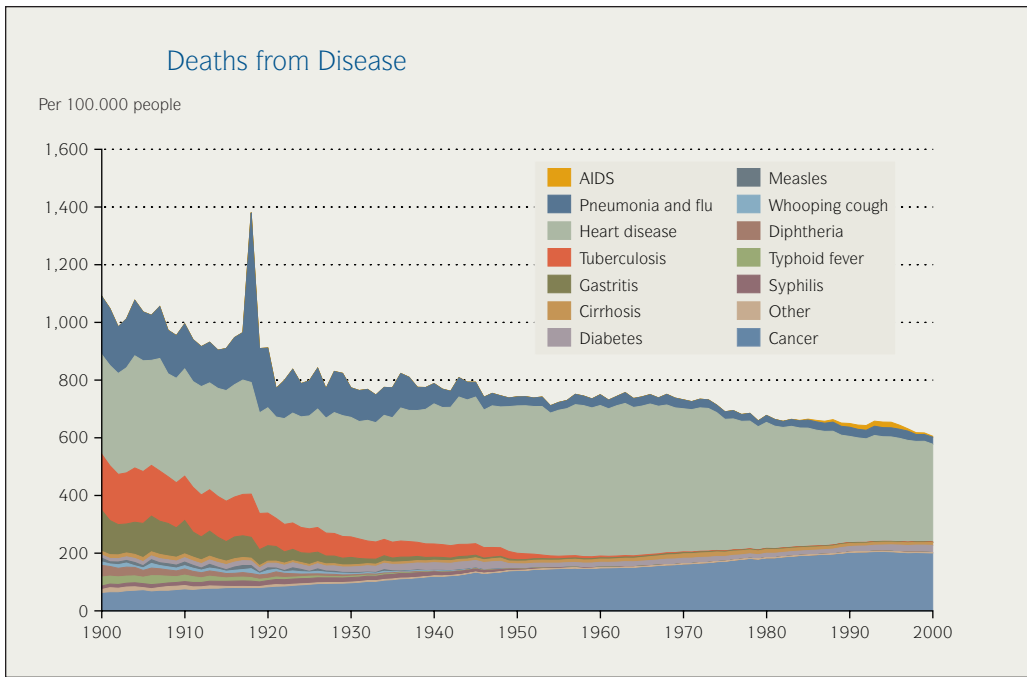
When she died in 1999 at age 119, two days short of the millennium, Sarah Clark Knauss (shown above with her great-great-great grandchild) was the oldest American ever. When Sarah was born in 1880, average life expectancy in the United States was 43. For the child born today, it's 77.1 years. Midrange projections put U.S. population growth at roughly 50 percent over the first half of this century, whereas the number of centenarians is expected to grow by more than 1,000 percent.

Virtually every component of the age-adjusted death rate has fallen. Death by natural causes is down 40 percent since 1950. Accidental death rates have plummeted. Since 1928, fatalities on the job are down 91 percent, those at home down 57 percent. The age-adjusted rate for homicide is at its lowest since 1964—declining from 10.5 per 100,000 in 1980 to 5.8 in 2000.

As a wealthy nation, we can afford to spend time and money to reduce life's risks, both economic and physical. We can put burglar alarms on our homes and cars. We can buy insurance on our property and our lives. We can reduce the financial risks of illness and old age by taking part of our pay in health benefits and retirement savings.

Today, we have investment opportunities available to only the wealthiest people even two decades ago. In 2000, nearly half of Americans owned mutual funds, and there were more than 8,200 funds to serve them. The diversification of investments makes individual Americans, and the country as a whole, less vulnerable to economic disruption.

Making America a safer place owes much to advances in engineering and technology. Divided highways, better roads,

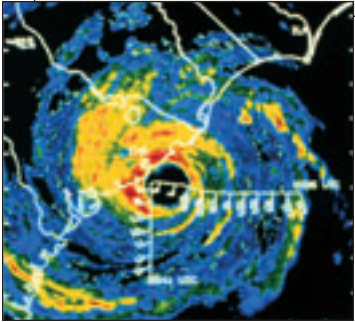
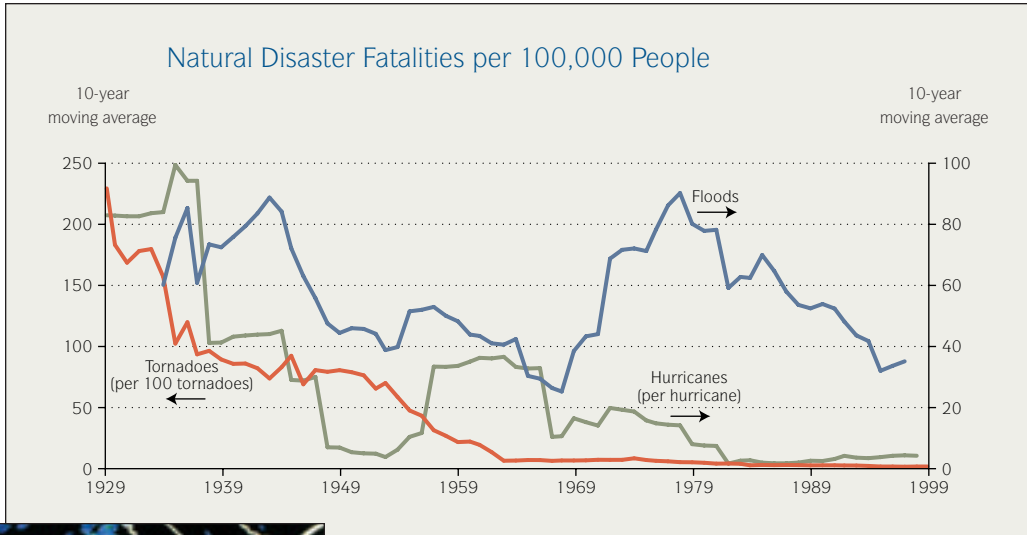


Americans today enjoy longer, healthier and more active lives than ever. We've come a long way.

Cholera, typhoid fever, bubonic plague, tetanus, polio, smallpox, typhus, leukemia, influenza, pneumonia, tuberculosis, measles, anthrax, leprosy, scarlet fever—the Centers for Disease Control and Prevention lists roughly 120 illnesses that have plagued the population. The overall death rate from 13 major illnesses is down by 45 percent over the century.

Death rates from heart disease—historically the largest killer—peaked at 527.3 per 100,000 in 1963 and are down by over a third to 339.3. Even the death rate from cancer has declined in recent years, albeit slightly.

Influenza and pneumonia, which killed nearly 600 people per 100,000 in 1918, claimed just 24 in 2000. U.S. death rates from the world's newest dread disease—AIDS—peaked in 1995 at 19.3 per 100,000 and subsequently declined by five-sixths to 3.2 in 2000.



Digitized radar warns the public of threatening weather. As a result, weather-related deaths have fallen drastically.

antilock brakes, radial tires and air bags are reducing the highway death toll. Sophisticated weather-forecasting gear provides warnings of severe weather, so we can take refuge in time. New medicines and treatments have reduced the incidence of fatal diseases.

Greater safety and security didn't come about by accident. It's what we, as a people, want. We put a high value on our lives and physical well-being, and we'll pay to protect ourselves against the sometimes unpleasant facts of life.

Safety and security are part of a balanced life. As our nation has grown richer, we've asked our economic and political systems to deliver a wide range of benefits. As a society, we can trade off some of one benefit to get more of another—for example, give up material goods for more



It's true that certain illnesses, such as Alzheimer's, have persistently increased. It's also true that biological weapons are of growing concern. But markets and government are winning civilization's long-term battle to extend and improve life.

leisure, pay raises for better working conditions. If after September 11 we want more safety and security, we have the luxury of being able to afford it.

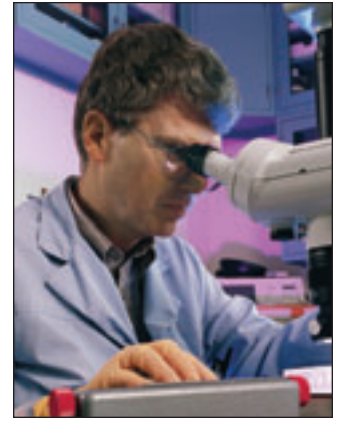
We might, for instance, give up some convenience or leisure time to go through the additional passenger screenings that will make flying safer. We can reduce individual consumption—by accepting higher government spending—to bolster our national defense. In fact, that's already happening. In the weeks and months following the attacks, Congress provided more than \$60 billion for economic recovery and responding to the threats to our nation—five times the previous year's antiterrorism spending. In President Bush's proposed budget for 2003, outlays for defense and national security would increase by 14 percent from their present levels.

Like all aspects of economic life, the pursuit of security involves trade-offs. What we want is a balanced life, where we don't pay large prices for small gains. In the emotional atmosphere of national tragedy, the temptation lies in sacrificing all on the altar of security. That's not how we, as consumers and workers, live our lives. We accept a degree of risk every day—just by driving a car, for example. Even after September 11, workers are still reporting to jobs in skyscrapers, implicit proof that they consider the risks low relative to the rewards.

The private sector makes trade-offs as a matter of routine. Indeed, that is the function of prices—to reveal the cost of one good versus another. The market also allows us to make individual choices. Those who want more home security can spend extra money on motion detectors and laser beams, sacrificing the consumption of other goods and services. Those who fear flying can travel by car.

When it comes to public goods, governments encounter neither the discipline of relative prices nor the ability to accommodate individual preferences. The danger lies in increasing security in ways that sacrifice too much freedom, unduly penalize exporters, unnecessarily destroy jobs or ignore excess costs. We could, for example, make traveling safer by doubling or tripling passenger screenings—then doubling or tripling them again. At some point, the cost will outweigh the benefit.

Life is inherently risky. Misfortunes and tragedy occur far too often, and protecting ourselves must be weighed against cost and convenience. We'll never achieve a perfect safety record. Nor will the threat of terrorism disappear. We as Americans face a future in which we'll need to be more vigilant, examining our security systems and behaviors to reduce the risk.



Engineers design and test safer cars; forensic scientists discourage crime by solving 30-year-old cases; and scientists seek cures for disease, armed with knowledge of the human genome.



Vaccines under trial offer promise of eliminating AIDS and thwarting bioterror.