

Ask PopEd: 14 Commonly-Asked Questions and Myths About Population Growth

1. Why should Americans be concerned about human population growth?

Global human population growth, increasing by over 84 million people a year, accelerates the degradation of the environment, strains our finite resources and gives rise to social ills, such as poverty and homelessness.

When Columbus sailed to the North America, world population was just 500 million. When Thomas Jefferson was the third president of the United States, it was 1 billion. It took almost 125 years for it to reach 2 billion; 33 years to get to 3 billion; 14 years to reach 4 billion; 13 years to get to 5 billion and just 12 years to reach 6 billion in 1999. In 2011, world population topped 7 billion people and by 2100, it is expected to reach 11 billion.

As our population swells, we need to produce more food and ensure that we have clean air and water. Population growth can outpace a community's ability to provide such basic services, as well as adequate shelter, sanitation and health care. As more automobiles are manufactured, more harmful toxins and heat-trapping gases are released into the air. As more houses, malls and factories are built, the fewer forests and wetlands we will have for future generations. As we dump more waste into streams, rivers, lakes and oceans, we harm wildlife.

2. Why should we be concerned about population growth rates of 1 or 2 percent a year?

The world's current population is over 7.5 billion, with an annual growth rate of 1.2 percent. 1.2 percent may not sound like a large number, but, at this rate, roughly 80 million people will be added to the population this year.

Another way to see the impact of growth rates is to consider the doubling time of a population. Doubling time for a population can be calculated by dividing 70 by the growth rate. For example, 70 divided by 1.2 is 58. This means that if present growth rates continue, our population would double in just 58 years. Twice as many people would need twice as much food and water, along with adequate roads, houses, schools, sanitation facilities, etc. Yet, many ecologists worry that our planet can't support another doubling of population.

3. Why are developing countries experiencing rapid population growth while developed countries are either growing more slowly or not at all?

Both developed and developing countries have experienced significant declines in their death rates and prolonged life expectancies, but developing nations continue to have higher birth rates. A country's birth rate is strongly linked to industrialization, economic development, availability of quality medical care, the educational level of the population, and the status of women.

The Industrial Revolution in Western Europe and North America improved living conditions through advances in medicine, sanitation and nutrition. These changes led to declines in death rates, especially among infants and small children. However, birth rates remained high and soon the population swelled. As these regions gradually moved away from an agrarian way of life and became more urbanized, large families became less practical and more expensive. Machinery was used more frequently to plant and harvest food, reducing the need for children as farm workers. Urban families bought food instead of harvesting it. Over the course of the 19th and early 20th centuries, birth rates dropped dramatically in these areas.

Developing areas, such as Africa, Latin America and parts of Asia are still primarily agrarian; therefore, incentives for having larger families still exist. Technology imported from industrialized countries improved living conditions and caused death rates to plunge. As a result, these populations are growing rapidly.

In many countries, the low status of women is another contributing factor to higher birth rates. Women are often denied educational and employment opportunities and have few alternatives to their childbearing roles. Many people wish to limit their family size but lack access to family planning education and health services.

4. What is the role of religion in population issues?

Varied. Many religious leaders understand the consequences of rapid population growth and the need to stabilize it. For example, two predominantly Catholic countries, Italy and Spain, have some of the smallest average completed family size (1.4 children and 1.5 children per couple respectively) in the world. Although the Vatican maintains a ban on modern methods of birth control, the church supports programs that improve health and education for women and girls, efforts that both lead to smaller families.

In Islam, influence over a person's reproductive choice depends on that particular culture's views on family planning and, to a great extent, a woman's status. Studies have shown that fertility rates are higher among Islamic countries, such as Algeria and Pakistan, where education and jobs are less accessible to women than in other Muslim nations, such as Tunisia and Turkey.

5. Are areas of high population density bad?

Not necessarily. Well-planned urban areas can efficiently support large numbers of people on minimal land area, limiting their impact on the natural environment. One of the reasons that cities are growing rapidly is because they often offer more economic and social benefits than do rural areas. However, urban centers that grow very rapidly without proper infrastructure and planning can become slums which lack basic sanitation, housing/jobs, and medical facilities.

This contrasts to poorly-planned areas of suburban sprawl – fast growing low density developments typically found outside major urban areas. When sprawl attacks, it can result in a loss of green space, increased dependence on automobiles, air and water pollution, and a wasteful use of land resources.

6. Why is biodiversity important?

Biodiversity refers to the variety of living organisms and their complex interdependency for survival. It is this diversity that gives ecosystems their strength and resilience. If even one species – whether plant or animal – shows signs of stress, then the functioning of our life systems may be altered. These life systems ensure the continuation of the planet's most critical functions, including conversion of carbon dioxide to oxygen.

Recent research has concluded that humans are destroying natural habitats at least 1,000 times faster than natural rates of extinction. Habitat loss, caused by development, pollution, mining, poor logging practices, and wetlands destruction is the largest contributor to species loss.

7. How does improving the status of women affect population growth?

In many societies, women are valued primarily for their role in reproduction. They hold little or no political or economic power, have lower earnings than men and are provided inadequate schooling and health care.

A combination of practices and programs that improve women's health, social and legal status, educational opportunities and economic well-being has been shown to effectively lower fertility rates. At the same time, men should also be educated about reproductive health and their responsibility.

For instance, although the state of Kerala, India, with a population of almost 35 million, is economically poor, its low fertility rate, 94% percent literacy rate, affordable and accessible health care, including family planning, and educational opportunities rival that of many industrialized nations, including the US. This is due greatly to the treatment of women. As a result, women in Kerala marry later than the average Indian woman.

Micro-lending has enabled thousands of women, especially in developing countries, to begin a micro-enterprise and to become financially independent. One famous example is the Grameen Bank in Bangladesh, which lent to poor women, and received a payback rate of 99 percent in two years.

8. Don't AIDS, wars, disease, and natural disasters cancel out population growth?

No. Our ability to reproduce is one of our species' greatest strengths. The wars of the 20th century have accounted for the deaths of nearly 200 million people. Yet, in that time, human population has increased by 4 billion, 20 times more than those killed in wars. Similarly, other tragedies throughout history have accounted for only a small percentage of deaths worldwide. Even AIDS, which affects millions worldwide, appears to be significantly altering population projections in only one part of the world: Africa, south of the Saharan Desert. Yet, even now under the specter of AIDS, rapid growth is projected in southern Africa.

There has only been one time in human history when our population growth was slowed significantly: In the 14th Century, the black plague, along with wars, killed an estimated one-third of the global population. Within 100 years, population was back to pre-plague levels.

9. Why should the United States be concerned about its own growth?

If we were only concerned about sheer numbers of people added to the population, then indeed, growth in countries such as India would be far more alarming than growth in the United States. But if we consider the impact of each person's lifestyle on the world's resources, then we reach an entirely different conclusion.

US consumption patterns are dramatically different from those in the developing world. Although Americans comprise only 5 percent of the world's population, we use nearly 20 percent of its energy resources and produce more trash and pollution than citizens of most other nations. The average American's energy use is equivalent to the consumption of 2 Germans, 7 Jordanians, 9 Colombians, 16 Indians, 101 Haitians, or 174 Ethiopians. Even moderate population growth in this country spells problems for the global environment.

10. When is the population of the United States expected to stabilize?

Our population will stabilize only when the numbers of births plus immigrants equals the number of deaths plus emigrants. It is not clear when, or even if, that will occur. Currently over 325 million, the United States is the third most populous country in the world and is growing by about 2.5 million people each year. According to modest projections by the U.S. Bureau of the Census, the US population could grow by 77 million Americans by 2050.

Some people are surprised to find out that a country's population does not immediately stabilize once the total fertility rate reaches a replacement level of 2.1. Due to "population momentum," a nation's population would continue to grow for another 50 to 60 years. This is because growing nations have many fewer people near the end of their lives than they have people at reproductive age. Populations would stabilize after a couple generations, once those age groups have had time to balance out.

11. Isn't overpopulation a matter of the "wrong" people bearing children?

And just who are the "wrong" people? Are they the 80 percent who live in developing countries, and have large families, but use only 20 percent of the world's resources? Or are they the 20 percent who live in industrialized countries, have smaller families, but use 80 percent of the world's resources? The funny thing about this question is that nobody seems to think that THEY are the "wrong" person. To solve the problems caused by rapid population growth and resource use, we will need to address the situations of both developing and industrialized countries.

12. Can you tell me about the population policies of China?

In October 2015, China's long standing One-Child Policy became a Two-Child Policy. Under the new policy, all couples are allowed to have two children.

Since 1979, the One-Child Policy had been the state of sanctioned family planning for the People's Republic of China. Chinese government officials assert that the policy averted 400 million additional births in a country that 1.4 billion people call home (though some experts put the number closer to 200 million). This severe limiting of births had far reaching impacts not only on the size of the population, but also on its age and sex structure. The Chinese government estimates that by 2050, one-third of the country will be 60 years of age or older and there will be fewer workers supporting each retired person. There is also a significant sex imbalance, with many more males than females. Due to these and other human rights issues, the One-Child Policy had been incrementally relaxed in recent years. Despite the recent rise in the number of Chinese babies born (a jump of 7.9% between 2015 and 2016), the long term impacts of the new Two Child Policy remain to be seen. Some predict that high costs of living and the general desire for smaller families will continue to keep birth rates low, despite the change in law.

Population Connection firmly believes that population policies should be consistent with US values of freedom, multiculturalism and democracy. We strongly condemn any coercive family planning measures.

13. Is it true that the entire population of the world could fit inside Texas?

We could FIT in Texas, but we couldn't survive there. If one divides Texas's 261,914 square miles amongst the world's 7.5 billion humans, each person could claim 0.022 acres of land. That amount of land could not provide enough food, water, energy or timber for a person to live. Every area has a "carrying capacity," the maximum number of a given species that the area can support over time. Resource experts say a minimum of 0.17 acres of arable land is needed to sustain a person on a largely vegetarian diet. Thus, the fact that we could all fit in Texas is virtually meaningless.

14. Do more people live now than have ever lived on the planet?

No. According to a "guesstimate" by the Population Reference Bureau, a population research organization, about 105.5 billion people have ever been born on Earth. The world population now is over 7.5 billion, which represents about 7 percent of those ever born. The estimate is highly speculative and was based on a "semi-scientific approach" using birth rates for specific periods of time starting from 50,000 BCE.