In the 20th century human health improved dramatically owing in large part to improvements in nutrition and reductions in the spread of infectious diseases. At the outset of the 21st century infectious diseases and hunger remain challenges to human well-being. What’s changed, however, has been the most effective means to address them.

As the human population tripled and the consumption of Earth’s resources grew apace in the past century, life on Earth underwent an unprecedented transformation. On the most simplistic level, the biosphere has been greatly simplified, a fact heralded by rates of species loss that are 100 to 1000 fold higher than those that occurred before humans walked the planet and unequalled in more than 60 million years. Loss of species, while of direct relevance to human health in and of itself, marks a much more worrisome disturbance in the biosphere: disruption to ecosystems vital to all animal life, including humans.

Public health successes of the 20th century related to improved nutrition and better control of infections were achieved through higher agricultural yields and better food distribution, and the use of vaccines and antibiotics, respectively. These remain worthy goals. However, to ensure the healthiest possible future for wildlife and humans, greater attention must be paid to the study and improvement of the health of ecosystems.

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