U.S. HEALTH CARE SECTOR GREENHOUSE GAS EMISSIONS LEAD TO INCREASES IN MALNUTRITION WORLDWIDE

FAST FACTS

Health care activities in the U.S. have **global climate and health consequences**.

Climate change increases the frequency and intensity of **precipitation extremes**, including both heavy rainfall and drought.

9%-10% of national greenhouse gas emissions were attributed to U.S. health care activities in 2013. Health care facilities are energy-in tensive operations that generate long-lived carbon dioxide emissions. Goods and services that feed into the health care sector include waste disposal, drugs, medical devices and supplies and clean water supplies.

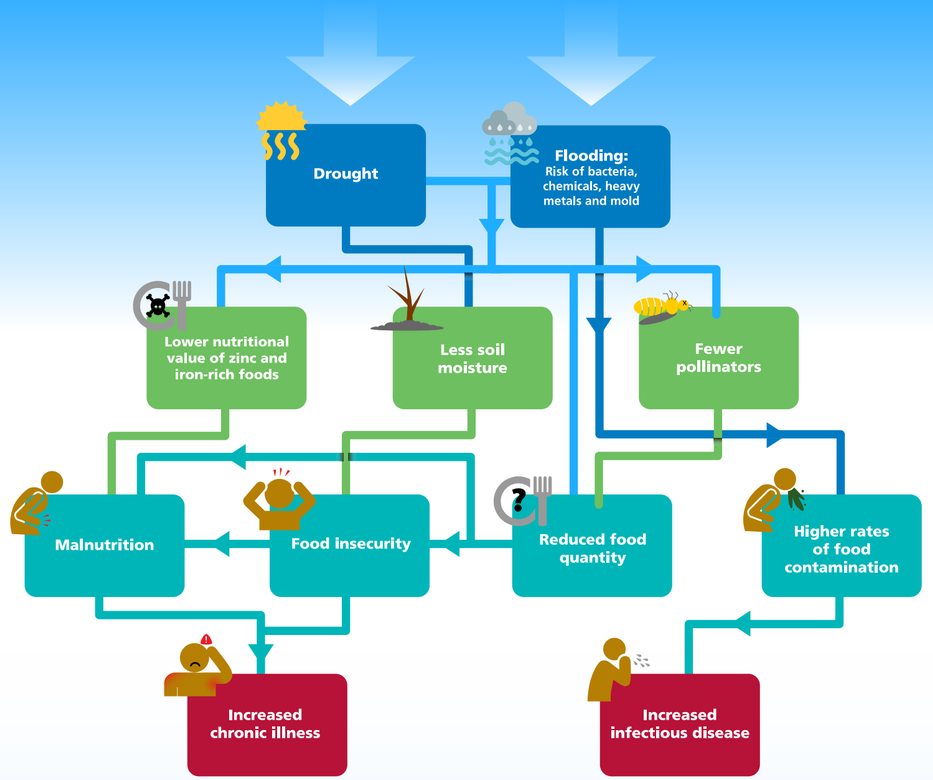
Roughly **2.75 billion people** around the world receive at least 70% of their dietary zinc and/or iron intake from C-3 crops* and will be placed at **significant risk for malnutrition** under climate change. People at highest risk for malnutrition live in impoverished areas in Africa and in parts of South and Southeast Asia.

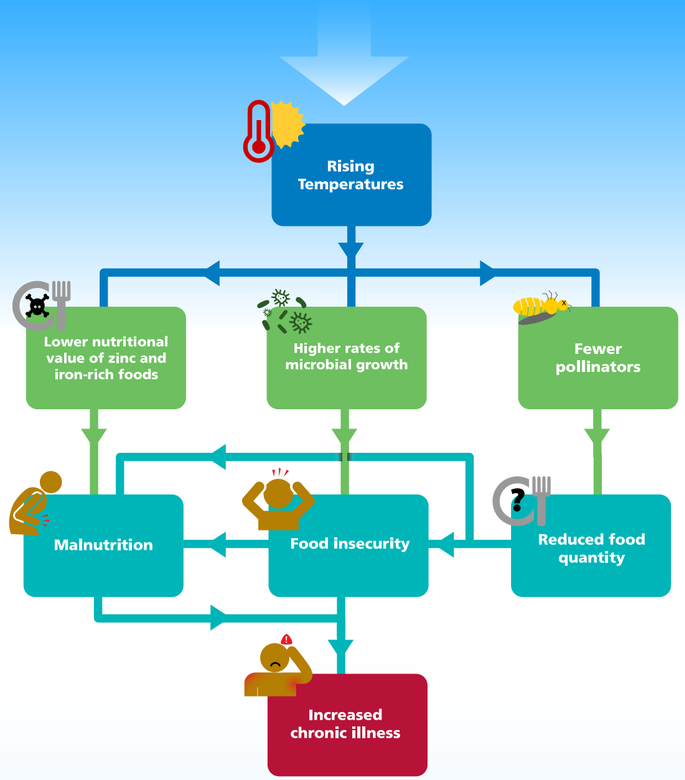
Up to **258,000 years** of healthy life lost, mostly due to **malnutri tion**, are associated with annual greenhouse gas emissions from health care in the U.S. **49%-63%**, the largest potential health dam ages, were attributable to malnutrition globally.

Efforts to improve the carbon footprint of the U.S. health care system will have **worldwide environmental and health co-benefits**.

GREENHOUSE GASES CAUSE THE CLIMATE TO CHANGE

When we burn fossil fuels, such as coal and gas, we release carbon dioxide. CO2 builds up in the atmosphere and causes Earth's temperature to rise, much like a blanket traps heat. This extra trapped heat disrupts many of the interconnected systems in our environment.





*All C3 crops showed significant reductions in iron and zinc. C3 crops include beans, rice, wheat, spinach, barley and potatoes. C3 crops are plants that survive solely on C3 carbon fixation. This refers to most crops besides maize, corn, sorghum and some of the millets (Myers, 2015). Myers, Samuel S et al. 2015. Effect of increased concentrations of atmospheric carbon dioxide on the global threat of zinc deficiency: a modelling study. The Lancet Global Health, Vol. 3, Issue 10, e639-e645

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