

The Economic Impact of an Influenza Pandemic on the United States

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How would a modern-day influenza pandemic affect the U.S. economy? According to a March 22, 2007, Reuters news article, "[Huge U.S. Economic Losses Forecast in Flu Pandemic](#)," predictions include \$700 billion in economic losses and a 5.5 % drop in GDP the year a severe pandemic occurs.

"America's employers are recognizing the need to reform their policies and prepare for the possibility of pandemic flu that could infect a large number of citizens—impacting not only their business operations but the entire U.S. economy."

—Tommy G. Thompson, former secretary of the U.S. Department of Health and Human Services

If asked to name one event responsible for 40 million deaths globally in the early 1900s, many individuals would guess World War I. In fact, deaths attributed to World War I, while still very significant, were roughly half that number. The influenza pandemic (or "Spanish Flu") of 1918, however, did claim 40 million lives worldwide over 18 months: 675,000 of those deaths occurred in the United States. Unfortunately, unlike many historically devastating pandemics, influenza is a modern-day repeat offender. The 1950s and 60s saw the milder Asian and Hong Kong influenzas, and, more recently, media worldwide covered the international avian flu (H5N1) outbreak and the flu-like SARS epidemic. Motivated by the possibility of a human influenza pandemic returning to the United States, policymakers, health officials, and economists have studied these previous episodes to develop "what if" scenarios and estimate the potential short- and long-term effects a present-day outbreak may have on our economy.

At the onset of a U.S. influenza pandemic, a number of near simultaneous events would likely occur. Not surprisingly, there would be a significant increase in demand for medical services. Depending on the severity of the outbreak, there would likely be a substantial decrease in demand for hotel, restaurant, and mass transportation services, as well as lower attendance at public events and a decline in retail shopping, as individuals (by choice or by force) seek to decrease their risk of infection. The supply of workers would temporarily decline as many became ill or stayed home to care for infected family members or school-restricted children. This reduction in the workforce would impair business functions, erode business revenues, and, not the least, adversely affect many household incomes. Revenue lost from the likely suspension of tourism to the United States and possible restrictions on trade could play an important economic role as well.

A milder present-day pandemic, similar in scale to the Asian and Hong Kong influenzas or the SARS outbreak, is estimated to cause a decline in U.S. gross domestic product (GDP) of about 1 percent. Its economic effects would be mostly short-term in nature, and, barring other significant events, both the economy and public health would soon recover. However, for a pandemic as severe as the 1918 influenza, estimates of its overall economic impact range from a 4.25 to a 5.5 percent annual decline in GDP—an effect large enough to trigger a significant recession.¹ Furthermore, if the influenza virus is of the same virulent strain as in 1918—causing unusually high mortality rates in individuals aged 18 to 40—the sudden and irreversible decline in the labor force population would likely produce negative economic consequences lasting several years. Although government agencies have created preparedness plans to mitigate the economic and human effects of a pandemic, the preparations themselves are costly and are currently far from comprehensive. If a severe outbreak occurs in the near term, preparations to date would likely offer only a modest reprieve.

By Lesli S. Ott, Senior Research Associate, Federal Reserve Bank of St. Louis

¹ See the Congressional Budget Office Report, "[A Potential Influenza Pandemic: Possible Macroeconomic Effects and Policy Issues](#)," for further discussion on determining GDP estimates for mild and severe scenarios.

Recent Articles and Further Reading on the Economic Impact of an Influenza Pandemic on the United States

[“Bird Flu Pandemic: History Warns of Economic Pain, Though Some Might Gain”](#) by Thomas A. Garrett, Federal Reserve Bank of St. Louis *Regional Economist*, October 2007.

This short article looks at economic and social studies of the 1918 influenza pandemic, as well as information taken from U.S. newspapers during that period, to paint a picture of what life may be like during a severe modern-day pandemic.

[“Economic Effects of the 1918 Influenza Pandemic: Implications for a Modern-Day Pandemic”](#) by Thomas A. Garrett, Federal Reserve Bank of St. Louis, November 2007.

This in-depth report provides greater analysis of the economic and social effects of the 1918 influenza pandemic and examines their implications for another U.S. pandemic, given current economic and social environments.

[“Avian and Human Pandemic Influenza—Economic and Social Impacts”](#) by Milan Brahmbhatt, World Bank, WHO Headquarters, Geneva, November 7-9, 2005.

This speech addresses potential economic and social impacts of a global influenza pandemic.

Free Data Sources

- Data:** The American Experience: Influenza 1918
Description: This website devoted to the 1918 influenza pandemic includes a film, special features, maps, a timeline, data including death rates by month, and a teacher’s guide
Published by: Public Broadcasting Services (PBS), 1999
Location: <http://www.pbs.org/wgbh/amex/influenza/index.html>
- Data:** Pandemic Flu and the Potential for U.S. Economic Recession: A State-by-State Analysis
Description: This report provides estimated data by state for illness and death rates, impact on industries and trade, GDP loss, and other economic impact factors
Published by: Trust for America’s Health, March 2007
Location: <http://healthyamericans.org/reports/flurecession/FluRecession.pdf>
- Data:** Pandemicflu.gov
Description: One-stop access to U.S. government avian and pandemic flu information, including a website on [“The Great Pandemic: The United States 1918-1919”](#) and a [chart on state and local funding for pandemic preparedness](#)
Published by: U.S. Department of Health and Human Services, 2007
Location: <http://pandemicflu.gov/index.html>
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