



What Can History Tell Us About the Potential Long-Run Human Fallout from COVID-19?

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What are the long-run human fallout of COVID-19 likely to be—and who will bear the brunt of this crisis? Because the evidence we do have from modern pandemics is largely limited to short-run impacts, recent experience can do little to help us anticipate and respond to COVID-19’s potential long-run consequences for individuals over decades and even generations. History, however, offers a solution. Historical crises offer closer analogues to COVID-19 in each of its key dimensions—as a global pandemic, as a global recession—and offer the runway necessary to study life-course and intergenerational outcomes. In this brief, I review the evidence on the long-run effects on health, labor, and human capital of both historical pandemics (with a focus on the 1918 Influenza Pandemic) and historical recessions (with a focus on the Great Depression). I conclude by discussing how past crises can inform our approach to COVID-19—helping tell us what to look for, what to prepare for, and what data we ought to collect now.

Why Might COVID-19 Cause Long-Term Harm?

Key features of COVID-19’s epidemiology—among them its extensive geographic reach, its relatively high ease of transmission, its comparatively low lethality, and its many emerging sequelae — have given rise to widespread and potentially lasting morbidity among its many survivors. The pandemic has sparked an unprecedented downturn, which can permanently scar trajectories of health and income, even for those who do not fall ill themselves. Loss in logged GDP has been greater during the COVID-19 pandemic than any other measurable global pandemic. Theory and evidence on human capital formation suggest that health and income shocks tend to interact with each other and compound over time. Conditional on how an individual is affected by COVID-19, their quality of life throughout their life can be affected. Individuals can ensure ongoing symptoms or a new disability following hospitalization resulting from COVID-19. Recent studies show that the COVID-19 health penalty is substantial. Briggs & Vassal (2021) estimate that up to 30% of the health burden from COVID-19 could be due to pandemic-induced disability, not death.

Compounding & Cross-Pollinating Effects:

The relationship between COVID-19 health and economic effects is a dynamic system, where the health and economic effects are cross-pollinating over outcomes and compounding over time. These effects are cross-pollinating because health outcomes affect economic conditions and *vice versa*. They are compounding because health (economic) outcomes in period one affect health (economic) outcomes in period two. They are compounding and cross-pollinating because health outcomes in period one affect economic outcomes in period two, and economic outcomes in period one affect health outcomes in period two. This relationship exists at the individual and societal levels.

1918 Influenza Pandemic

From the 1918 Influenza Pandemic, we can expect locations with higher pre-pandemic pneumonia, worse air pollution, worse overall population health, in addition to those in poverty, to be hit harder by the pandemic. Urbanization and residential crowding will exacerbate transmission. Individuals with higher living standards and income will find it much easier to resist infection.

The Great Depression

From the Great Depression, we can expect the economic effects of COVID-19 to include disruptions to labor markets and human capital acquisition as people transition their careers. At-risk populations, such as women, minorities, and low-income persons, will be more vulnerable to infection, and therefore the economic consequences. We can also expect substantial earnings penalties amongst less-educated workers entering the labor market, younger workers out-competed by older ones for jobs, and a fall in intergenerational mobility for individuals growing up in cities severely hit by the pandemic.

Recommendations

- **Get the pandemic under control both domestically and globally via mass vaccination.**
- **Identify and redress incipient damage.** Monitor and account for non-mortality harms, such as pandemic-induced disability, quality of life changes, employment outcomes. Provide targeted assistance to most-affected and vulnerable communities.
- **Invest “preemptively” and aggressively,** rather than waiting for costs to snowball. Interventions are most effective closest to the insult.
- **Invest in public health infrastructure** allowing us to respond swiftly and decisively to the next crisis.
- **Improve baseline socioeconomic conditions.** Focus on reducing poverty, inequality, improving affordable access to health care (especially preventive care). People will be less vulnerable and more resilient to shocks.