The 1918 influenza pandemic was the deadliest pandemic in recent history. With 50 to 100 million deaths in a global population of about 1.8 billion people, the mortality rate was several times higher than for COVID-19 so far.

At the University of Missouri in the US, Taylor van Doren and Professor Lisa Sattenspiel are investigating how the 1918 influenza pandemic affected the remote island of Newfoundland (now part of Canada), from a biological anthropology perspective.

Life in early 20th century Newfoundland was very difficult. Most people lived on the coast in small, geographically isolated fishing communities called ‘outports’. Only a small fraction of the island was suitable for growing crops, so malnourishment was common, as were water-borne illnesses due to poor sanitation. Very little medical care was available, so many people went for years without seeing a doctor.

Taylor and Lisa analyse historical materials to determine the impacts of the pandemic on the population of Newfoundland. Sources of quantitative data include death records, censuses and hospital records, while sources of qualitative data include newspapers, government reports and personal correspondence.
Once data have been extracted from these archival sources, Taylor and Lisa use a combination of quantitative and qualitative analyses, known as a ‘mixed methods’ approach, to address their research questions.

For example, they use statistical modelling techniques to calculate mortality rates. Qualitative data then provide insights into social organisation and behaviour, such as the gendered division of labour, that will explain interesting patterns revealed by quantitative analyses.

Taylor and Lisa discovered the outcomes of the 1918 influenza pandemic were more severe in the outports of Newfoundland than they were in the main settlement of St John’s. Taylor explains how social inequalities contributed to differences in mortality rates.

Access to medical care was a key factor. As many outports were inaccessible by land, doctors had to travel to them by boat and often arrived too late to treat patients.

There was also a class difference in mortality. Wealthy merchants living in St John’s did not need to encounter many people, so were less likely to become infected. In contrast, poor fishermen from the outports were forced to continue working even if they were ill, thereby spreading infection.

Taylor and Lisa’s research highlights the important role social scientists play in understanding how social inequalities contribute to different mortality outcomes during a pandemic. In light of the social inequalities highlighted by COVID-19, this knowledge has never been more important.

What could you achieve as an anthropologist?