The Influenza Pandemic of 1918–1919 in the British Caribbean

By DAVID KILLINGRAY*

SUMMARY. The influenza pandemic swept through the Caribbean during the period October 1918 to March 1919 and resulted in c.100000 deaths. This article focuses on the British possessions and is based principally on official reports and the local press. It looks at how the virus entered and spread through the region, the possible reasons for variations in levels of morbidity and mortality between islands, popular responses to the infection, and the mainly fruitless official attempts to arrest and deal with the disease. Jamaica was the first island to be affected, and along with Belize and Guyana, suffered most severely. A number of islands, particularly those in the eastern Caribbean, appear to have escaped relatively lightly. Although all sections of the population were vulnerable, the heaviest mortality rates were among the very poor, East Indian immigrant labourers, and native Americans. There was also a high toll among males aged 15–40. Altogether the death rate from influenza in the British Caribbean was c.30000. In London influenza was added to the official list of British 'imperial diseases', and although it was recognized that poverty provided the conditions for the spread of disease, the resources in the Caribbean were barely used to improve standards of living and nutrition.

KEYWORDS: influenza, pandemic, 1918–19, Caribbean, Jamaica, Belize, Guyana, quarantine, prevention, demography.

I

In 1918 and the early months of 1919 an influenza pandemic spread across most of the world and in a few months killed many millions of people. The influenza came in three waves. The first began in March 1918 in the mid-western United States and rapidly spread to Europe, reaching Asia, North Africa, and Australia by July. A second and more disastrous wave occurred in August, possibly originating in France, which very rapidly engulfed the world including Latin America and the Caribbean region. A third and far less virulent wave appeared in the winter and spring of 1918–19 with mild effects on certain parts of the Caribbean.

It has been estimated that the influenza pandemic of 1918–19 killed in the region of 25–30 million people world-wide, many more than the total military casualties of the First World War. It is unlikely that the total death rate will ever be known, but recent research on specific countries has revised mortality figures upwards. An indication of the statistical uncertainties was given by a contemporary British report, and has been echoed by a number of

* Department of Historical and Cultural Studies, Goldsmiths' College, University of London, New Cross, London SE14 6NW.

1 K. David Patterson and Gerald Fyle, 'The Geography and Mortality of the 1918 Influenza Pandemic', *Bulletin of the History of Medicine*, 65 (1991), 4–21.

2 Parliamentary Papers. 1920 vol. X. (P.P.) Supplement of the 81st Annual Report of the
epidemiological historians; Crosby for the United States suggests a death rate higher than the official figure of 550,000, while Phillips in his recent study on South Africa doubles the death rate given by the official Union report to over 250,000. Other studies for the Gold Coast, India, Indonesia, New Zealand, and Japan similarly increase figures for total mortality from influenza. The death rate in Great Britain from influenza was 225,000. Whatever the total global figure, the absolute number of dead from influenza in 1918–19 certainly made it the most devastating infectious disease to affect the world since the Black Death ravaged much of Asia and Europe in the mid-fourteenth century.

Influenza is endemic throughout the world. Generally outbreaks are mild and of minor epidemiological significance to normally healthy patients. Many people suffer from what is commonly referred to as ‘flu’, and the elderly often die as a result of the infection. However, the A virus is much more virulent, the cause of pandemics such as those of 1889–90 (Asiatic), 1918–19 (Spanish), and more recently in 1957–58 (Asian), 1968 (Hong Kong), and 1977. Pandemics of influenza seem to originate in a common single place (e.g. the 1889–90 pandemic apparently began in the Chelyabinsk region of Russia), and as the virus spreads it results in high levels of morbidity. Since the isolation of the A virus in 1933 ‘the amount of information that has been accumulated about the virus is considerable, but the behaviour of the virus remains bewildering and many gaps remain to be filled on the actual epidemiology of the disease’. It is now well established that a wide range of antigenically different influenza A
viruses exist in non-human hosts such as birds, and an important current area of study is on the hypothesis that 'non-human reservoirs of type A influenza viruses may be important as a source of new human pandemic strains of influenza A virus'.

In tropical regions the seasons of the year do not seem to be as significant for the transmission of the virus as in temperate zones although the infection spreads more rapidly in warmer weather. The virus is transmitted from person to person by the respiratory route, with a short incubation period of 24–72 hours, so that the virus can spread rapidly. Close crowding of people offers ideal conditions for infection. In serious cases the symptoms are bloody sputum, bleeding from the nose, and lung failure associated with haemorrhagic and oedematous complications.

Influenza pandemics, though markedly less so in 1918–19, those often at risk are the elderly, those with chronic health problems, and the very young. Influenza does kill directly but frequently the virus leads to serious bacterial pneumonic complications which may result in death. Although vaccines were developed in 1918 and 1919, they were not effective and even today, when so much more is known about the epidemiology of the virus, immunization needs to be highly specific to the variant of the virus.

There are difficulties in assembling historical data on the geographical spread and incidence of influenza and its morbidity rates. In the early decades of this century health records were patchy, even in industrialized countries; for much of the world reliable data on individual causes of death rarely existed, and public health systems were limited. Influenza was not a notifiable disease and when it did occur contemporary observers were often vague in describing it. Where influenza was the cause of death very often this was attributed to symptoms such as pneumonia or 'coughs and fever'. In local epidemics where high mortality is known to have occurred, for example among the Amerindian populations of Belize and Guyana in 1918–19, there are no accurate detailed records.

Relatively little is known about the influenza pandemic of 1889–90 in the Caribbean. It hit the area in early 1890, but the evidence is thin as to the course and impact of the infection. The virus appears to have spread from North America along shipping routes; it was raging in New Orleans in January 1890 and reached Tobago and Antigua at the end of that month. By February it was in St Kitts and also Havana; by April in Barbados and the Danish

---

9 Charles H. Stuart-Harris, Geoffrey V. Schild, and John S. Oxford, *Influenza: The Viruses and the Disease*, 2nd edn. (London, 1985), pp. 83–4.

10 S. E. Chow, 'Some clinical features of the recent influenza epidemic', in F. G. Rose (ed.), *The British Guiana Medical Annual for 1919* (Demerara, 1919), pp. 78–9.

11 A useful introduction is by W. I. B. Beveridge, *Influenza: the Last Great Plague. An Unfinished Story of Discovery* (London, 1977).
19 November when two employees of the Town Board were infected from a ship which they boarded to deliver water.

Second, what was the course of the pandemic in the Caribbean? To answer this question adequately would require much wider research than given to this essay and would involve studying sources in French, Dutch, and Spanish in a large number of scattered archives supplemented by oral evidence. Nevertheless, an attempt has been made here to plot the path and impact of influenza on the Caribbean using primarily British official sources and the English language press although undoubtedly further research in archives in the Caribbean would fine-tune some of the conclusions.

A third question is why did the influenza pandemic vary so much in levels of morbidity and mortality from area to area? For example, in Trinidad and Tobago the Blue Book for 1918 reported that ‘influenza of a mild type was widespread during the latter part of the year, but was not attended by the high mortality observed in other countries’, including neighbouring Venezuela, while in Barbados in late December and early January influenza victims were reported to be numerous but the death rate low. Such variations may have been due to prompt quarantine actions by the authorities, for example in the Bahamas, which although in close proximity to the United States must have been helped by a dearth of wartime shipping, and possibly also in Trinidad. Another possibility is that by the time the virus reached an area it had become weaker or was a different strain, or that populations in certain areas, exposed earlier to similar strains of influenza, had built up a level of immunity to the pandemic virus. Although people fell sick in large numbers relatively few succumbed to the disease. This argument may be true, but it does not seem likely for certain areas of the Caribbean in that many of the victims were in the age range 20–30 and thus too young to have gained immunity by exposure to an earlier and similar strain during the pandemic of 1889–90. A minor epidemic in the Caribbean in 1900 may have had an influence. Indeed, in Guyana, which was among the areas most severely affected, influenza had hit the colony in epidemic proportions in 1890, 1892, 1898 and 1907. A probable answer to this question, unsatisfactory to both epidemiologist and historian, is that the influenza virus is unpredictable in the way that it affects people.

20 Trinidad and Tobago, Annual General Report for the Year 1918, p. 8; Trinidad Guardian, 1 January 1919, p. 3, reporting meeting of Central Board of Health, 31 December 1918. Barbados Standard, 11 January 1919, p. 5.
21 PRO. CO26/73. Bahamas, ‘Report on Health and Sanitary Conditions of the Colony for 1918’. There were over 2500 Bahamian labourers in Charleston, South Carolina, for war work, and many were infected and died during the epidemic. PRO. CO26/70. Sessional Papers. Votes of Legislative Council, 18 February 1919. P.P. 1921. vol. XXIV. No. 1059. Bahamas Report for Year 1918–19, p. 13. Australia operated a quarantine system which helped to protect the continent; see Humphrey McQueen, ‘Spanish flu—1919: Political, Medical and Social Aspects’, Medical Journal of Australia, 1 (1975), 565–70.
22 In Trinidad the Port Medical Officer exercised ‘constant vigilance’ to exclude epidemic diseases. However, influenza was not a notifiable disease and the PMO did not have the powers to quarantine or exclude people believed to be infected. R. Seheult, A Survey of the Trinidad Medical Service 1814–1964 (Port of Spain, 1948), p. 37.
A fourth question is on the extent and impact of the pandemic. If the official record is often vague, it is due to lack of reliable demographic and medical data. Certain regions of Belize and Guyana were outside close administrative survey and data of any kind was thin or non-existent. And even in the smaller islands, in urban centres and those places closely administered, influenza was not a notifiable disease, so that many of the deaths resulting from the infection were either unknown or not recorded, or attributed to other causes. The climate meant that burial invariably took place very soon after death thus limiting further possibility of medical record. With all these limitations statistics for both morbidity and mortality must be treated with great caution.

This essay is exploratory, an attempt to map the course of the influenza pandemic (and to put the pandemic on the map of recent Caribbean history), to examine the ways in which the authorities attempted to tackle the infection, and to assess its impact and consequences. The resources used limit the scope of the inquiry. One subject, but thinly recorded, is what Ranger, writing about Southern Rhodesia, has called ‘the influenza pandemic as a conceptual crisis, as a challenge to existing explanations of affliction’.\(^{23}\) The popular and religious response of people to a disease that to some must have appeared of apocalyptic proportions, rooted in spiritual causes and beyond modern medicine, is surely a rich layer of experience to investigate, in town and rural fastness, among East Indians and the Amerindian peoples of Belize and Guyana. To some European observers fatalism robbed Indian indentured labourers of the will to fight the disease, although sacrifices were made to propitiate the gods.\(^ {24}\) In Jamaica, where there was a strong and enduring tradition of Christian ‘revivalism’, the Gleaner reported a band of street corner preachers from Port Maria arriving at Savanna-la-Mar in late October 1918 and making ‘an impression on the “ignorant people”’:  

The man who seems to be ‘chief priest’ of the band, in delivering what he calls ‘the message from God’, tells the people that there is no cure for the influenza; that God has sent an angel and touched all the water in the land and that all would get the complaint. That three-quarters of all the people in Sav.-la-Mar [sic] would fly from the town, and that a lady in the town who the people were worshipping was the cause of the trouble.\(^ {25}\)

From a single reference it is difficult to provide context for this religious expression. It sounds like a revivalist group, perhaps of Bedwardites who in 1894–95 at Savanna-la-Mar had a healing spring where an angelic form was believed to be present.\(^ {26}\) However, from 1920 onwards the Bedward move-

\(^ {23}\) Terence Ranger, ‘The Influenza Pandemic in Southern Rhodesia: a Crisis of Comprehension’, in David Arnold (ed.), *Imperial Medicine and Indigenous Societies* (Manchester, 1988), p. 172.

\(^ {24}\) Alexander Dunn, ‘The Canadian Presbyterian Mission in British Guiana—the Pioneer Years 1885–1927’, MA Thesis, Queen’s University, Ontario, 1971, p. 141.

\(^ {25}\) *The Gleaner*, Kingston, 12 November 1918, p. 3.

\(^ {26}\) Anthony J. Williams, ‘The Role of the Prophets in Millenial Cults. Politico-religious Movements in Jamaica, 1800–1970’, B.Litt. thesis, University of Oxford, 1974. Martha Warren Beckwith, *Black Roadways: A Study of Jamaican Folk Tales* (Chapel Hill, NC, 1929, ch. X, ‘Revivalists’, does not mention any response to influenza although she was in Jamaica in the summer of 1919.
ment was in decline and there is no evidence that the influenza pandemic brought an upsurge of millennialist activity in that group in Jamaica or among other revivalist movements in the Caribbean. But then the literature of these movements is meagre and it may be that those who have studied them have missed a connection between disease and millennial revivalism.

So how did people perceive the disease, explain its cause and cure? What wild imaginings were conjured up in the 'terrifying fear of various forms which took hold of those affected' by influenza in Dominica, and what possessed the minds of the 60 people admitted to the Kingston Lunatic Asylum 'whose exciting cause was attributed to influenza'? It would be interesting to know what the victims thought and to have more than just the views of their keepers. And what did priests and preachers offer from pulpits and at shrines to explain God's wrath and to expiate afflictions, and what was the context of popular songs or children's rhymes in early 1919?

A supplementary question is also worth asking: why has the influenza pandemic been ignored by historians of the Caribbean? The pandemic was a major event, a disaster of great significance for certain territories, although even at the time it does not seem to have received the official attention that one would have thought it merited. Other than Guyana there were no official reports on the impact of the pandemic, although in other British islands and territories where it had a serious impact, most notably Jamaica and Belize, local health boards and officials, and the press, devoted a great deal of time and space to reporting the course of the pandemic and the attempts made to avert its disastrous effects.

The high profile epidemic diseases that frequently erupted in the Caribbean were most dangerously smallpox, typhoid, measles and yellow fever, while influenza in severe epidemic form was a sudden, short-lived and relatively infrequent visitor. The last serious influenza pandemic to affect the region had been in 1889–90. Influenza, with its associated pneumonic complication, was always present in mild sporadic form and did not as a rule pose a serious threat to life. No single influenza pandemic was like another and that of 1918–19 was widely recognized by medical authorities as being unique in virulence. But

W. F. Elkins in *Street Preachers, Faith Healers and Herb Doctors in Jamaica, 1890–1925* (New York, 1974), p. 6, mentions an increase in revivalist activity in the period after 1914 due to economic depression, social disruption and unhealthy conditions, but he does not provide any substantiating evidence.

27 Dominica. *Official Gazette*, 3 February 1919, District C. and *The Dominica Chronicle*, 5 February 1919, pp. 6–7.

28 PRO. CO140/254. Jamaica, *Report on the Lunatic Asylum for year ended 31 March, 1919*. Needless to say, prayers for the end of the influenza and for the victims were said regularly in Christian churches throughout the region.

29 Crosby, *America's Forgotten Pandemic*, ch. 15, discusses this act of collective amnesia in the United States.

30 PRO. CO114/170. British Guiana, Combined Court, First Special Session 1919, *Second Report on the Epidemic of Influenza in British Guiana in 1918–19*, by J. H. Conyers, Acting Surgeon General, 8 May 1919. Sessional Paper No. 5. See also War Department Annual Reports, 1919, vol. 3, *Report of the Governor of Puerto Rico.*
The Influenza Pandemic of 1918–1919 in the British Caribbean

unlike most other epidemics it came rapidly, fiercely and briefly and was gone in the space of a few weeks. On a day-to-day basis medical and government authorities in the Caribbean had their attention focused on those diseases that permanently and seriously affected life and the economic well-being of the islands. A further reason for the low profile of the pandemic may be that it occurred at a time when the Great War still held the attention of people. Even when the death rate was rising dramatically the local press and officials—and this is true of territories hit hard by the pandemic such as Guyana—continued to address the distant war as if it had a more immediate effect on the destiny of the region than the virus daily taking its grim toll. As Balfour and Scott wrote in 1924: 'We were so surfeited with horrors, so inured to death and suffering, that the true magnitude of the disaster was never appreciated'.

Scholarly attention to the history of disease in the Caribbean has been selective, with a concentration on the earlier period and the rich material available in military and plantation records. Little appears to have been written at a regional level on the major outbreaks of epidemic disease such as cholera in the 1850s, or yellow fever. Perhaps the growing interest in the history of disease and the increasing number of studies on historical epidemiology, and on the influenza pandemic in particular, will serve to stimulate further research in the historical epidemiology of the Caribbean.

IV

As early as mid-September 1918 the second wave of influenza was reported in Guadeloupe and also Puerto Rico. Apparently the SS Brazos and the SS Benevento from New York brought the influenza to San Juan and, despite quarantine regulations imposed by the Puerto Rican authorities, the virus infected over 250,000 of the island’s 1.25 million people; at one point more than 100,000 people were affected at the same time. The official, and surely conservative, figure for deaths was 10,888. By early October the influenza pandemic was well established in Central America and from there it reached

31 A Balfour and H. H. Scott, Health Problems of the Empire; Past, Present and Future (London, 1924), p. 218.
32 R. N. Buckley, 'The destruction of the British Army in the West Indies 1793–1815: a Medical History', Journal of the Society of Army Historical Records, 56 (1978), 79–82. Richard B. Sheridan, Doctors and Slaves: A Medical and Demographic History of Slavery in the British West Indies, 1680–1834 (Cambridge, 1985). Phillip D. Curtin, Death by Migration. Europe’s Connection with the Tropical World in the Nineteenth Century (Cambridge, 1989). Kenneth F. Kiple, The Caribbean Slave. A Biological History (Cambridge, 1984). Jamaica History Review, 17 (1991), special issue on 'Health, Disease and Medicine in Jamaica'. David Patrick Geggus, Slavery, War and Revolution. The British Occupation of San Domingo 1793–1798 (Oxford, 1982), ch. XIII.
33 On Cholera see William A Green, British Slave Emancipation. The Sugar Colonies and the Great Experiment 1830–1865 (Oxford, 1976), pp. 311–13; and George Brizan, Grenada. Island of Conflict (London, 1984), pp. 167–74. The official study by Robert W. Boyce, Health, Progress and Administration in the West Indies (New York, 1910), is principally on yellow fever.
34 Crosby, America’s Forgotten Pandemic, p. 230. United States, War Department Annual Reports, 1919, vol. 3, Report of the Governor of Puerto Rico, pp. 3, 7, and 133.
Belize on the eleventh of the month.\textsuperscript{35} Ten days before a banana boat brought the infection from North America to two ports in northern Jamaica, and a little later that month it appeared in the Bahamas. In the first week of October the virus also reached Havana and Cienfuegos in Cuba, and then rapidly spread through the island; six weeks later Jamaican migrant workers were reported dying of influenza on plantations in Oriente province.\textsuperscript{36} Trinidad and Tobago were both affected in October; in November the disease reached the Dominican Republic and the Virgin Islands, was taken to the Cayman Islands by a boat out of Jamaica, infected Saint Lucia, and also Dominica where the epidemic was known as ‘Christmas Cold’. In early December the virus struck fiercely at Guyana’s Demerara coast, introduced from North America according to the Surgeon-General, and also passed on to Suriname and French Guiana. At the same time it appears to have had only a mild effect in the Turks and Caicos, and likewise in Barbados, but with greater although varying degrees of severity in the islands of Grenada, Antigua and St Vincent. In most cases the virus lingered for a period of between 4 and 10 weeks, but in some areas, most notably Guyana, Belize, and Jamaica, people were still dying from the disease as late as March 1919, while its long-term effects were felt for many more months: ‘Some cases never recover and have died of the affection months after recovery from influenza proper’, reported S. A. Isaacs, the Medical Officer of Health for Grange Hill, Jamaica, in April 1919.\textsuperscript{37}

Jamaica

The influenza pandemic entered Jamaica simultaneously at two places, presumably via ships from North America: Port Antonio on 2 October and Montego Bay. Within a few days the infection had taken over Port Antonio, reached the estates in Portland parish, and followed the railway line along the coast towards Hope Bay which was affected by 14 October. At the same time, and probably as a result of contact by coastal craft or a North American ship, influenza reached the small ports of St Ann’s Bay and Falmouth on the northern coast. The authorities restricted the use of the railway, fumigated carriages, and suspended mail services with affected parishes, all in a vain attempt to restrict the contagion. But in a busy and populous island quarantine measures and isolating those who were infected were of little avail. The disease spread rapidly and by the end of October it had reached Kingston. It is difficult to plot precisely its course. The virus moved where people moved and whole areas contracted the disease within a matter of days. For example, it was reported that a man returning from Montego Bay to Savanna-la-Mar on 17 October infected the town setting off a ‘mortality rate . . . the highest that had ever been reached within the recollections of some of the oldest inhabitants

\textsuperscript{35} Nicolas Sanchez-Albornoz, \textit{The Population of Latin America. A History} (Berkeley, CA, 1974), p. 170.
\textsuperscript{36} Jamaica Times, 21 December 1918, p. 4. See also Sergio Diaz-Briquets, \textit{The Health Revolution in Cuba} (Austin, TX, 1983), pp. 15, and 88, table n12.
\textsuperscript{37} PRO, CO140/254. Jamaica, Central Board of Health, \textit{Report of the Year ended 31 March, 1919}. 
whose memories could go back as far as the Cholera epidemic’ of 1850–51. And at Williamsfield in Manchester parish, influenza arrived on 16 October, possibly along the railway line from Montego Bay, and within a few weeks had engulfed every district where it prevailed for 6–10 weeks. A similar pattern occurred in the neighbouring parish of Clarendon to the east.

By early November virtually every part of Jamaica was suffering from the effects of influenza. Some areas were affected only mildly; Port Royal, on a peninsula opposite Kingston, seems to have escaped lightly. By the end of November the disease had burned itself out; but it seized the island for two months or more, a period in which trade, production, and social life were severely dislocated. The poor in urban and rural areas, generally malnourished and living in crowded and poorly constructed houses, suffered much. So did workers on the large plantations, especially immigrant labourers, living in crowded and poorly ventilated barracks on the estates. At Port Antonio, the Gleaner reported in mid-October, ‘coolie labour on the estates has been reduced almost to vanishing point’, while the District Medical Officer at Annotto Bay recorded that most victims ‘sent in from Estates and country parts were in rags and had not in many instances had food for some time’. East Indian labour on the United Fruit Company estates in Portland was hit first, but the largest number of deaths, totalling 853 indentured workers, occurred in St Mary, Westmoreland and Clarendon. In addition 329 non-indentured labourers died from influenza on the large estates.

Official monitoring of influenza by district medical officers and specially appointed visitors helped to highlight the appalling living conditions of many people throughout the island. As the Medical Officer of Health for Manchester reported, the epidemic showed up the deep and dark places in the parish and that the people are living under bad conditions, badly housed and fed, and that their vigour had been undermined through atrocious social conditions. . . . The epidemic of Influenza gave me the first opportunity of studying the conditions under which the people live in this parish, and to see people of all ages living in a small room without a window, sleeping on boards without any bedding or covering, possessing only one wearing apparel, and without any visible means of subsistence. It seems to me difficult to explain how people can live long under such conditions. In a house with two small rooms I saw sixteen adults and children suffering from Influenza. In another of one apartment 10 × 10 ft. there were nine persons, five occupying two small beds and four on the ground under one bed . . . The overcrowding in many places can only be described as a disgrace to this Island. No attempt has been made to improve these unsatisfactory conditions.

38 PRO. CO140/254. Jamaica, Central Board of Health, Report for the Year ended 31 March, 1919. Dr A. A. Anderson, MoH, Savanna-la-Mar, 7 May 1919.
39 The Gleaner, 20 October 1918, p. 3.
40 PRO. CO137/730/18253. 26 February 1919, enclosing Acting DMO, Dr P. M. Lyon to Acting SMO, Kingston, 23 January 1919.
41 PRO. CO140/254. Jamaica, Immigration Department, Report for the Year ended 31 March, 1919.
42 PRO. CO140/254. Jamaica, Central Board of Health, Report for the Year ended 31 March, 1919.
The 'dread malady', the *Gleaner* reported, touched every part of Kingston by early November. The city trams were disinfected, tickets fumigated and even money sprinkled with disinfecting powder. In the poorer quarters such as Lower St Andrews, with grass roofed shacks and insanitary conditions, death rates rose rapidly and distress multiplied each day. The hospitals were soon overcrowded and the demands of the sick out-stripped the energies of the small number of doctors and nurses. At the urging of the Kingston Charity Organisation Society the City Council agreed to fund three extra soup kitchens, and by late November outdoor relief was being given to 725 people, most of whom were suffering from influenza. The insanitary conditions of the slum areas of the city were highlighted by the *Gleaner* in an illustrated investigative article which demanded government action to reform food markets and distribution.\(^{43}\) A month earlier the newspaper had attacked both Government and the City authorities for lack of urgency in adopting precautions against influenza. The Government response to this and other criticisms was to make influenza an advisory disease and to appoint a Superintending Inspector of Influenza.\(^{44}\) Contrary to the belief of many, influenza was not a disease exclusive to the poor and wretchedly housed, a point graphically made by the *Gleaner* from mid-November onwards, with its column headed 'Hand of Death' listing the deaths of prominent people. By early December the influenza pandemic in the island had almost died out. It had come suddenly and ferociously, and it went almost as quickly, although leaving thousands weakened who would succumb to other illnesses in the succeeding months.

Replying to a question in the Legislative Council in mid-December about the number of sufferers and fatalities from influenza, the Colonial Secretary said that the 'figures must be regarded as problematical'.\(^{45}\) All other reports during the pandemic, and subsequent assessments, echo that statement. The Medical Officer of Health for St Andrews could not give the number of influenza deaths in his parish although in good bureaucratic form he reported that 18,755 plates of soup were distributed to the poor during the pandemic, while the Medical Officer of Port Maria in his report of May 1919 dismissed the officially recorded death rate of 254 as 'unreliable . . . and 2000 would be nearer the mark'.\(^{46}\) Jamaica had a relatively low level of certificated deaths, the Registrar General reporting that in the December quarter of 1918 only 31 per cent of all deaths were 'medically certified'. So the figure of 5022 deaths from influenza and 547 from pneumonia in that quarter is a gross under-estimate as the Registrar General acknowledged.\(^{47}\) The official death rate for 1918 was

---

\(^{43}\) *The Gleaner*, 20 November 1918, p. 11.

\(^{44}\) *The Gleaner*, 19 October 1918, p. 10, and 21 October 1918.

\(^{45}\) PRO. CO140/254. Jamaica. Legislative Council Minutes, 12 December 1918.

\(^{46}\) PRO. CO140/254. Jamaica, Central Board of Health, *Report for the Year ended 31 March, 1919*, St Andrews, and Port Maria.

\(^{47}\) PRO. CO140/254. Jamaica, Registrar's General's Department, *Report for the Year ending 31 December 1918*, p. 11, paras. 17–20. The officially recorded death rate in 1917 was 24,167, in 1918 29,580, and in 1920 19,857; see Kalman Tekse, *Population and Vital Statistics, Jamaica 1832–1964* (Kingston, 1974), p. 188, table 58.
The Influenza Pandemic of 1918–1919 in the British Caribbean

Well above that of 1917 in every parish except for Kingston, and yet given the disruption caused by the pandemic it would seem that the recorded death rate for the capital is far from accurate. What might be cautiously suggested, comparing Jamaica with other low income areas hit by the influenza, is that in excess of one per cent of the population died during the pandemic, that is c.10000 people. There is no reason to doubt the official estimate that 50 per cent of those who died were aged between 20 and 45 years, and that the total population of Jamaica fell in 1918 largely as a result of the influenza pandemic.48

Belize

The pandemic reached the Caribbean coast of Guatemala by early October and affected the towns of Livingston and Puerto Barrios. On 11 October the SS Belevenon from Puerto Barrios docked at Belize with labourers of the United Fruit Company. Several men clearly had influenza and were placed in quarantine on Mojo Cay. Others showed no obvious signs of infection but they spread the disease to their families and it rapidly took hold of the town and spread to the Northern River area where infection was so severe that there was ‘none to help the other’.49 In the next few weeks over 2550 cases were reported in the capital, the peak period for deaths being the second week of November, with the mortality rate estimated at four per cent.50 At the end of that month the town of Belize was declared an infected area under the terms of the Spanish Influenza Ordinance and the Quarantine Ordinance, but this was too late to effectively curb the epidemic.51

In the second half of October the pandemic spread throughout a large part of the colony, initially carried by boat along the coast and up the rivers. Influenza entered the southern town of Punta Gorda on 15 October ‘having been probably introduced by passengers on a Carib doryy arriving from Barrios’. The influenza spread to Baranco and through much of the Toledo District having a devastating effect on the native peoples along the Sarstoon River.52 Migrant labourers employed by the United Fruit Company also brought influenza from Puerto Barrios to Stann Creek on 17 October. Despite the quarantine procedures, which were soon abandoned in many districts as unworkable, it was the government mail steamer SS Star on its regular run along the coast and up the rivers which helped spread the pandemic. It infected Orange Walk on 22 October and Corozal on the 27th. Influenza reached the Cayo district by motor boat along the Belize River on 24 October and also the border town of

48 The year 1918 had the highest recorded death rate in Jamaica since 1880, 34.2 per 100000; the general mortality ‘was rarely’ 25, the exception being the previous influenza pandemic years 1890–91. George W. Roberts. *The Population of Jamaica* (Cambridge, 1957), p. 186.
49 Clarion, Belize, 31 October 1918, p. 490.
50 PRO. CO123/292/55147. Acting Governor R. Walter to Sec. State W. H. Long, ‘Outbreak of Influenza in Belize’, 27 December 1918, enclosing ‘Report on the Recent Epidemic of Influenza in the Town of Belize’, by Principal Medical Officer.
51 PRO. CO126/22. British Honduras, Executive Council Minutes, 28 November 1918; CO123/292/55147. R. Walter to W. H. Long, 1 November 1918.
52 PRO. CO123/294/17011. Acting Governor R. Walter to W. H. Long, ‘Influenza’, 26 February 1919, enclosing reports from Assistant MO of Out Districts: Toledo.
Benque Viejo. By early November the pandemic had a grip on every district of the colony, the virus being spread along the usual lines of communication by migrant labour and also by plantation workers fleeing infected estates.

Infection rates were reported to be as high as 80 per cent in some areas. Influenza disrupted trade and the electricity supply of the capital. In Corozal it reduced food production and plantations were left with crops unharvested.\textsuperscript{53} The production of timber and chicle was also interrupted. In Belize and other major towns relief committees, organized by the medical authorities and Christian bodies, attempted to bring assistance to people suffering from the disease; nearly 8000 people received assistance in Belize alone at the height of the infection between 5 and 16 November.\textsuperscript{54}

Mortality levels were high but the official figure of 1014 deaths was acknowledged by the Acting Governor as far too low especially for remote areas and Indian villages.\textsuperscript{55} All the reports from medical officers emphasized the high rate of morbidity among native peoples. In Corozal it was reported that 'the Indians suffered most severely' and that up to 60 per cent of the population were infected; in the Orange Walk District the Medical Officer reported up to 80 per cent of the population affected by influenza, and in southern Toledo the infection returned to native villages in January after it had subsided elsewhere in the District. In Cayo District so severe was the pandemic that 'some of the Indian villages have been completely wiped out'.\textsuperscript{56} An accurate figure for deaths from influenza is not possible; the official figure would give a rate of 2.4 per cent. It is likely that upwards of 2000 died during the pandemic and that a rate of 4.6 per cent is closer to the truth. This would make more sense of the statement in the Census Report of 1921 that the pandemic had a serious effect on the growth of population of the colony.\textsuperscript{57}

\textit{Trinidad and Tobago}

From the official reports only a mild form of influenza appears to have been prevalent in Trinidad throughout the last quarter of 1918 and early January 1919, although a government medical officer recalled thirty years later that the epidemic caused a 'high mortality rate'.\textsuperscript{58} District Officers of Health reported very few deaths and although influenza was made a quarantinable disease in mid-December, following demands in the press, the Surgeon-General did not think it necessary to make it a notifiable disease. According to Dr Enrique Prada, of the Central Board of Health, the 'bacillus' in the island was not the

\textsuperscript{53} Clarion, Belize, 2 January 1919. In neighbouring Guatemala the epidemic struck at coffee picking time; it was reported that 25–30 per cent of the crop was left on the trees and thus lost.
\textsuperscript{54} British Honduras, \textit{Medical Report for the Year 1919} (Belize, 1922), p. 4.
\textsuperscript{55} PRO. CO123/294/17011. Acting Governor R. Walter to Sec. State W. H. Long, 26 February 1919.
\textsuperscript{56} British Honduras, \textit{Medical Report for the Year 1919} (Belize, 1922), p. 4
\textsuperscript{57} British Honduras, \textit{Report of the Census of 1921}, Part I (Belize, 1923), p. 8, para. 46.
\textsuperscript{58} Scheult, \textit{Trinidad Medical Service}, p. 44.
same as that then raging in Venezuela,\(^{59}\) while the *Trinidad Guardian* reported
the island ‘singularly immune’ from influenza.\(^{60}\) And the relatively low
officially recorded mortality rate—only 188 deaths from influenza and 169
from pneumonia for the period April to June 1919—appear to confirm this.\(^{61}\)
The *Argos*, a populist paper in Port of Spain, saw a connection between the
influenza pandemic and the end of hostilities in Europe with troops going on
leave, and urged action by the health authorities to segregate and examine ‘all
arrivals from the war zone’.\(^{62}\)

In Tobago influenza was also widespread but mild with ‘no fatalities’ re-
corded in Roxborough and Scarborough in October to December 1918. Re-
porting from Plymouth, the Medical Officer of Health stated that from the
onset of the rainy season to the end of 1918 ‘an epidemic catarrhal disease of a
comparatively mild nature affecting chiefly adults’, similar to the common
cold, but ‘in some cases the appearances simulated very closely those of
“Pfeiffer’s Bacillus Influenza”’ had affected the district. The disease had ‘in-
capacitated for various short periods a large percentage of the labouring classes
. . . without any death[s]’. It was his hope that this was a ‘secondary wave’ of
influenza which would ‘confer on the inhabitants of Tobago a partial immu-
nity which may preserve them from the ravages of the more virulent . . .
influenza’ sweeping the Continent.\(^{63}\) Whether this was so is not clear, but both
Trinidad and Tobago seem to have escaped relatively lightly from the pandemic.

**The Windward Islands**

The Windward group of Islands, Grenada, St Lucia, St Vincent and Dominica,
from the available records in London, appear to have suffered more during the
influenza pandemic than the Leeward islands to the north. The pandemic
reached St Lucia on 19 November and by the end of the month it had moved
from the capital Castries, where although reported as ‘selectively mild’ its
victims filled the hospital, to every part of the island. Mortality was highest in
the valleys of Roseau and Cul-de-Sac and the virus lingered longest in the 6th
medical district. The morbidity figures are not available.\(^{64}\) Dominica similarly

---

\(^{59}\) Trinidad and Tobago, *Annual General Report for the Year 1918*, p. 8; Minutes of Proceedings of
Legislative Council for Half Year January–June, 1919. *Administrative Report of the Medical Inspector
of Health*, Legislative Council Paper No. 101 of 1919. *The Port of Spain Gazette*, 19 December 1918,
p. 3; *Trinidad Guardian*, 1 January 1919, p. 3, reporting meeting of Central Board of Health, *Report
on the Pandemic*, pp. 342–4. Influenza entered Venezuela at La Guaira, the port of Caracas, probably
via a ship from the US in mid-October. Within a few weeks the pandemic raged throughout the
country and in certain areas, notably the north-west, up to 3 per cent of the population were
reported to have died.

\(^{60}\) *Trinidad Guardian*, 7 January 1919, p. 8.

\(^{61}\) National Archives, Trinidad and Tobago. Port of Spain (NATT). C.S.O. 1919, Box 8, file
6643. ‘Arrangements for the Early Notification of Infectious Diseases’, compiled by Surgeon-
General.

\(^{62}\) *Argos*, 9 January 1919, p. 2, leader entitled ‘The Present Epidemic’.

\(^{63}\) Trinidad and Tobago, Medical Inspector of Health, *Administrative Report for Year 1918*, p. 46.

\(^{64}\) PRO. CO256/25. Saint Lucia, Executive Council, 5, 14, 19 December 1918. CO256/27.
*Report of the Medical Officers for the Year ending 1918–19*, and Report of Health Officer on the
Sanitary Dept. 1918–19. *Voice of St. Lucia*, 7 December 1918, p. 2, and 14 December 1918, p. 3.
was affected by influenza in late November, the virus apparently entering the island at Roseau and working its way initially along the coastal roads and then into the interior. At first the effects were mild and transmission relatively slow, but by late December and early January it had gained an enormous hold on the population of the eastern side of the island. Dr Bellot, the Acting Medical Officer for that area, reported that 40–50 per cent of the population were affected at any one time and a terrifying fear of various forms [took] hold of those affected which led to a fatalism about the spread of the disease and a predisposition to mortality.65

In Grenada influenza was prevalent in early December. Quarantine restrictions on shipping from Venezuela, Panama, Canada, and the United States were introduced on 12 December, and at the end of the month influenza was declared a notifiable disease. It continued to affect the island during January 1919. However, despite being described variously as ‘raging’, ‘severe’, and ‘serious’, and the ‘mortality was great’ (District No. 10) in the Colonial Surgeon’s report for 1919, the Registrar General’s figures for the death rates for 1918 and 1919 indicate little change from the previous year and influenza is not singled out as a major cause of death.66 The reason for this seeming contradiction is not clear. The pandemic was in St Vincent by the second week of December. The prospect of its arrival had spurred the local press and nervous individuals to urge the island authorities to improve sanitary conditions. By the end of December the disease had exhausted itself in Kingstown and mortality was relatively low on the island. The most pressing result was the interruption of trade in imported fish and meat, but the issue highlighted by the press was the urgent need to improve public health.67 Barbados was hit by influenza in late December 1918. Although the virus affected many people throughout the island its effects were mild and mortality low.68 The late arrival of the influenza and the island’s ‘cross-roads’ position—giving the population a more sustained exposure over a longer time to various strains of influenza—may have provided Barbados with a greater measure of protection from the effects of the pandemic than other islands in the region.

Guyana

Along with Belize the other British colony most severely affected by the pandemic was undoubtedly Guyana. A mild outbreak of influenza occurred in July 1918 affecting the east and west banks of the Demerara river which brought a few deaths. The second wave arriving in the first week of December

65 Dominica, Official Gazette, 3 February 1919; The Dominica Chronicle, 5 February 1919, pp. 6–7. Mortality appears to have been low; in the hospital at Roseau only 9 out of 84 patients with pneumonic symptoms died in 1919. David F. Clyde, Two Centuries of Health Care in Dominica (New Delhi, 1980), p. 123.
66 PRO. CO104/38. Grenada, Colonial Surgeon’s Covering Report 1918; CO104/41, Colonial Surgeon’s Covering Report for 1919; CO104/41, Registrar General’s Report for the Year 1919.
67 The Times, Kingstown, St Vincent, 5 December 1918, p. 3, 19 December, p. 3, and 2, 9, 23 January 1919.
68 Barbados Standard, 11 January 1919, p. 5.
hit the coast and soon assumed ‘epidemic proportions’ with ‘extreme rapidity almost simultaneously’ in an area reaching from Skeldon in the south-east to Anna Regina District in the north-west. The railway, coastal craft and the river system speeded the spread of the infection which took hold in the closely crowded housing of Georgetown, Suddie and New Amsterdam, and among labourers in the densely packed ill-ventilated and damp huts of sugar plantation estates strung out along the low-lying coast and river mouths. Plantation labourers fleeing the estates helped to spread the virus. By the fourth week of December the epidemic had reached inland to the Canje River, by early January the Upper Berbice River area, and also up the Essequibo and the Potaro rivers to Tumatumari. In the next few weeks of the new year those places which the virus reached last were among the hardest hit. In most districts the infection lasted for about one month; the pandemic declined in February and by March 1919 only a few isolated cases were recorded.

Areas with the greatest concentration of East Indian labour, both estate and village, suffered most heavily from influenza with the highest levels of mortality recorded on the plantations. No single estate escaped, all suffering severely reported the Immigration Agent General. Wartime difficulties in obtaining food, particularly dholl (split peas) the main protein for vegetarian Hindus, and rising living costs in 1917–18, led to a general deterioration of health and a greater susceptibility to disease among the East Indian population. Their close concentration in barrack accommodation also made them vulnerable to influenza. One report stated: ‘With poorly nourished bodies, due principally to the exorbitant prices for foodstuffs, the people have easily become victims to this dread disease’, while the Government Bacteriologist later wrote that the disease took ‘a fearful toll, more particularly of the lower classes of the community, the poor East Indian and black, generally already debilitated by the ravages of chronic, malaria and filarial infection’. At Plantation Ogle, in mid-December, ‘carpenters [were] kept busily employed making coffins’; a month later the epidemic continued to spread on the west bank and there were difficulties in digging graves which soon became waterlogged. The large number of deaths also put a serious strain on local burial society funds. At Plantation Mara there was ‘appallingly high mortality’ in January and 112 labourers died out of a work force of 539; at the Friends estate, east of the Berbice River, 66 of a work force of 381; at Springlands 35 of 440; and at

---

69 PRO. CO114/170. British Guiana, Combined Court, First Special Session 1919, Preliminary Report on the Epidemic of Influenza in British Guiana, 1918–19 by K. S. Wise. Surgeon General, 15 January 1919. Sessional Paper No. 5, p. 2.

70 Daily Chronicle, 3 January 1919, Revd R. T. Frank. See also Lesley Marianne Potter, 'International migration and re-settlement of East Indians in Guyana, 1870—1920'. Ph.D. thesis, McGill University, 1975, pp. 384–92.

71 F. G. Rose, 'The Influenza Epidemic in British Guiana', The Lancet, vol. 196, 15 March 1919, p. 421.

72 Daily Chronicle, 21 December 1918; 12 January 1919, p. 4.

73 Daily Chronicle, 16 January 1919, p. 4.
Hampton Court 72 of 910. And at Lima, along the Essequibo River, the East Indian population suffered heavily and 'it is a common occurrence to see three funerals from one house'.

The high mortality reduced the supply of labour in the colony. Indentured East Indian immigration had been ended in 1917 and, following the pandemic, planters now had to compete for labour with the government's sea defence work, rice production and the bauxite industry. Cane acreage declined slightly and looked set to be further reduced, and the British Guiana Planters' Association, raising the old bogey of a labour shortage, demanded the resumption of immigrant labour. A delegation led by Joseph Nunan, representing Indian and African interests, in 1919 visited first London and then New Delhi to ask for free not indentured labour, a demand rejected in both capitals. In fact British Guiana did not have a labour shortage. On the contrary the end of the war brought lower prices for sugar and rice with estates abandoned on the Essequibo and many labourers out of work and impoverished. The planters' real interest was to have low-cost labour over which they could exert effective control.

Amerindian people in Guyana appear to have suffered more heavily than any other group. Influenza penetrated along the Essequibo, Courantyne, and Rupumini rivers and their tributaries, infecting Amerindian communities and reaping a grim and unnumbered harvest. In his diary the Jesuit missionary C. Carey-Elwes recorded that some of his Indian mission workers had gone to Georgetown which had become 'a regular death trap'. When they fell ill they left the capital and started up the Essequibo in their boat. A few days later balata (non-elastic rubber) tappers found their bodies on the river bank where all but one had died in their hammocks. The survivor recollected: 'I was still conscious surrounded by decaying corpses but too weak to get out of my hammock.' In the Tumatumari area Amerindians died in large numbers so that there was no one to bury the dead. The Anglican catechist, J. E. Bowen, brought sick Indians to the mission hospital, but he also reported that many died of starvation: 'There have been as many as three deaths in one day at Tumatumari. On December 25th and 26th, the Indians assembled at the different camps and held what is known by them as masmorony [communal work]. They imbibed the cassiri drink [cassava beer] freely, and soon commenced to die.' On the upper Essequibo and its tributaries the Turuma and

74 PRO. CO114/170. British Guiana, Combined Court, Second Report... Influenza 1918-19, p. 3. See also CO114/67. Report of the Immigration Agent General for the Year 1918, p. 25, paras. 7-10.
75 Daily Chronicle, 8 January 1919, p. 3.
76 Daily Chronicle, 16 January 1919, p. 1; 19 January 1919, pp. 1 and 4; 22 January 1919, p. 4. See also Peter D. Fraser, 'The Immigration Issue in British Guiana, 1903-13: the Economic and Constitutional Origins of Racist Politics in Guyana', Journal of Caribbean History, 14 (1981), pp. 18-45.
77 PRO. CO114/170. British Guiana, Combined Court, Second Report... Influenza 1918-19, p. 7.
78 Society of Jesus Archive, Mount Street, London. 25/3/5. C. Carey-Elwes, 'Among the Amazon Valley Indians', 5 vols., Ts. Vol. IV, p. 784.
79 Daily Chronicle, 15 January 1919, p. 5.
Atorai people were reported to have been largely wiped out by influenza and also malaria.  

Estimates of morbidity were very high, an average of 40–50 per cent in most coastal districts and up to 75 per cent in a few. The official estimate of the death rate from influenza for the months of December to February was given by the Acting Surgeon General as 6378, but he cautioned ‘it is not easy to calculate numbers of dead . . . for no doubt many attributed to pneumonia, bronchitis and other respiratory diseases, were probably due to influenza’. Also many deaths were not registered in the Colony. The figure for deaths among plantation labour may be more accurate while those for other deaths are but crude estimates. The Registrar General recorded that 3842 East Indians died from influenza and 2190 from pneumonia and bronchial complaints. Although the official reports stressed the greater susceptibility and heavy mortality among Amerindians the were silent as to possible numbers. In the absence of a reliable figure for mortality it does not seem unreasonable to increase the official estimate by half, which would put the death rate at over 3 per cent and around the unsubstantiated figure of 12 000 given by the semi-official handbook for the colony in 1922. More males than females died and the most vulnerable section of the population was the 20–30 age group. In his official report the Acting Surgeon General concluded that ‘this epidemic of influenza has been the most severe visitation of disease within the memory of any colonist, the almost universal prevalence and high mortality have caused untold suffering. The one bright feature’ he said, ‘has been that it has called forth a widespread humanity. . . .’

And humanity was needed to cope with the sick and the dying, the orphaned and those reduced to begging for food. By the middle of December the three hospitals on the coast, at Georgetown, Suddie and New Amsterdam, were overwhelmed with patients. One third of all government medical staff were down with influenza and more than half the dispensers.

In the Public Hospital, Georgetown, where many cases of a severe type were being treated, a visit to an influenza ward was most distressing: frequent and noisy coughing, combined with the ravings of delirious patients created such a din that it was difficult to make oneself heard. Added to this, the attempts of the delirious to leave their beds or even to fall out of them if not closely watched, made the work of the nurses, whose members had been sadly depleted by the disease, very anxious, trying and laborious.  

---

80 G. Giglioli, Amerindians of the Guiana Highlands and Savannas. A Study in Photographs (Georgetown, 1948), p. 1.  
81 PRO. CO114/70. Preliminary Report, p. 2.  
82 William Francis (ed.), The British Guiana Handbook 1922 (Georgetown, nd. c. 1923), p. 65. Jay R. Mandle, The Plantation Economy. Population and Economic Change in Guyana 1838–1960 (Philadelphia, 1974), p. 82 table 24, gives death rates from pneumonia and bronchitis (per 100 000) as follows: 1917 375.91; 1918 535.91; 1919 518.65; 1920 300.43; and p. 88 table 26, the infant mortality rate for 1918 at 223.21, the highest recorded figure in the twentieth century.  
83 PRO. CO114/170. British Guiana, Combined Court, First Special Session 1919, Second Report on the Epidemic of Influenza in British Guiana in 1918–19, by J. H. Conyers, Acting Surgeon General, 8 May 1919, Sessional Paper No. 5.  
84 Ibid. p. 2. Daily Chronicle, 18 December 1918, p. 1.
So severe was the death rate in Georgetown that prison labour had to be used to dig graves.\(^{85}\)

**Quarantine and prevention**

The way in which the influenza virus was transmitted was understood, but preventing its spread, specially in populous and mobile societies, was difficult if not impossible. Nevertheless, the authorities in most areas introduced some form of quarantine for ships and people thought to be infected entering their area. In Jamaica, the infection was already present, and quarantine served little purpose; in other islands the external restrictions appear to have had some success, and this may be an explanation for the apparent low levels of morbidity in the Bahamas despite its closeness to the United States. Also lower transmission levels in certain areas were the result of low density housing and where people spent a good deal of time living out of doors.

Unlike the high profile diseases such as yellow fever and typhoid, influenza was not a notifiable disease. In an attempt to establish a measure of control, Antigua, the Bahamas, Belize, Grenada, Guyana, St Kitts and St Lucia all made influenza notifiable. Medical officers in Barbados, Jamaica, St Lucia and Trinidad argued that it was either impracticable, too late, or unnecessary to do so. In any case bureaucratic and medical infrastructures were inadequate to cope with the sudden pandemic; Barbados had no system of death registration, and even in normal times many deaths went unrecorded in the towns, but more particularly in the interior regions of Belize, Guyana, and Jamaica. Medical officers were few in number, and hospital and welfare services slender. At the height of the pandemic in Jamaica so serious was the shortage of medical staff that the press urged the government to recruit doctors from the United States. Despite their best efforts medical doctors could not effectively curb or cure the infection. Nursing care undoubtedly was a major element in the recovery of patients.

Declaring influenza a notifiable disease gave the authorities power to ban gatherings of more than ten people, to close schools, and also place people in isolation. The most common practice, and the easiest, was to close down schools, churches and places of entertainment, but why, asked the Belize Clarion when the government passed such an ordinance did they not also order the closure of bars and saloons: ‘surely the malady is as deadly there as in a church or school’\(^{86}\). In many islands schools were closed for up to two months; wakes were suppressed by the police in Georgetown, Guyana; infected people placed in isolation under guard in Jamaica; travellers suffering from influenza removed from ships and placed in quarantine in Grenada; and even mild cases of influenza segregated in St Vincent on the basis that ‘an ounce of prevention is worth a pound of cure’\(^{87}\). In the larger islands and

---

\(^{85}\) *Daily Chronicle*, 29 December 1918, p. 4.

\(^{86}\) *Clarion*, 24 October 1918, p. 460.

\(^{87}\) Dr Durrant, Colonial Surgeon, as reported by *The Times*, Kingstown, St Vincent, 2 January 1919, p. 3.
territories, many parishes and districts appear to have adopted their own procedures for dealing with the pandemic, while governments attempted to impose and co-ordinate a standard policy. Thus, in one parish people might be placed in isolation but not in another; cinemas would be closed in one town but remain open in another town a few miles away. In the larger colonies, for example, Guyana where between 40 and 60 per cent of the population was affected with influenza, isolation was impossible. And, in St Lucia, where there was frequent migration, the authorities said that it was impossible to effectively operate a quarantine system for a disease that had an incubation period of 48 hours.

Official attempts to prevent the spread of the virus once it had entered an area ranged from leaflets with advice on basic hygiene and ideas about how to avoid or cure the disease, restrictions on the movement and gathering of people, and the isolation of those who were infected. For example, in Jamaica the Immigration Department circulated estates with a pamphlet on 'the Prevention of Spanish influenza' which described the disorder and recommended milk, beef tea, moderate doses of whisky or rum, repeated doses of Calomel and quinine, aspirin (which did help to reduce fever) and the isolation, disinfection, and segregation of the sick from the healthy. In several islands wartime rumours, emanating from the United States, claimed that Bayer aspirin tablets contained influenza. In fact the US Government had taken over the German company in mid-1917, and it speedily issued disclaimers to the Caribbean press. In Trinidad, where the only precaution taken by the Public Health Department in Port of Spain was to distribute leaflets, the Medical Officer of Health's advice was 'Wash Your Hands Before Eating or Touching Food'.

There was no shortage of advice from official and unofficial sources on how the disease could be prevented or cured. The printed advice of the Surgeon General for the United States was widely distributed by governments throughout the region, and several islands published the preventive procedures adopted by English boroughs. A widely recommended way of warding off infection was a small dose of quinine daily and either washing out the nostrils with a common solution of salt and water or using an antiseptic gargle. This appears to have been widely used in Jamaica for by the middle of November the press reported that quinine and other curative drugs had become scarce. Quinine was not a cure, although believed to be effective in reducing fever; indeed there was no known cure, as was pointed out in the sombre words of Dr O'Malley, a US doctor reported in the Dominica press: 'The treatment is technical and should be given by a physician. The popular notion that quinine is effective is erroneous . . . As death may be very sudden in complicated

---

88 Jamaica, Immigration Department, Report for the Year ended 31 March 1919, p. 214.
89 E.g. Trinidad Guardian, 18 December 1918, p. 6. Crosby, America's Forgotten Pandemic, p. 216.
90 Trinidad Guardian, 20 December 1918, p. 6, and 24 December 1918, p. 6.
91 The Gleaner, Kingston, Jamaica, 18 October 1918, p. 1 and 19 October 1918, p. 3.
92 Jamaica Times, 16 November 1918, p. 1.
influenza, care should be taken to have the last sacraments given in a dangerous condition'.

Another commonly recommended preventative measure was wearing a mask or respirator lined with lint or cotton wool impregnated with an antiseptic preparation, a practice taken from the United States where it was widely used and had been enforced in public places by various local ordinances. Of course, most of these supposed remedies and preventive means were not very helpful and well beyond the incomes and perhaps also the perceptions, of many of those who became infected.

Various vaccines to tackle the epidemic, 'shot-gun preparations' containing a variety of organisms found in the bodies of patients, were developed in the United States, but none had any immunological value. At the end of 1918 the Government Bacteriological Department in Georgetown, Guyana, produced its own vaccine which was made available for prophylactic inoculations. By the second week of January 1500 doses had been used, mainly on plantation workers but without its desired effect.

All manner of local remedies were also recommended by government departments and the general public: rum and honey, stimulants and creosote; 30 grains of citrate of potash and 30 grains of bicarbonate of soda; the fumigation of buildings with formaldehyde; Jeyes' fluid; formalin, or sulphur and tar; and a daily cold bath, and a mild laxative. Drinking bitterweed, smelling guinea hen weed, burning tar fires in front of houses, and poultices of heated sand or salt were proposed by a resident of Spanish Town, Jamaica, while a clergyman in Kingston, writing to the press, openly stated that there was no cure for influenza and offered the sufferer the sensible advice, still relevant today, that 'he should avoid excess in eating or drinking or over exertion ... at once betake himself to bed and remain there until well'.

Business for many drug stores soared during the pandemic and advertisements offered patent preventions and cures: 'White pine Cough Syrup, coryza tablets, formalin tablets'; 'Killem ... a true germicide'; Horlicks, fly sprays; 'I smoke a lot ... to avoid the flu'; and Palmolive soap; all these and many others had their prophylactic virtues proclaimed.

Demographic consequences

A precise figure for the number of deaths from the influenza pandemic in the Caribbean will never be known. However, it is possible to provide some crude estimates for certain of the English-speaking islands of the region. The calculations reflect recent research that has revised mortality upward in India, Indonesia and South Africa and which have been employed by Patterson and Fyle to estimate a death rate in the poorer countries of the world during the second wave of 16.6 per thousand. This would give the mortality rates tentatively

93 Dominica Chronicle, 18 December 1918, p. 6.
94 PRO. CO114/167. British Guiana, Report of the Local Government Board for the Year ending 1918, paras. 66–77.
95 The Gleaner, 19 November 1918, p. 3, letter from Mr T. A. Sharpe; and 18 October 1918, p. 3, letter from Revd W. Graham.
96 Patterson and Fyle, 'Geography and Mortality', pp. 19–20.
TABLE 1 Mortality rates from influenza during the pandemic of 1918–19 in the British Caribbean

| Place                        | Population | Reported total number of deaths | %  | Estimated total number of deaths | %  |
|------------------------------|------------|---------------------------------|----|----------------------------------|----|
| Bahamas                      | 59,000     | 60                              | 0.1|                                  |    |
| Barbados                     | 191,000    | 190                             | 0.1|                                  |    |
| Guyana                       | 310,000    | 6378                            | 2.0| 12,000                           | 3.8|
| Belize                       | 43,300     | 1014                            | 2.34| 2000                             | 4.6|
| Jamaica                      | 850,000    | 5569                            | 0.6| 10,000                           | 1.0|
| Trinidad and Tobago          | 360,000    | 300                             | 0.08| 1000                             | 0.2|
| Leeward Islands              | 100,000    |                                 |    |                                  |    |
| Windward Islands             | 180,000    |                                 |    |                                  |    |
| Total                        | 2,093,300  | 13,261                          | 0.75| 27,550                           | 1.65|

Source: PRO. CO140/254. Jamaica, Central Board of Health, Report of the Year Ended 31 March 1919. British Honduras, Medical Report for the Year 1919 (Belize, 1922). Trinidad and Tobago, Medical Inspector of Health, Administrative Report for year 1918. CO114/170. British Guiana, Combined Court, Second Report on the Epidemic of Influenza in British Guiana, 1918–19, by K. S. Wise, Surgeon-General, 15 January 1919, Sessional Paper No. 5.

set out in Table 1. Patterson and Fyle suggest a total mortality rate for the Caribbean and Central America (except Mexico and Guatemala) of c. 96,000. Without the mortality rates for Cuba, and also Haiti and the Dominican Republic where influenza was reported as severe in mid-December 1918, it is not possible to give a more precise total for the Caribbean region, but the figure of nearly 30,000 deaths for the British colonies would seem to support their calculation. These figures take account of unrecorded deaths, those reported as dying of other causes such as ‘fevers’ and pneumonia, often complications related to influenza, long-term influenza infections such as encephalitis lethargica, and also the islands only slightly affected by the pandemic.

The influenza pandemic in certain areas further reduced an already slow rate of population growth. For example, in the Old Federation islands in the period 1891–1911 the average rate of growth was c. 1.1 per annum, lower than the rate prevailing before 1871. In the decade 1911–21 the rate of population growth fell to the lowest level recorded since the first census in 1841–44. This was partly due to the continued haemorrhage of emigration and the end of indentured labour immigration, but also to mortality associated with the war and particularly the influenza pandemic. Indeed, in this period many islands—Barbados, Antigua, St Kitts, Grenada, and also Guyana and Belize—experienced either net reductions in population or only a very slight increase.97

97 George Roberts, ‘Prospects for Population Growth in the West Indies’, Social and Economic Studies, 11 (1962), 337–8. Jack Harewood, The Population of Trinidad and Tobago (Geneva, 1975), pp. 8–9, states that population growth in the period 1911–21 fell to a mere 0.9 per cent per annum due to the end of immigration, and an increase in mortality mainly because of the influenza pandemic.
The pandemic vividly highlighted for some the extent of malnutrition and poverty suffered by a large section of the population of the British Caribbean. Whether this helped to bring about an improvement in systems of public health is a matter for further enquiry. Certainly following the First World War there was increased French and British interest in the economic resources of empire and consequently greater concern with health and what were termed 'important communicable maladies] the presence of which exercises a markedly deleterious effect on the resources of the Empire'. In 1921 a West Indian Medical Conference was convened at Georgetown, British Guiana, to consider the general hygienic programme of the West Indies. This helped provoke discussion on the paucity of medical services in the British Caribbean and the urgent need for adequate public health care to deal with widespread poverty which was perceived by many to be the main cause of communal disease. But improvements in sanitation and medical services within the

---

Fig. 1. Death-rates for four West Indian colonies
Source: George W. Roberts, The Population of Jamaica (Cambridge, 1957), p. 186, fig 8.
British Caribbean depended on local financial resources and these were not immediately forthcoming.

The pandemic did lead to a more comprehensive imperial system of gathering intelligence on infectious diseases. Within a few months, on instructions from the Colonial Office, both influenza and pneumonia were added to the list of notifiable diseases and colonies were instructed to provide a monthly return of all diseases and also to inform neighbouring colonies by telegraph when an outbreak of epidemic disease occurred.\(^{100}\) And in the colonies a more serious approach was now taken with regard to a wider range of infectious diseases. For example, in Trinidad an amendment to the Public Health Ordinance, 1915, gave the Port Health Officer power to isolate sick people who arrived in the colony and to inspect ships in order 'to prevent obvious cases of epidemic influenza or pneumonia from freely entering the community'.\(^{101}\) Thereafter the colony tightened local controls and also supplied London with a regular return, on printed sheets, of cases of infectious disease, including influenza and pneumonia. In London the Ministry of Health compiled a monthly worldwide return which was circulated to all colonies.

**Conclusion**

In the space of a few months in 1918–19 influenza spread around the globe, carried with great rapidity along ocean shipping lanes, by railway, river, and road systems. Only a few remote and isolated places, such as St Helena, escaped infection. The total mortality rate of 30 million people distinguishes the influenza pandemic as the worst demographic disaster from a single cause in the twentieth century. In the Caribbean region the death toll may have been in the region of 100,000 people. The infection seems to have been most severe in the islands of Jamaica, Puerto Rico, and the mainland territories of Belize and Guyana. Further research is required at local and metropolitan level to assess the full impact of the pandemic on the whole region, especially in Cuba, Haiti, and the Dominican Republic, and the French and Dutch possessions. Before 1920 influenza was not listed by the British authorities as an 'imperial' disease but the pandemic of 1918–19 changed that by showing only too well that 'there is no malady which better merits the title “imperial” than influenza in one of its great periodical outbreaks'.\(^{102}\)

**Acknowledgements**

The author gratefully acknowledges the helpful comments of friends and colleagues, specially those of Professor K. David Patterson and Dr Caroline Berry.

---

\(^{100}\) PRO. CO854/55. Circulars by Milner, 6 September 1919, and 26 September 1919. This move by the Colonial Office was due to representations by New Zealand and South Africa.

\(^{101}\) NATT. C.S.O. 1919, Box 8, file 6643, 'Arrangements for the Early Notification of Infectious Diseases', compiled by Surgeon-General.

\(^{102}\) Balfour and Scott, *Health Problems of the Empire*, pp. 214–15.
Fig. 2. Map A: the influenza pandemic in the Caribbean October 1918 to March 1919
FIG. 3. Map B
FIG. 4. Map C
The Influenza Pandemic of 1918–1919 in the British Caribbean

Fig. 5. Map D