

Timeline

(obviously this is not an exhaustive record of events, but is only intended to give some impression of the progress of the pandemic)

February/March 1917

Outbreak of mysterious respiratory disease at Etaples military camp with similar symptoms to 1918 influenza, labelled 'purulent bronchitis'

February 1918

Doctor in Haskell County, Kansas, near Camp Funston, reports an outbreak of respiratory disease with unusually high mortality, especially among younger people

March 1918

4th Albert Gitchell, camp cook at Camp Funston Army camp, Kansas, reports sick. By noon the camp doctor is dealing with 107 cases – disease comes to the attention of the authorities

Russia leaves the war under the Treaty of Brest-Litovsk and Russian POWs return home, possibly taking flu with them

Ludendorff launches spring offensive on Western Front, with the aim of defeating the Allies before US forces join the war

April 1918

Flu spreads across US and to Allied Expeditionary Force in Europe

May 1918

Flu begins to affect French troops

Arrives in Bombay (Mumbai), and spreads along rail lines to other major cities

Flu also reported in China, Japan, Greece, Macedonia, Egypt

British Grand Fleet unable to put to sea, George V taken ill

June 1918

Flu reported in Germany and Ireland

29th Dudley Herald reports an outbreak in Tipton beginning at a large factory, 'most of the victims being on the night shift', including 150 taken ill on the night of the 21st. The paper notes that 'So far only one or two deaths have been reported, and they were of persons who were low in vitality at the time'.

July 1918

flu in Denmark, Norway, Switzerland

Chief Medical Officer Sir Arthur Newsholme prepares memo to local authorities with instruction regarding precautions, but does not issue it because he doesn't want to hamper the war effort (see quotes)

- 3rd Express & Star reports 'serious dislocation' of work in Staffordshire collieries
- 5th Express & Star reports closure of all schools in Bilston
- 9th Express & Star reports all schools in Wolverhampton to be closed for an indefinite period

August 1918

Flu reaches Netherlands, Sweden, Peru

Epidemic is declared over in Britain as first wave subsides. At the same time, the second wave is emerging in Boston, Freetown and Brest.

Ludendorff's Spring Offensive fails, for a variety of reasons, and Ludendorff later complains that flu played a key role in depriving him of manpower

- 10th Medical Research Council predicts second wave
- 12th second wave arrives in New York with Norwegian vessel Bergensfjord
- 14th New York Health Commissioner Royal Copeland denies US soldiers are suffering from flu, blaming malnutrition instead for their ill health
- 17th Dudley Herald reports that Coseley Council complains of a shortage of doctors and considers petitioning the army for the return of a doctor

Sept 1918

- 1st 500 black stevedores taken ill in Freetown, Sierra Leone (see 13th Sept)
- 8th Camp Devens, Massachusetts outbreak brings second wave to the attention of US Army, causing 14,000 casualties and over 750 deaths, including 63 in one day
- 12th PM David Lloyd George taken ill on a visit to Manchester

Copeland announces in New York that 'the city is in no danger of an epidemic'
- 13th SS *Jaroslav* brings 1500 members of the Native Labour Corps to Cape Town from Sierra Leone, with 90 deaths en route. Flu follows train lines and other lines of communication from here through South Africa. The virus spreads through the rest of Africa in a similar way.
- 17th Flu is made a reportable disease in New York City
- 18th Australia imposes strict quarantine, and is thus protected from second wave
- 28th Liberty Loan drive (a fundraising parade for the war effort) in Philadelphia brings hundreds of thousands on to the streets despite efforts by health officials to persuade the Mayor to cancel it. Within three weeks 4,500 people are dead. The city runs out of mortuary space and coffins and essential services collapse due to the number of people incapacitated.

29th Troop ship *Leviathan* leaves New York for Brest with 11,000 on board. Flu breaks out almost immediately.

October 1918

1st John Pershing, Commander in Chief of the US Army in France, requests 1500 nurses

4th Copeland finally acknowledges existence of epidemic, and institutes measures to reduce crowding on public transport and in workplaces

6th German Chancellor Prince Max appeals for armistice

7th Draft for US Army cancelled after initial refusal by Chief of Staff Peyton March

8th *Leviathan* docks in Brest with 2,000 people on board sick and over 80 deaths, most buried at sea

12th President Wilson leads a 25,000-strong parade in New York, with similar results to the one in Philadelphia (see 28 September)

14th War Office conference urges development of vaccine

South African Union Government mandates quarantine for flu patients

21st Express & Star remarks that Wolverhampton has not so far been badly affected by the second wave, and advises anyone beginning to feel ill to 'have a good bath and go to bed'

22nd Newsholme finally issues memo suggesting local authorities consider advising precautions, as deaths reach 4500 per week in England and Wales (see quotes)

29th Royal Copeland visits Calvary Cemetery, Queens, NYC, to find a backlog of 200 coffins

30th Doctors released from military duty

Appeals issued in many areas for extra gravediggers – calls for soldiers to be released from Army for this purpose

Fatima visionaries Francisco and Jacinta Marto are affected by flu. Neither fully recovers – Francisco dies April 1919 aged 11, Jacinta February 1920 aged 10

November 1918

Steamer *Talune* arrives from New Zealand into Western Samoa, bringing the virus with it, leading to the death of 22% of the population. It has also taken the virus to Fiji and Tonga. Neighbouring American Samoa imposes complete quarantine and suffers no losses.

6th Express and Star offers the opinion that the epidemic 'has reached its limit and is on the point of subsiding' in Wolverhampton after 40 deaths in the past week. The following week sees 64 deaths from flu and 8 from pneumonia.

11th Armistice celebrations bring massive public gatherings, both planned and spontaneous, around the world, making nonsense of attempts to prevent large assemblies of people. Fresh outbreaks of flu follow in many cities around the world.

18th Express and Star: in Wolverhampton 'An application is being considered for the early release from the Army of coffin makers and grave diggers. Local undertakers can't deal with the workload. They were refusing orders. They can't guarantee burial under 7 or 8 days. It was noted that a large percentage of the deaths were of under 35s.'

A letter to the editor complains about the carelessness of coughing at a thanksgiving service, offering the opinion that people who are coughing should avoid crowded public places

29th Express and Star: in Bilston 'It was agreed that the proprietors should be asked to limit entertainment to three hours continuous only, then an interval of half an hour to air and disinfect the room. Proprietors are to be asked to discontinue children's performances during the epidemic'.

December 1918

Schools are closed in Wednesbury, and the Mayor remarks that 'interment of bodies has been unduly delayed'

January 1919

Australia lifts quarantine as soldiers begin to return. Flu arrives in Australia for the first time, causing 12,000 deaths in the year.

June 1919

25th (content warning) A medical party reaches a remote village in Bristol Bay, Alaska, to find no one alive and starving sled dogs fighting over human remains. The party burns the village to the ground. Around 300 orphans are eventually rescued from the Bristol Bay area as a whole.

July 1919

1st Ministry of Health established in England and Wales, centralising health care for the first time

October 1920

Chief Medical Officer George Newman publishes a report on the course and effects of the pandemic in Britain and overseas

1996

Ann Reid and Jeffrey Taubenberger find preserved lung sample of Private Roscoe Vaughan at Armed Forces Institute of Pathology, Washington DC, and achieve partial RNA sequencing (viruses have no DNA)

John Hultin obtains sample from body from mass grave at Brewig Mission, Alaska, enabling Taubenberger to obtain further sequencing

June 2002

New Zealand Prime Minister Helen Clark apologises on behalf of the country to Samoa for the 'inept and incompetent administration' that, among other injustices, allowed the virus to enter Samoa on the *Talune* and cause such devastation

2005

Reid and Taubenberger publish complete RNA sequence, which proves to be more similar to bird flu than other human flu sequences, suggesting the possibility that the virus passed directly from birds to humans

H1N1 virus reconstructed for study purposes – when tested on mice produces 40,000 times as many viral particles as seasonal flu

2009

H1N1 virus, having been circulating in pigs since 1918, unexpectedly reappears in a further mutated form in humans to cause 'swine flu' pandemic. 80% of deaths from this are in people under 65.

2011

Taubenberger publishes comparison of sequences from first and second waves, showing that between waves the virus mutated to become better adapted to humans than birds, allowing more efficient human-to-human transmission

2018

The centenary of the beginning of the pandemic arouses fresh interest, although this is overshadowed by the commemoration of the Armistice.

(I am indebted to local historian David Taylor for sharing with me his notes for a forthcoming journal article, the source of my information about Wolverhampton and the surrounding area)