



## CONTENTS

A Late Obituary .....	5
Many Names, One Disease .....	8
Pfeiffer's Bacillus .....	14
Fever, Coughing, Headaches .....	18
Pneumonia and Flu .....	20
Peculiarities of the Spanish Flu .....	22
Preventing the Flu .....	24
Unclear Origins .....	35
Waves of Infection .....	37
Prelude in Central China .....	39
Appearance in Kansas .....	44
Spring Fever in Europe .....	49
May in Madrid .....	52
Flanders Fever .....	55
One Big Sickroom .....	63
Wind and Weather .....	67
Summer Flu .....	70
A Doctor's Equipment .....	77
Over the Sea .....	83
September – Mass Death Begins .....	90
October – The Tipping Point of the Pandemic .....	94
An Autumn of Flu in Austria .....	98
No Doctors, No Aspirin .....	103
Witches' Cauldron USA .....	106
Cemetery Flowers .....	117
Rumours of the Plague .....	123
Feverish Peace 1918 .....	127
The Third Wave 1919 .....	136
Aftershocks 1920 .....	144
Epidemiologists Look Back .....	150
On the Trail of the Spanish Flu .....	156
Notes .....	162
Glossary of Medical Terminology .....	166
Pictorial Sources .....	167

COVER PAGE: Red Cross workers making flu masks, Camp Boston, Massachusetts, 1918.

LEFT: A man wearing a protective face mask disinfects the top deck of a London General Omnibus Company bus, 1920.



Ward in the Mare Island Marine Hospital, California, November 1918.

making contact with the enemy and consequently passing the flu to their own ranks. There was talk of Austrian troops storming Italian positions and finding their enemies seriously ill. They were said to have thought of poison gas before realising that the foe had been laid low by influenza.<sup>72</sup>

Gustav von Bergmann, a German internal medicine specialist, described German battalions coming into physical contact with infected regiments in a tunnel and infection being spread during hand-to-hand combat with the Americans.<sup>73</sup>

In early June 1918, the flu had an impact on the wide divisional sector on the Ailette front; on 6–8 June, the “mass affliction with Grippe, which had previously only been seen among the Allied powers, also began to be transmitted to the German troops”,<sup>74</sup> although the flu was still only showing its milder face. “Around

a quarter to a third of the ranks in all formations fell sick in turn, and the epidemic continued through changes in occupying troops, nourished by additional training groups, during the months of July, August and September, in varying degrees, but always with the same symptoms,” wrote Egon Frey in *Wiener klinische Wochenschrift* [Viennese Clinical Weekly]. He continued: “never complications, no deaths!”<sup>75</sup> Reports on the course of the flu are contradictory. Given that men often had incredibly similar symptoms, the soldiers talked of “comradely flu”.<sup>76</sup>

In the field hospitals it was not always easy to tell the high temperatures of flu from traumatic fever following a war injury, as the terse report of former army doctor Hermann Kahler shows: “Indeed, at the

TOP LEFT: The Imperial and Royal Reserve Hospital no. 2 in Pardubice, scene of the flu in Bohemia, c. 1918.

BOTTOM LEFT: Rows of tents with flu patients in Emery Hill in Lawrence, Massachusetts, May 1919.

RIGHT: Motorcycle and sidecar fetching supplies in New Zealand, 1918.





*Epidemic à la mode.* "Good God! Are you heading to the Front?" "No, to the cinema."

Soldiers marching with protective face masks, filmed c. 1918.



American fishing grounds, scattering infected fish, and the pharmaceutical company Bayer was suspected of having contaminated aspirin tablets with flu germs.<sup>80</sup> Some people even said that it should be called German plague rather than Spanish flu.

On 3 October 1918, in a conversation with Reich Chancellor Max von Baden, Ludendorff would list the reasons for the failure of German military operations; these included the mass use of tanks and a lack of potatoes, but he would also explicitly mention the flu.<sup>81</sup> The fact that the pandemic coincided with the last months of the war throws up a series of hypothetical questions. How the events of the war are linked to the flu outbreaks? After all, there are suspected links between wartime events and flu outbreaks, such as the reports of early outbreaks in US military camps or among Chinese contract workers, who were being shipped around the world just as a flu-like illness was raging in their home regions. We know about troop ships, taking recruits ill with flu to Europe, and ships laden with coughing and feverish patients returning to ports on the east coast. Reports also mention animal husbandry, designed to provide food for soldiers in the



various camps – pigs and poultry kept in muddy, over-crowded barracks and camps, surrounded by thousands of cavalry horses, all in a confined space and in close proximity to men in uniform equate to ideal breeding grounds for influenza.

Thus the debate continues as to whether the war was father to the flu, or whether it was rather that the epidemic had a fateful influence on the final phases of the war. Given that it affected Central Powers and the Entente nations in equal measure, it is hard to make a case for the losses to flu having weakened the exhausted German empire and its Austro-Hungarian ally, likewise in its final throes, further than the reinforced Allies.

Demonstration in a Red Cross station in Washington, D.C. during the pandemic, c. 1918.



recalled the corrupt vitality of hair, which can grow from a rotting corpse. And Ben's thin lips were lifted, in a constant grimace of torture and strangulation, above his white, somehow dead-looking teeth, as inch by inch he gasped a thread of air into his lungs.

And the sound of this gasping – loud, hoarse, rapid, unbelievable, filling the room and orchestrating every moment in it – gave to the scene its final note of horror.

Ben lay upon the bed below them, drenched in light, like some enormous insect on a naturalist's table, fighting, while they looked at him, to save with his poor wasted body the life that no one could save for him. It was monstrous, brutal.”<sup>214</sup>



ABOVE: A fashionably-dressed couple modeling elegant anti-influenza masks. Photo from the 1920s.

BELOW: A Red Cross Emergency Ambulance Station in Washington, D. C., c. 1918.

#### CEMETERY FLOWERS

The scenes playing out at cemeteries around the world were downright apocalyptic. Day in, day out, bodies were transported from hospitals and private houses, and long rows of them began to form in mortuary rooms and inside cemetery walls. Soon there was a shortage of coffins, and the dead had to be buried in simple, makeshift caskets made from old doors or cardboard. In many places, military commands also made carpenters available to lend a hand with producing basic coffins.

Large numbers were placed in anonymous mass or multiple graves, or hastily cremated. In many places,

Funeral in England for German prisoners of war who died of Spanish flu. 1918/19.





OPPOSITE PAGE: Pictures of the famous French dancer and music hall singer Gaby Deslys.

RIGHT: Crowds at Gaby Deslys' funeral following her death from flu, outside the Notre-Dame-de-Grâce church in Paris, 8 February 1920.



In Montrouge, Paris, the public was bereft of famous dancer and singer Gaby Deslys, aged 39. The music hall star had caught the flu in December 1919. Doctors carried out several operations in an attempt to treat the ulcerous pleurisy that subsequently set in – but in vain. Her mortal remains were transported to Marseille, where Deslys was laid in the Saint-Pierre cemetery, very close to author Edmond Rostand, who had also died of the flu.

After an unusually mild early spring, the influenza also returned to Germany and Switzerland in 1920. Another Munich victim was German sociologist Max Weber, who died on 14 June, a late victim of flu-related pneumonia.

According to the *Wiener Medizinische Wochenschrift*, the influenza also returned to Austria in early 1920. Civilian hospitals were overrun and could barely take in any more flu patients. Professor Dr Julius Tandler, the fledgling republic's Under Secretary for Public Health, ordered the preparation of 600 beds from war-damaged hospitals for the use of civilians ill with flu.<sup>261</sup>

Prague and Bohemia also saw the flu's final flare-up in 1920, which was marked by considerably higher