P R O T E C T I O N  O F  A U T H O R ’ S  C O P Y R I G H T

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Preventable deaths? : the 1918 influenza pandemic in Nightcaps

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A study submitted for the degree of Bachelor of Arts with Honours at the University of Otago, Dunedin, New Zealand.

1991
GILLIAN BULLING

Preventable Deaths?

THE 1918 INFLUENZA PANDEMIC IN NIGHTCAPS
PREFACE

There are several people I would like to thank for their considerable help and encouragement of this project.

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The staff of the Invercargill Register of Births, Deaths and Marriages.

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Mrs Dorothy Bulling and Mrs Diane Elder
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Rice, Black November pp134-5

Tables 1.4, 1.5, 2.1, 2.2, 2.3, 3.1-3.6 are based on Death Certificates of Victims.
INTRODUCTION

In the Nightcaps cemetery there is a gravestone that simply says 'Mary, 1918'. This is testimony to the social and economic upheaval of the 1918 influenza pandemic that killed between 21 and 25 million people worldwide.\(^1\) It is more accurate to describe the 1918 influenza as a pandemic rather than an epidemic. This is because a pandemic indicates that influenza is prevalent throughout the country or the world, whereas epidemic indicates that it is a localised illness. New Zealand had a population of a little over one million in 1918 and in the pandemic approximately 6,600 people died over a period of three months. The European death rate was 5.8 per thousand while the Maori suffered at a significantly higher rate of 22 per thousand people.\(^2\)

In *Black November*, Geoffrey Rice states that any death rate higher than 15 per thousand must be regarded as a high or severe death rate for a European population.\(^3\) The regional death rate for Southland was 8.2 per thousand; but this figure disguises some horrific death rates for some of the small towns and communities in Southland. Four towns had a death rate higher than 15 per thousand and another three were above 10 per thousand.\(^4\) The most disturbing death rate occurred in Nightcaps, a small coal mining community in Western Southland. The death rate for this community was 45 per thousand: the highest European locality death rate in New Zealand.

For the purposes of this study the geographical area I have defined as Nightcaps includes the township of Nightcaps, Wairio and Wreys Bush. In the 1916 census this area had population of 911 and over a period of two weeks 41 people died.\(^5\)

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2 Ibid p110
3 Rice, G. *Black November* p147
4 Ibid p203
5 Compiled from the death registers for Nightcaps, Riverton, Otautau and...
The initial reaction to such a horrific death rate is 'why was it so high?' To answer this question a complete study of the influenza pandemic in Nightcaps is necessary. By also considering the pandemic in Southland the Nightcaps experience can be placed in context. The importance of the Southland experience lies in the fact that the Southland region is made up of a number of small towns. Although the influenza pandemic in New Zealand's main centres has been studied a balance needs to be created by looking at the pandemic in small towns.

Chapter one will therefore give a brief overview of the influenza pandemic in New Zealand and a closer look at the influenza in Southland. How did it spread? What were the death rates? How was it dealt with in Invercargill and the outlying districts? What precautions were taken and were these adequate? Chapter two will look at the epidemic in Nightcaps. This chapter will also include a discussion of the pandemic in Otautau. Otautau is the closest town to Nightcaps with a Doctor and a Chemist and it had opened a temporary hospital well before Nightcaps. Chapter three will look at the legacy of the pandemic and its aftermath.

Rural New Zealand suffered from the influenza pandemic at rates comparable with the main centres, however the rural centres lacked comparable facilities to deal with the pandemic. Thus the experience of and lessons learnt from the pandemic in rural New Zealand differ at times from that of the main centres. The intention of this essay is to explain the rural experience in Southland and consider the possible explanations for the death rate in Nightcaps.

The Maori death rate in Southland was the second highest regional death rate for the Maori in New Zealand and while this is significant for the Maori population I have discounted this statistic as the Maori deaths were only nine of 500 deaths in Southland. Invercargill for period October 1918 to January 1919.
The Maori population in Southland totalled 1396 and was concentrated in the coastal areas. I do not intend discussing the Maori deaths as none were recorded in the Nightcaps area.

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6 Rice, G. Black November p203
CHAPTER ONE: SETTING THE SCENE

It seems that the influenza, once looked upon as a comparatively harmless complaint, is now spreading over the world with as devastating an effect as the Black Plague of the Middle Ages.\(^7\)

This comment appeared in the *Otautau Standard* on 29 October 1918. By mid-October news of the influenza pandemic around the world appeared alongside news on the progress of the 'great war' in Southland's two daily newspapers; the *Southland Times* and the *Southland Daily News*. This chapter is going to briefly outline the history of the 1918 Influenza Pandemic in New Zealand by looking at the geographical diffusion and patterns of death followed by a closer look at the pandemic in Southland.

Prior to 1918 influenza was not a notifiable disease in New Zealand.\(^8\) It therefore appeared astonishing that a previously 'harmless' viral infection killed 20 - 25 million people worldwide and about 6600 in New Zealand alone. The influenza pandemic appeared in three separate waves over a period of less than 12 months. The first wave occurred in April/May of 1918. This was a relatively mild wave and the mortality rate could not be considered high. Mortality mainly occurred in old people, a pattern consistent with past influenza viruses. The extraordinary feature of this wave was the appreciable number of deaths in the 20 - 40 age group. This feature became even more obvious, especially among males in the second wave that first appeared in September in the northern hemisphere. The second wave was the most virulent influenza experienced but it waned as quickly as it had appeared and the third wave in early 1919

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\(^7\) *Otautau Standard* 29 October 1918 p 3

\(^8\) Dr R H Makkil, Report on the Influenza Epidemic in New Zealand. *AJHR* 1919 H-31 p25
was much less severe.\textsuperscript{9}

The second wave of influenza swept through Europe in September of 1918 and within several weeks the whole population of the world was affected, including New Zealand.\textsuperscript{10} Influenza struck Europe in September and by the first week of October the first deaths from influenza in New Zealand were recorded in Auckland.

**TABLE 1.1 - INFLUENZA EPIDEMIC DEATHS IN NEW ZEALAND - 2ND WAVE.**

<table>
<thead>
<tr>
<th>DATE</th>
<th>WEEK</th>
<th>NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct 7</td>
<td>1st</td>
<td>3</td>
</tr>
<tr>
<td>Oct 14</td>
<td>2nd</td>
<td>6</td>
</tr>
<tr>
<td>Oct 21</td>
<td>3rd</td>
<td>13</td>
</tr>
<tr>
<td>Oct 28</td>
<td>4th</td>
<td>21</td>
</tr>
<tr>
<td>Nov 4</td>
<td>5th</td>
<td>72</td>
</tr>
<tr>
<td>Nov 11</td>
<td>6th</td>
<td>423</td>
</tr>
<tr>
<td>Nov 18</td>
<td>7th</td>
<td>1442</td>
</tr>
<tr>
<td>Nov 25</td>
<td>8th</td>
<td>1860</td>
</tr>
<tr>
<td>Dec 2</td>
<td>9th</td>
<td>1045</td>
</tr>
<tr>
<td>Dec 9</td>
<td>10th</td>
<td>354</td>
</tr>
<tr>
<td>Dec 16</td>
<td>11th</td>
<td>151</td>
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<td>Dec 23</td>
<td>12th</td>
<td>60</td>
</tr>
<tr>
<td>Dec 30</td>
<td>13th</td>
<td>21</td>
</tr>
</tbody>
</table>


\textsuperscript{9} Beveridge, W J B. *Influenza, The Last Great Plague* p30

\textsuperscript{10} Ibid p42-3
The second wave of influenza reigned for thirteen weeks throughout New Zealand. In common with the rest of the world New Zealand suffered from two distinct waves - the first wave reaching New Zealand in late August/early September. The mortality from this wave, according to Dr Makgill, the District Health Officer for Auckland, "though abnormal, was not alarming". The second wave brought death to all sectors of New Zealand society from early October through to the end of December. The virulence of this wave was "in excess of anything which [had] hitherto been experienced with influenza".

Within one to two weeks influenza had diffused throughout all New Zealand and produced almost simultaneous epidemics in three of the main centres and most of the regional centres, and large towns in the North Island. Influenza was at its worst in the second, third and fourth weeks in the South Island. As in the North Island most regional centres and larger towns were simultaneously struck by the pandemic. Rail and shipping were the main forms of transportation at the time, and the pandemic appeared to spread along these lines. The pandemic appears to have followed the main trunk line between Auckland and Wellington in the North Island and between Christchurch and Invercargill in the South Island.

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11 Maygill, AJHR 1919 H-31 p23. see also Table one.
12 See Table 1.2 Death rates for North Island and South Island.
13 See figure one: Dates of the first epidemic deaths in the North Island and South Island.
TABLE 1.2 Death Rates of the North Island and South Island

Of the four chief centres, Auckland, where the outbreak first assumed importance, suffered most severely.

<table>
<thead>
<tr>
<th>City</th>
<th>Death-rate per 1,000 inhabitants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auckland</td>
<td>6.97</td>
</tr>
<tr>
<td>Wellington</td>
<td>5.94</td>
</tr>
<tr>
<td>Christchurch</td>
<td>4.25</td>
</tr>
<tr>
<td>Dunedin</td>
<td>3.70</td>
</tr>
</tbody>
</table>
Towns and cities throughout New Zealand became 'ghost towns' virtually overnight as the pandemic made its way down each island. Services and businesses closed due to the number of staff who were either struck down by the influenza themselves or caring for family members. On 13 November 1918, Department of Health Officers were given the power to close all hotel bars, club bars and places of entertainment. All church services were cancelled for Sunday 17 November and on 19 November all banks in the Dominion were ordered to close and not to reopen until 10.00am, Wednesday 27 November. The Health Department was granted wide-ranging powers and the following notice in the *Southland Times* is an example of these powers.

*Southland Education Board - Influenza Epidemic*

> By order of the Health Department Chairmen of School Committees throughout the district are hereby ordered to close their respective schools for one week from this day (Wednesday) the 13th.

Behind the 'ghost town' appearance of each town as the pandemic took its toll on the communities, was the reality of the devastation wrought on each affected family. The reality according to the *The Outlook* was an "infinitude of fatherless children, widows and widowers", and needless to say the thousands more who "stricken by sickness will need help and sustenance during the long period of convalescence". Behind closed doors families grieved for brothers, sisters, mothers, fathers, wives, husbands, daughters, sons and relatives and friends. Not one family escaped the clutches of influenza and the devastating effects it wrought on the people.

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14 *Southland Times* 15 November 1918 p1  
15 *Southland Times* 16 November 1918 p1  
16 *Southland Times* 21 November 1918 p1  
17 *Southland Times* 14 November 1918 p1  
18 *The Outlook* 3 December 1918 no 49 vol XXV p3
FIGURE 7.2
DATES OF FIRST EPIDEMIC DEATHS, NORTH ISLAND

Christchurch from 30 October

FIGURE 7.3
DATES OF FIRST EPIDEMIC DEATHS, SOUTH ISLAND

Collier "Kalde" from Auckland 2 November

Wellington from 1 November
TABLE 1.3 Age/sex structure of Influenza Deaths in New Zealand.
The pandemic had some distinctive features as illustrated by Table 1.3. The first feature was that males suffered at a rate almost twice as severe as females. The other striking feature was the age structure of the deaths.\(^\text{19}\) While females only died at the rate of 3.48 per 1000 the male death rate was 6.49. Even more alarming was the different death rates in the 30 - 35 age group. The male death rate was 16.3 per 1000 while the female death rate was less than half of this at 6.7.\(^\text{20}\) This death pattern distinguishes the 1918 pandemic from past influenza epidemics, where the very young and the very old made up a significant number of the deaths. The only age group in which females suffered a slightly higher death rate was in children under 15 years old.\(^\text{21}\)

It is therefore evident that New Zealand along with every other country in the world suffered the deva...\(^\text{19}\) New Zealand Official Yearbook 1919 p171
\(^{20}\) Rice, G. NZJH pl12.
\(^{21}\) Makgill, AJHR 1919 H-31 p31
Christchurch carnival which began on 4 November. In Southland two more events intensified the situation. The first being the premature Armistice celebrations in most towns on 8 November and the actual Armistice celebration of 11 November. The second event, the Winton Races of 13 and 14 November would also have spread the infection. The Southland Times reported on 14 November that all race meetings were prohibited and this led to the cancellation of the final day of the Winton Races. It is likely that the damage had already been done as the races were well attended and people would have already caught the infection.

To date it has been argued that these events, and especially the Winton Races were responsible for spreading the influenza throughout Southland, however, other evidence suggests that influenza had already spread into some areas. Nightcaps is a case in point. Using the information gained from death certificates I ascertained the day each person first fell ill. Each death certificate stated the number of days each person had influenza and in most cases the number of days the person had pneumonia (in two cases people were in a coma before death.) Counting back the number of days each person was ill from the date of death I arrived at the day each person fell ill.

Table 1.4 Contraction Rates of Victims

<table>
<thead>
<tr>
<th>November</th>
<th>3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>1 - 1 - 3 - 4 2 6 3 6 1 3 1 1 4 - 1 2</td>
</tr>
</tbody>
</table>

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22 ibid p35  
23 Southland Times 14 November 1918 p1  
24 Information taken from 1918 Death Registers for Invercargill, Riverton, Otautau and Nightcaps. Tables 1.4 and 1.5 were compiled from this information. It is stated in the introduction that there were 41 deaths in Nightcaps, however, I was only able to find 39 death certificates. The two unrecorded deaths were both males (adult) and were listed in the QS.  
25 The dates in bold are for the Winton races.
This table clearly shows that influenza was present in Nightcaps well before the Winton Races and indeed the Christchurch carnival and the armistice celebrations. Of the 39 deaths recorded here, 18 had already fallen ill before the Winton races, nine fell ill on the two days of the races and twelve after the races.

The incubation period of influenza is usually 48 hours, and 1918 was no different with some cases recording an incubation period of 36 hours or less. By adding another 48 hours (the average incubation period) on to the number of days each person was ill the results are quite different to those gained in Table 1.4.

**Table 1.5 Contraction Rates of Victims - including incubation period**

<table>
<thead>
<tr>
<th>November</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
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<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Including the incubation period means that 27 people fell ill before the Winton Races, 4 on the 2 days of the races, and eight people after the races. This indicates that of the people that died in Nightcaps the majority caught the influenza before the Winton Races.

The premature armistice celebration were held in Nightcaps in Friday 8 November. The O.S. reported that these were public celebrations and all of Nightcaps closed for the event. Going back to Table 1.5, six people caught influenza before the armistice celebrations, four on the day of the celebrations and 29 people after the celebrations. Of that 29, 17 caught the influenza before the Winton Races. Thus it can be concluded that

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26 Makgill AJHR 1919 H-31 p32
27 The bolded dates and figures are for the Winton races and the italicised date and figure is for the armistice day celebration.
28 Otautau Standard 12 November 1918 p3
the premature armistice celebrations were the major contributing factor to the spread of influenza in the Nightcaps area.

This may not have necessarily been the case for all communities in Southland, however, it is important to realise that there were several factors contributing to the spread of influenza. The Winton Races must not be over emphasised or viewed as the only factor contributing to the spread of influenza throughout Southland. The Winton Races saw a large number of people congregating together but it was not the only such event.

At a public meeting in Invercargill on the evening of 14 November, the Mayor of Invercargill, Mr J Stead, stated that "it [is] quite evident that the disease [is] not as malignant as in the north". In fact Southland did not fare as well as one would expect, or the Mayor thought it would. According to Rice's categorisation of New Zealand districts, Southland had the highest death rate (this excludes Maori deaths and the deaths in the military camps). On 14 November the Southland Times commented:

> Here conditions have never been as bad as in the Northern cities because the precautions which were taken there only when the position got to some extent out of hand were taken here while it was still well in hand. Still it would be idle to deny that the epidemic is very serious and neither the community nor any individual in it can afford to take it lightly.

This summarises the complacent attitude of the paper and the leading figures of Invercargill. I will argue that Southland and especially Invercargill did not in fact deal with the situation any earlier than other centres throughout New Zealand. Influenza was already present throughout Southland when steps were first taken to control it.

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29Southland Times 15 November 1918 p3
30Rice, Black November. Appendix pp193-203
31Southland Times 19 November 1918 p4
On the evening of 14 November a public meeting in Invercargill attended by about 40 citizens discussed "ways and means" of combating the pandemic. This was the first public meeting in the area to discuss the pandemic, held at the request of the Minister of Public Health. On 15 November the Southland Times noted that "the influenza epidemic in Southland is still holding sway, and, if anything, the last few days have seen an extension of the disease's prevalence."32 Railway and Postal officials reported staff problems with a number already ill. The Reformatory reported 106 inmates ill and 29 acute (pneumonia type) cases had been admitted into hospital whose staff had also been depleted with about six fallen victim33. Thus conditions in Invercargill were becoming out of hand when on the evening of November 14 when citizens gathered to discuss the situation.

In the days leading up to the public meeting the Health Department had been active in preparing the people of Invercargill for the threat influenza posed. In each edition of the Southland Times and Southland Daily News Health Department notices warned people of the influenza and advised of precautions that should be taken.34 Furthermore the Health Department had established an inhalation chamber in the city but it was only open for four hours a day. By 21 November the Health Department had also established chambers at Bluff, Winton, Gore and more in Invercargill.35 Thus the Health Department had made moves towards preparing the people of the coming influenza but it was questioned at the time if these measures were adequate.

The Southland Times extensive coverage of the public meeting recorded a seeming lack of regard (or respect) for the ability of the Health Department. This first becomes

32Southland Times 15 November 1918 p3
33ibid
34 Notices were also placed in small town papers such as the Western Star and the Otautau Standard.
35Southland Times 15 November p3, 21 November p2.
obvious when "Mr Gilkison moved that the meeting set up a vigilance committee to assist in the extermination of the disease, and working independently of the Health Department which, if it were to be judged by the inhalation chamber, did not come up to expectations". Mayor Stead had already expressed his opinion regarding the inhalation chamber, stating that it should be open from early morning, until late at night - not only four hours a day - and more chambers should be established immediately.

It appears that the general opinion was that the Health Department measures had thus far been ineffective and were not large enough in scope.

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36 Ibid
37 Ibid
I N F L U E N Z A  P R E C A U T I O N S:

In order to prevent the spread of this dangerous infectious disease, The Public are advised to observe the following precautions:

1. Spray the throat and nasal passages, or gargle the throat with a solution of Four Drops of Keroil, Hyoscy, or K.P. Fluid No. 16 in One Pint of Water. Keep the teeth and mouth clean.

2. Remain in the open air as much as possible.

3. Avoid heated atmospheres and crowded assemblages of any kind.

4. Give close attention to general personal hygiene, so that if attacked by the disease there will be a greater bodily resistance.

5. Do not travel beyond your own locality, unless absolutely unavoidable.

E. FABIS,
District Health Officer.
November 12, 1918.

G. R.
PUBLIC HEALTH DEPARTMENT, NEW ZEALAND.

PRECAUTIONS AND WARNINGS.

If persons undertake the following precautions there are very much less risk of taking the illness and likelihood of complications:

PRECAUTIONS.

1. Remain in the fresh air as much as possible.
2. Avoid too close contact with persons suffering from colds.
3. Absolutely avoid intimate contact—e.g., kissing and dancing.
4. Avoid places where persons congregate indoors—e.g., public meetings, trains, entertainments, etc.
5. Avoid draughts.
6. Always cough or sneeze into a handkerchief.
7. Use a simple spray for the nose and gargle the throat—e.g., Condy's fluid or any other throat antisptic, or use Formumant lozenges, etc.
8. Avoid close contact with persons suffering from influenza.

Do not remain unnecessarily long with patient, as this increases danger of infection.

Aromatic oil—tincture of guaiac is a drug that is much recommended.

Spray of wipe floor and furniture in rooms that have been occupied by infected persons with a solution of about half a breakfast-cup to a gallon of water of any reliable disinfectant.

P A T I E N T S.

Go to bed when feel onset of symptoms, and remain there till all the fever has completely disappeared. This is the only way of avoiding risk of complications.

Isolation should be practiced where possible, and only one member of the family should visit the patient's room.

Destroy sputum, etc., by receiving sputum and nasal secretions into proper receptacles containing a per cent. carbolic acid, or into cloths which afterwards burn.

Keep patient's feet dry, clean, etc., separate, and place in boiling water after use.

Handkerchiefs used by patients should be kept separate and well boiled after use.

Patients should not appear in public places for seven to ten days from the onset of the disease, and should be particularly careful not to sneeze or cough without using a handkerchief which has been soaked for an hour in a weak solution of disinfectant—say, a teaspoonful to a pint of water, otherwise there is danger of infection being spread.

Light nutritious diet is recommended.

The attendant on the sick person should wash her hands in water to which disinfectant has been added after leaving sickroom and before returning. She and the other members of the household should gargle the throat frequently and douche the nose with mild antiseptics. She should avoid visiting or coming into close contact with other people.

By order,

C. E. FRENDLEY.
Acting Chief Health Officer.
Wellington, October 8, 1918.
The second Health Department measure to be questioned was the list of places ordered to close by the Health Inspector. This list included "theatres, moving picture shows, dancing halls, billiard saloons, concert rooms, shooting galleries, and other buildings or rooms used as places of public entertainment or amusement, all public and private schools and all places used for race meetings". Fresh air and sunshine being the best antidotes to the disease, Mr Crosby Smith thought that these regulations were surely unnecessary. It appears that Smith stood alone on this point although he did receive some support when he advocated that Church services should be held outdoors instead of being cancelled.

In his prefatory comments, Mayor Stead justified his belief that the malignant form of influenza present in the north was not evident in the south because the percentage of deaths thus far was small compared with numbers afflicted. In Invercargill the largest number of deaths occurred on 26 November twelve days after Mayor Stead’s comment. The mayor’s comment was therefore premature as the pandemic had not yet peaked in Invercargill and it appeared in the Southland Times only six days after the first deaths were recorded. At the time of the public meeting the percentage of deaths compared with the numbers afflicted may have been low but the majority of the deaths were yet to occur.

The Mayor placed considerable emphasis on the need for a system of fighting the pandemic and Invercargill’s resources were very limited. The most urgent problems were the lack of medical assistance and the need for more hospital accommodation.

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38 ibid
39 ibid
40 Makgill, AJHR 1919 H-31 p35
41 ibid
42 Southland Times 15 November 1918 p3
The meeting moved to establish a Vigilance Committee with Stipendiary Magistrate Mr G Cruickshank as Chairman. Cruickshank also suggested adopting the block system which had been adopted elsewhere, in Invercargill. He thought the town should be divided into blocks and each member of the Vigilance Committee allotted one block. This person would visit each house in the section and notify the Central Bureau of all the houses that had influenza patients. The Central Bureau would then notify a sub-committee (such as the St Johns Ambulance Brigade) who would attend each house and deal with the situation.43

On 18 November the Southland Times reported that the town had been divided into 20 blocks. Each block had its own committee and convener and the duty of the committee was to make house to house visits and establish those cases requiring urgent attention.44 The organisation of the town and suburbs into blocks was demanded to ensure that strict supervision would be exercised and that every case would receive immediate attention. Through the block system all cases received prompt attention from the Vigilance Committee but not from the Invercargill doctors. They rejected this system on the grounds that it was impracticable and told Cruickshank that the system would not work and that they knew their own business best. The Vigilance Committee received a similarly hostile reception when they approached the doctors asking for their cooperation. The constant duplication of calls and waste of time and effort caused Dr Pottinger, when approached by the Vigilance Committee, to suggest that to avoid this people "should let any doctor know before 11.00am in the morning that his services are required". Dr Pottinger believed that this would enable each doctor to prepare his schedule effectively. One of Invercargill's doctors who returned from army camp to help later agreed with Cruickshank that lives had been lost in Invercargill because doctors refused to be directed, especially when the block system had proved to be a valuable system to work by in other areas.45

43 ibid
44 Southland Times 18 November 1918 p5
An example of the amount of time wasted by doctors refusing to use the block system can be found in the 20 November issue of *Southland Times*. It stated "cases have been received where influenza patients have been visited by three doctors, which means a valuable waste of time". One doctor then suggested "that whenever a household is visited and the doctor finds on inquiry that other medical men have been sent for, he shall, if possible, communicate with them informing them that the patient or patients have already received medical assistance." It was this sort of doubling up and lack of communication that the block system would have prevented.

Citizens committees were an important force in dealing with the pandemic and were set up in most districts when influenza became prevalent. The functions these committees carried out were vital in combating the pandemic; provision of food, assistance where necessary, arranging transport of serious cases to hospital and the equipment and management of temporary hospitals all come under the auspices of the citizens committees.

By 16 November the Invercargill Vigilance Committee had established a Central Bureau and was accomplishing a considerable amount of useful work. The Vigilance Committee's main problem, a lack of helpers, especially nurses and people to visit struck homes, mind children and do housework prompted the following advertisement to be placed on the front page of the *Southland Times*:

**INFLUENZA**

**HELPERS WANTED**

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45 *Southland Times* 16 November 1918, p5; 23 November 1918, p3; 3 December 1918. See also Rice *Black November* p99
46 *Southland Times* 20 November 1918, p3
47 Makgill AJHR 1919 H-31 pp35-6
48 *Southland Times* 16 November 1918 pp1 and 4
The VIGILANCE COMMITTEE have established a CENTRAL BUREAU at the SOUTHLAND LEAGUE OFFICES, Albion Buildings, Dee Street (opposite post-Office).

Telephone 990.

Will all those willing to act as Voluntary Helpers give in their names AT ONCE.

The Committee wish all suffering from influenza and in need of assistance to give in their names at the Bureau.

G. Cruickshank
Chairman.

It was hoped that all people in a position to offer their services would do so as few offers of help had been received at the time.

By this point the possibility of establishing an auxiliary hospital at Melrose College or Southland Girls' High School had become more urgent. The hospital was to be staffed by trained nurses and accommodate about 20 patients. Having a number of patients in one building instead of scattered over the town would save both time and labour.\(^49\) On 19 November the auxiliary hospital, established at Southland Girls' High School was opened and nine or ten cases were transferred that evening with more expected in the next two days.\(^50\)

\(^{49}\)ibid p4
\(^{50}\)ibid, 20 November 1918 p3
It is evident that influenza was poised to strike at the heart of the community by 15 November. On 14 November the Vigilance Committee received names of 14 households in which influenza raged. With such a large number of households requiring assistance, the Vigilance Committee decided that assistance could only be offered where no one was capable of looking after the patients. If the husband or wife was not afflicted then no assistance could be given. The *Southland Times* noted:

A call at the office of the Southland League, from which the Central Invercargill Vigilance Committee is operating, gives convincing evidence that this town is fairly in the grip of the influenza epidemic and that there is a call to everyone to neglect no precaution which will assist to prevent the spread of the infection.

Over the weekend of 16 and 17 November the Vigilance Committee received numerous applications for assistance. Each area committee had compiled schedules of all affected households in their area so that the Central Committee could arrange for relief where necessary but over the weekend the influenza had become so universal that the Central Committee had to ask the area committees to arrange the relief themselves. Little voluntary help had been forthcoming and the Central Bureau's main problem was still organising enough helpers to attend the ill. The number of voluntary helpers at the Central Bureau was so small that the Executive decided to urge the area committees to mobilise all help available. They also urged a policy of self-help as far as possible. Neighbours and friends were strongly urged to do all they could for those with influenza.

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51 ibid, 20 November 1918, p4  
52 ibid, 18 November 1918, p5  
53 ibid  
54 ibid
and the doctors refusal to be directed by the block system. Over the weekend a case came to the attention of the Vigilance Committee of a wife with nine children - the oldest of which was twelve - who had been struck down by influenza. The Vigilance Committee agreed that the children should be temporarily taken away from the home but were in a dilemma as to where the children should be put.\textsuperscript{55} The upheavals that most families faced during the epidemic are not recorded as this one was and thus situations such as this one are important to gain some understanding of the social upheaval and enormity of the situation that many families faced.

By 20 November 136 households had made applications for help to the Vigilance Committee and only the most serious cases were being admitted to the hospital.\textsuperscript{56} With applications for help increasing daily the Vigilance Committee continued to appeal for voluntary helpers. The \textit{Southland Times} reported that "the appeal of the Vigilance Committee is one that cannot be disregarded in any community which has a sense of duty".\textsuperscript{57}

It is reasonable to assume that people were very diffident about volunteering their services because of the considerable "fear" the pandemic provoked in most people. Mrs Kitty Laidlaw and Mrs Peg Taylor were young women in Nightcaps at the time of the pandemic and both women vividly remember how fearful people were of "catching the 'flu".\textsuperscript{58} It was also believed that "fear and apprehension simply makes conditions more favourable for the reception of the disease".\textsuperscript{59} Lack of commonsense precautions and panic would surely lead to evitable disaster.\textsuperscript{60} People only had to look around them to find reasons to be fearful of the "dreadful scourge" that had descended upon

\textsuperscript{55}ibid
\textsuperscript{56}\textit{Southland Times} 20 November 1918 p2
\textsuperscript{57}ibid p3
\textsuperscript{58}Interviews with Mrs Kitty Laidlaw and Mrs Peg Taylor. July 1991
\textsuperscript{59}\textit{Southland Times} 19 November 1918 p4
\textsuperscript{60}ibid and 20 November 1918 p2
them all. The town was very quiet with businesses closing early\textsuperscript{61} and many services such as the Railways and the Post Office limited.

On 23 November the Central Bureau was able to report that new cases applying for assistance were fewer in number, however calls for medical and nursing assistance and medicine were still regular.\textsuperscript{62} It appears that the number of people with influenza peaked about this date as the Central Bureau continued to report fewer applications for assistance. One nurse found that the number of serious cases on her schedule had dropped considerably and many patients were convalescing well.\textsuperscript{63} Although the number of people with influenza appeared to have reached their peak about this date the largest number of deaths was recorded on 26 November. After this point the situation continued to improve daily. There was a 30\% decrease in the number of cases reported and 27 November, the Central Bureau reported, was "the quietest day we have had. Things are much on the improve".\textsuperscript{64}

A continuing problem for the Vigilance Committee was still the need for more voluntary help. They were able to report an increase in the number of helpers on 25 November due to the efforts of the area committees, however, this situation was not to last. The Vigilance Committee continued to make appeals for more helpers to come forward. Helpers were needed to visit sick\textsuperscript{65} homes and to work at the hospital in the kitchens and as orderlies. The Vigilance Committees made a tremendous effort in combating the pandemic in Invercargill. The people of Invercargill, however, did not take any early measures to

\textsuperscript{61}Southland Times 20 November 1918, p3
\textsuperscript{62}Southland Times 23 November 1918 p3
\textsuperscript{63}Southland Times 25 November 1918 p3
\textsuperscript{64}Southland Times 26 November 1918 p3, 28 November 1918 p3
\textsuperscript{65}Southland Times 26, 27 and 28 November 1918
deal with the pandemic. When measures were taken to deal with the influenza it was only after the first deaths had occurred. The situation was intensifed by the doctors’ refusal to be directed by the block system and the lack of voluntary helpers to assist the Vigilance Committee.

What could have been done in Invercargill and indeed Southland to combat the influenza? In the Coromandel quarantine measures were instituted. All incoming traffic was monitored and all passengers were quarantined for 24 hours and then put through formalin inhalation chambers. All roads into the Coromandel were blocked and inhalation chambers set up. To travel past a road block one had to have a medical certificate. Furthermore, before going any further, the person had to take five minutes of formalin fumes.  

In the aftermath of the pandemic there was a debate on the effectiveness of these chambers. Doctor Colquhoun of Dunedin opposed the future use of inhalation chambers when giving evidence to the Influenza Epidemic Commission.

> Any method of inhaling poisonous vapours, I think, is bad, because if the vapour is strong enough to kill the organism it is strong enough to damage the mucous membrane. I know of many cases of people straight out of the inhalation chamber getting attacks of influenza directly afterwards.

The Chief Health Officer, Dr Valintine opposed this view saying that although the value of the chambers was not absolutely proved, they had been used in the military camps and this experience would justify the Department using them in the future. The Coromandel experience would also have backed Doctor Valintine’s view.

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66 J Lovett-Gregg. ‘How Coromandel Kept the Influenza Epidemic at Bay” in NZMJ vol 18 no 33 pp52-3
67 Influenza Epidemic Commission AJHR 1919 H-31A p6
68 ibid
One can only speculate as to whether or not similar measures could not have been implemented early on in Southland. A more effective measure would have been for the Christchurch Carnival and the Winton Races to be cancelled or postponed. The premature armistice celebrations in most areas were spontaneous events and thus little could have been done about them, however, the Otago A&P Summer show was postponed, as were the Gore, Winton, and Wallace A&P shows. Had earlier gatherings like this been postponed the pandemic in Otago and especially Southland may not have been as severe. The pandemic in the North Island was reported in the Southland Times and the Southland Daily News from the beginning and thus people were aware of its progress south and foresight could have seen these events postponed making the spontaneous armistice celebration the only large gatherings of people.

Four towns in Southland had a death rate higher than 15 per thousand. These towns were Riverton 16.2; Winton 16.4; Otautau 25.0; and Nightcaps 45.0. A further two towns had a death rate higher than 10 per thousand (Wyndham 13.1 and Mataura 11.5). The Southland Times noted

> The country towns are seriously affected and as there are no doctors in many of the smaller places they are unable to cope with it as efficiently as in the larger cities.

Certainly, lack of facilities and resources were major obstacles for rural areas in their efforts to combat the pandemic. Many communities as well as having no doctor were not large enough to qualify for the status of town district and therefore had no Town Board. This meant there was no official body to initiate measures to combat influenza and thus many rural towns and communities lacked effective organisation to

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69 Southland Times 16 November 1918 p1; 21 November 1918 p2; 23 November 1918 p1
70 Rice, Black November 203 for all the death rates except Nightcaps.
71 Southland Times 20 November 1918 p3
72 In 1918 to qualify as a town district the defined area had to have a population of 600.
deal with the situation.\textsuperscript{73}

With the increasing number of country calls the Vigilance Committee decided it would have to take some measures to deal with them. The first step was to place Mr J T F Mitchell in charge of the country areas (excluding eastern Southland that was administered through Gore) and the placement of the following advertisement in the \textit{Southland Times} on 23 November.\textsuperscript{74}

\textsuperscript{73} In areas that had a town board, such as Otautau, it was the Town board that first took steps to deal with the pandemic

\textsuperscript{74} \textit{Southland Times} 23 November 1918 p1
COUNTRY COMMITTEES and persons requiring medicine or assistance from the Vigilance Committee are requested to notify their needs through Mr J T F Mitchell of Messrs Wright, Stephenson & Co. Phones 602 (from 9 to 5), 399 (later)

G Cruickshank
Chairman

With Mitchell directing the operation, supplies of medicine and information were sent out to rural areas by car to be left at suitable centres such as Post Offices, telephone bureaus or well-known homesteads. The country districts were also asked to set up local committees to organise a means of self-help in their areas. These committees would perform similar tasks as the Vigilance Committee and area committees in Invercargill and were asked to report to Mitchell on the progress in their area.

To gain an understanding of the kind of help country districts were requiring one has to look at the reports in the Southland Times. Some areas were able to report that they were coping well with the situation while in other areas the situation was completely out of hand.

Riverton was one country town that had the situation reasonably well in hand although

75 Southland Times 23 November 1918 p2
76 Southland Times 25 November 1918 p3
the death rate of 16.2 per thousand does not seem to indicate that this was so. In 1918 the hospital of Riverton was the only one in the Western Southland and by 20 November the pandemic was general throughout the district, placing considerable strain on the hospital and its resources. According to the Southland Times the hospital staff had been working "heroically" but most of the nurses were down and volunteers were doing a lot of duty at night. Doctor Trotter, the only doctor in Riverton, was having a "strenuous time" but was still making all calls while the chemist, Mr J T Price was extremely busy.77

The first death recorded in Riverton was on 14 November and within two weeks the pandemic had peaked. On 26 November the Riverton Committee was able to report an improvement in the general conditions and the remaining patients.78 At this point there was every indication that the pandemic was abating in Riverton and conditions would continue to improve.

A few kilometres down the road the township of Orepuki was not as well organised. In the 1916 Census Orepuki was classified as a small centre and had a population of 746.79 By 20 November the situation in Orepuki required urgent attention. At least 150 people were affected, it had proved impossible to secure medical attention and nurses and the supply of medicine was almost nil. The Vigilance Committee was only able to dispatch two gallons of the standard mixture, a medicine thought to help the symptoms, and arrange for Mr D R Campbell, a dentist, to travel to Orepuki and give what assistance he could.80 This assistance did little to relieve the situation as on 27 November the Orepuki Advocate stated "that influenza has taken a grip on nearly every household throughout the town and district".81

77 Southland Times 20 November 1918 p3
78 Southland Times 27 November 1918 p3
79 1916 Census p25
80 Southland Times 20 November 1918 p3
81 Southland Times 27 November 1918 p3
In other areas such as Grove Bush and Mabel Bush the pandemic was general and the staff of both cheese factories were stricken by influenza as early as 16 November.\textsuperscript{82}

This is only one of many examples of businesses that were affected by the pandemic. The Tuatapere Guardian provided a vivid description of the small town experience in the middle of the pandemic.

\textit{No shops open, nobody on the streets, no sound of voices, everyone that does business generally, including post and railway officials, in bed with influenza. That is how the township appeared yesterday.}\textsuperscript{83}

This could have been a description of any town in New Zealand at the height of the pandemic.

Many towns established temporary hospitals to deal with the pandemic. Lumsden (population 530) and Balfour (population 449) were two such communities: Balfour also had the services of Mrs Orr Jn, who had trained as a nurse in an English hospital. By 23 November Lumsden and Balfour were both able to report that while there were still several cases, the worst had passed.\textsuperscript{84} It appears that if the temporary hospitals and other such measures were taken early enough that the situation would

\begin{quote}
\textbf{Flumint.}

This well-tried and proven cure has many friends. "One dose abates—One bottle dispels."

It is easy and pleasant to take.

\textbf{PRICE—1s 6d and 2s 6d PER BOTTLE.}

\textbf{GORDON SINCLAIR}

M.P.S.
Pharmaceutical Chemist (by exam)
MAIN STREET, OTAGO.
\end{quote}

\begin{itemize}
\item \textsuperscript{82} Southland Times 16 November 1918 p4
\item \textsuperscript{83} Southland Times 21 November 1918 p2
\item \textsuperscript{84} Southland Times 23 November 1918 p3
\end{itemize}
not get completely out of hand.

By 10 December the pandemic was on the decline in the western districts. The temporary hospitals were able to report considerable improvement in their patients. On 9 December the hospitals recorded the following conditions: Riverton one admitted; three discharged; one death; 23 remaining patients; Otatau five admitted; four discharged; no deaths; 26 remaining patients; Tuatapere one admitted; three discharged; no deaths; 14 remaining patients. Nightcaps recorded nine patients still in hospital and Orepukihospital had closed.85

Efforts to organise a system of dealing with the pandemic were more effective in some areas. However, the most difficult obstacle that all country districts had to face was the lack of facilities, medical help and supplies. Doctors in country towns were usually working alone and were too busy dealing with the pandemic in their own town to deal with the situation in neighbouring towns that had no doctor. In many cases the township was reliant on the Vigilance Committee for advice and assistance but the Vigilance Committee was not in a position to offer a great deal of assistance. They were able to supply country districts with medicine and information but little else.

85 Western Star 10 December 1918
In January 1919 the people of Nightcaps were both looking forward to and diffident of the upcoming Wario Races. The 1918 Influenza Pandemic had taken its toll on this small coal mining community, with 41 people succumbing to the virus and fear of it still lurked in the back of people's minds. This chapter is going to outline the pattern of the pandemic in Nightcaps, with reference also to Otautau, the nearest town with a doctor and a chemist.

In the early twentieth century Nightcaps was a thriving community; it had three stores, two saddlers, two blacksmiths, a bakery, a hotel, a Post Office and a telephone Bureau. The primary school had been established in 1884. There were Presbyterian and Methodist Churches and a Roman Catholic Church in nearby Wreys Bush. Nightcaps was essentially a coal mining community that also serviced the surrounding farming district. It had rail links to both Invercargill and Riverton through the railway junction at Thornbury. As well as servicing the coal mine there was a daily train to Invercargill, leaving at 7.00am and returning at 7.00pm. High school children travelled daily to secondary school in Invercargill or the District High School in Riverton by train. Because of its relative geographical isolation the train was an important link for the citizens of Nightcaps.

Today Nightcaps is like many small towns in Southland. Its population has declined and services are centralised in the larger towns and Invercargill. Old derelict buildings with boarded up windows are the only evidence of days gone by when the township was the centre of activity. However, the community spirit and cohesiveness still exists as it did in the past and was very important when the community had to deal with the legacy of World War I and the influenza pandemic. As well as losing 29 young men in the 'great war', a further 41 people died in the pandemic. Thus all families of Nightcaps were in some way effected by the war and the pandemic.
heralded the armistice". Although the armistice was not official until 11 November 1918 this meant little to the many people throughout New Zealand who celebrated on 8 November. In Nightcaps the armistice celebration was a momentous occasion. The Otautau Standard reported that all of Nightcaps closed for the public event. Everyone in the town was present for the celebrations which involved a hastily built bonfire, "much singing and shouting and waving of flags" (the union jack). Walter Excell remembers that it was an unusual day at school and "the dreary days of watching casualty photos in the Otago Witness had come to an end". The armistice celebrations were an embodiment of the community spirit that existed in Nightcaps. However this happy occasion was followed by weeks of 'fear and sadness' wrought by the 'terrifying' influenza as it raged throughout the district. This change in atmosphere is caught by Walter Excell in the following statement.

The senior boys, led by "Twist" Jaggers and "Bang" Kemp, organised us into a squad which marched up to the Main Street, and back singing "Pack up your Troubles", sadly there were many days to follow during the 'Big Flu' when there would be no school.

Six days after the armistice celebration, on 14 November, three people from Nightcaps died of influenza and many more were stricken by it. Mary Boyle, the publican's wife, died in her home, and her brother, Mr Timothy Cairns died at the Wallace Hospital in Riverton, while Edwin Keig, a returned soldier died at the Greer farm where he was working.

The Western Star on 12 November reported that influenza was prevalent in various parts of the district and cases were being reported from all quarters. Considering the severity of the pandemic in the north it is puzzling that so little had been done to combat its appearance in the district: in fact towns and communities did not organise action against the pandemic until after the first deaths occurred. It appears that this was the case in Nightcaps and Otautau. However, these two towns were not in similar positions to combat the pandemic. Otautau according to the 1916 census had a population of 696. The Town Board had been established for many years and there was a resident

90 Ibid p180
91 Otago Standard 12 November 1918
92 Boyle, V. Centennial Supplement p90
93 Boyle, V. A history of Education in the Nightcaps District p101
94 These are the adjectives that the people I interviewed used to describe the pandemic.
95 Boyle p101
96 Names of victims have been used if they were on public record, otherwise names will not be used.
97 Western Star 12 November 1918
98 1916 Census p20
Evidence suggests that there are two reasons why the death rate was so high in Nightcaps. First is the fact that the newly elected Town Board was ineffective in dealing with the crisis because it lacked experience. The second was the very high morbidity rate in Nightcaps: at its worst there were only two adults not down with influenza. This is discounting any children who did not catch influenza. A number of children not stricken had the considerable responsibility of caring for their parents, brothers and sisters but of course were of little help in any other capacity.

What measures were taken in Nightcaps to deal with the Pandemic? Considering the course of the pandemic in Nightcaps inevitably leads one to also consider the pandemic in Otautau. Nightcaps was reliant on Otautau for medical services, medicine and any other aid until adequate measures had been taken and even then the reliance on Otautau was not relinquished. It has been established in chapter one that no public action to combat the pandemic in Invercargill was taken until 14 November and in many country districts not until after the Vigilance Committee advised that Country Committees should be established to deal with the pandemic in their areas. In Otautau it was the Town Board that first made moves towards combating the pandemic, however, it is unclear who was responsible for taking the initial action in Nightcaps. This is because all the Nightcaps Town Board Records, held at the Coronation Hall were lost in 1950 when a fire destroyed the Hall and nearby shops. Thus trying to establish what action the Town Board took has been like trying to put together a jigsaw puzzle, in which all the pieces do not fit.

The evidence suggests that much of the initiative in dealing with the pandemic in Nightcaps came from some leading figures consulting closely with Otautau. It is therefore important to establish what the Otautau Town Board did to combat the pandemic in their district and the help they afforded the Nightcaps district.

The monthly meeting of the Otautau Town Board held on 11 November was attended by the District Health Officer for Otago and Southland, Dr Far Is. This was the first

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99 Otautau Standard 1 October 1918. To qualify as a Town District the area had to have a population of 600
100 Thompson p321
101 Interviews, all the people I have interviewed have confirmed this.
meeting at which influenza was mentioned. Dr Far is recommended that Public Notices be distributed advising people of precautions that should be taken. He also requested that the Hall be sprayed with disinfectant on every occasion it was used for public purposes. The Health Department was establishing depots for the distribution of disinfectants and other such items necessary for combating the pandemic. The caretaker of the Hall was authorised to procure the necessary materials and carry out the work.102

PUBLIC NOTICE

Otautau Town Board Influenza Urgent Important

In view of the serious epidemic now prevalent in the Dominion, residents in the Town district are urged to take all immediate steps to see that their sanitary arrangements are maintained in the best of order.

The public are directed to observe any notifications made from time to time by the Health Authorities.

Standard influenza remedy is available for speedy issue to the public on demand from Dr A A Stewart, Otautau.

The cooperation of the public with the Board, the Health Department in combating the epidemic is asked for.

By Order.103

The next time the Town Board met was on Thursday morning, 14 November for a special meeting. The meeting was called to discuss a telegram from the Health Department and decide upon what action should be taken. As well as being attended by the usual board members, this meeting was also attended by Dr Stewart and two leading men from Nightcaps; the Reverend Bandy the Presbyterian Minister, and Mr Ronald.104 After Dr Stewart outlined the best means of prevention and treatment and supplied some prescriptions it was moved and carried that a notice would be sent to all households and also be placed in the Otautau Standard advising people of the methods of prevention and treatment.105 The Board also took upon itself to procure supplies that were available free of charge form the Board's depot on the Main Street, with Mrs Parmenter attending to the distribution.106

The Board met again the next day, Friday 15 November to organise further ways and means of combating the pandemic. This meeting was devoted entirely to organising the

102 Western Star 15 November 1918, Otautau Town Board Minutes. 11 November 1918
103 Otautau Standard 12 November 1918, 19 November 1918
104 Western Star 15 November 1918
105 Otautau Town Board Minutes. 14 November 1918
106 Otautau Town Board Minutes. 15 November 1918
establishment of a temporary hospital in the Town Hall in conjunction with Dr Stewart. Dr Stewart was authorised to order the removal of patients to the temporary hospital and to order mattresses and bedding while the Town Board undertook to organise screens and such like. Captain Andrews (a well known figure in Otautau) was empowered to engage female assistants to help Dr Stewart at the temporary hospital.  

The Otautau temporary hospital opened in the Town Hall on Saturday 16 November and was able to accommodate at least 20 beds. Throughout the course of the pandemic the temporary hospital treated 93 cases of influenza (including complications such as pneumonia and coma); 68 cases were discharged convalescent; three were transferred to the Wallace hospital in Riverton and one to Invercargill; and 21 cases were fatal. The hospital treated 13 cases from Nightcaps of which eight were fatal. All these cases were treated over a four week period by Dr Stewart and two nurses; Nurse Liddell and Mrs Dr Stewart.  

The Otautau Standard reported that "a hospital sprang into being in a night". This was largely due to the response of the Town board, the Wallace County Council (whose main offices were in Otautau), the Red Cross, the War Funds Association and the general public. Once the hospital was up and running Nurse Liddell and Mrs Dr Stewart, assisted by Captain Andrews and Mrs Cupples were able to establish a routine and patients were accepted from the afternoon of Saturday 16 November onwards. The establishment of the hospital slightly eased the pressure on Dr Stewart who had been having difficulties dealing with the patients both in Otautau and the surrounding district. Praise was heaped on Dr Stewart by the Otautau Standard for his ability to keep the situation in hand. "Dr Stewart has given his utmost of his strength and skill, has by this foreseeing the need of the hospital accomplished far more than would other have been possible."  

The importance of establishing the temporary hospital lay in the fact that a number of patients in one place saved a considerable amount of time for the doctor. It was believed that much suffering and probable death had been averted with the establishment of the temporary hospital. However the hospital lost its first patient on its second day. The

107ibid
108Southland Times 16 November 1918, Otautau Standard 19 November 1918
109Otautau Standard 17 December 1918
110Otautau Standard 19 November 1918
111ibid
112ibid
113ibid
36 year old spinster from Nightcaps had had influenza for twelve days and pneumonia for three and died at the hospital on 17 November.\textsuperscript{114} The woman's father, a Nightcaps resident was asked to make the funeral arrangements.\textsuperscript{115} Victims of influenza had to be buried within 24 hours of death\textsuperscript{116} and for this reason they tended to be buried at the nearest cemetery to their place of death. Of those who died in Otautau and Riverton only two (one from Otautau and one from Riverton) were brought back to Nightcaps or Wreys Bush for burial.\textsuperscript{117} Furthermore those two people were some of the earliest victims from Nightcaps. From this point on only victims who died in Nightcaps, Wairio or Wreys Bush townships were buried at the Nightcaps or Wreys Bush cemeteries.

The district was fortunate that Otautau had a chemist, Mr Gordon Sinclair, and he was kept busy supplying medicines and remedies until he also came down with influenza in the fourth week of November. The seriousness of the situation in the district, at this point, led to a chemist (Mr Colbran) being sent out from Invercargill.\textsuperscript{118} This had been arranged though Mr Mitchell, the Vigilance Committee's convenor for the country districts.

By 27 November the Southland Times was able to report that 'systematic organisation [was] well in hand throughout the district and Dr Stewart express[ed] his confidence in successfully combating the epidemic'.\textsuperscript{119} Although Otautau had taken measures to deal with the pandemic it appears that it lingered longer in Otautau than other townships. On 10 December the Western Star reported that "owing to the number of cases at Otautau, the Health Department have, by request, reimposed the restrictions on the town and a three mile radius. This does not apply to the remainder of the district.\textsuperscript{120} Thus the situation was still quite serious in Otautau, especially when other townships were almost back to normal. One such case was Orepuki. The township was seriously affected by the pandemic and had high morbidity rates but by 10 December the Orepuki temporary hospital had closed and there were no patients left in the township.\textsuperscript{121}

On 9 December the Otautau Town Board met for its monthly meeting and the influenza crisis dominated the agenda. The temporary hospital was still open but it was decided that it should be ascertained whether it could be closed and what steps should be taken

\begin{itemize}
\item \textsuperscript{114}Otautau Death Register 1918
\item \textsuperscript{115}Otautau Town Board Minutes 18 November 1918
\item \textsuperscript{116}Makgill AJHRH-31 1919 p36
\item \textsuperscript{117}Death Registers for Otautau, Riverton and Nightcaps.
\item \textsuperscript{118}Southland Times 25 November 1918 p3
\item \textsuperscript{119}Southland Times 27 November 1918
\item \textsuperscript{120}Weekly Star 10 December 1918
\item \textsuperscript{121}ibid
\end{itemize}
in the meantime for its closure, including the disposal of all equipment. Dr Stewart was asked to arrange for bad cases to be transferred to Riverton in order that the hospital be closed as soon as possible. It was noted that the Health Inspector had been asked to make a visit to the town.\textsuperscript{122}

It appears that the Town Board was eager to continue with business as usual and put the crisis behind them. This "life must go on" attitude of people (when it became apparent that the pandemic had run its course) was, I believe, the way of dealing with the crisis and the loss of family and friends. When asked how people dealt with the aftermath of the pandemic, Mrs Taylor, Mrs Laidlaw and Mr Sinclair all stated that life continued as normal because what else could be done.\textsuperscript{123}

The final mention of the influenza pandemic in the minutes of the Otautau Town Board was at a special meeting on 19 December, called to tie up any unfinished business created by the pandemic. The temporary hospital had closed on 17 December and the accounts had to be dealt with; the Health Inspectors visit was also briefly mentioned.\textsuperscript{124} The next meeting of the Town Board was their monthly meeting in January 1919: at this meeting it was business as usual with no mention of the recent scourge.

Of the 41 deaths from Nightcaps only 23 people died in the area, either in their homes or at the Nightcaps temporary hospital. The other deaths occurred at the Wallace hospital in Riverton, the Invercargill hospital and the Otautau temporary hospital. Excluding the one death at Invercargill hospital, there is a pattern to the deaths at Riverton and Otautau. The Nightcaps people who died at Riverton all contracted influenza before the Otautau temporary hospital was established and those who died at Otautau contracted influenza before the Nightcaps temporary hospital was established.

\textsuperscript{122}Otautau Town Board Minutes 9 December 1918

\textsuperscript{123}Interviews. Also an article by W Excell in the \textit{Southland Times} 18 August 1977.

\textsuperscript{124}Otautau Town Board Minutes 19 December 1918
TABLE 2.1 Place of death

<table>
<thead>
<tr>
<th>Place</th>
<th>NUMBER</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nightcaps</td>
<td>19</td>
<td>46.3%</td>
</tr>
<tr>
<td>Wairio</td>
<td>2</td>
<td>4.9%</td>
</tr>
<tr>
<td>Wreys Bush</td>
<td>1</td>
<td>2.4%</td>
</tr>
<tr>
<td>Moretown</td>
<td>1</td>
<td>2.4%</td>
</tr>
<tr>
<td>SUB TOTAL</td>
<td>23</td>
<td>56.0%</td>
</tr>
<tr>
<td>Riverton</td>
<td>9</td>
<td>22.0%</td>
</tr>
<tr>
<td>Otautau</td>
<td>8</td>
<td>19.6%</td>
</tr>
<tr>
<td>Invercargill</td>
<td>1</td>
<td>2.4%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>41</td>
<td>100.00</td>
</tr>
</tbody>
</table>

TABLE 2.2 Deaths in Hospital and at home.

<table>
<thead>
<tr>
<th>DATE</th>
<th>HOSPITAL*</th>
<th>TEMPORARY HOSPITAL**</th>
<th>HOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>November 14</td>
<td>1</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>November 15</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>November 16</td>
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<td>-</td>
<td>-</td>
</tr>
<tr>
<td>November 17</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>November 18</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>November 19</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>November 20</td>
<td>-</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>November 21</td>
<td>-</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>November 22</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>November 23</td>
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<tr>
<td>November 24</td>
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<td>-</td>
<td>2</td>
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<tr>
<td>November 26</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>November 27</td>
<td>-</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>November 28</td>
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<td>November 29</td>
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</tr>
<tr>
<td>TOTAL</td>
<td>10</td>
<td>19</td>
<td>10</td>
</tr>
</tbody>
</table>

* Riverton and Invercargill
** Otautau and Nightcaps

The main problem in the country districts was the fact that many smaller towns did not have a doctor and thus their ability to cope with the pandemic efficiently was seriously hindered.125 This was the major problem in Western Southland where there were only two doctors in the district: Dr Trotter in Riverton and Dr Stewart in Otautau. As well as the Nightcaps area this left many small communities such as Thornbury, Orepuki, Colac Bay and Tuapapere almost completely unattended and reliant on Drs Trotter and Stewart who were already considerably overworked.

125 Southland Times 20 November 1918 p3
The Otautau Standard appeared to take the view that the crisis in Nightcaps was significantly worse than in Otautau.

The town of Nightcaps is a case in point. It appeared there in its worse form earliest in the Western District. There was no doctor there, and before the newly elected and inexperienced Town Board could take measures to cope with it practically the whole township was down. The death rate has been very high and would have been worse but for the aid afforded by Otautau.  

Evidence indicates that the morbidity rate was extraordinarily high in Nightcaps and using the contraction rate of those who died as an indication of the overall pattern of contraction in Nightcaps it appears that the majority of those who had influenza caught it by 12 November.

Table 2.3

<table>
<thead>
<tr>
<th>Nov</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
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<th>16</th>
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<th>25</th>
<th>26</th>
<th>27</th>
<th>28</th>
<th>29</th>
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<tbody>
<tr>
<td>#</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
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<td>7</td>
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<td>4</td>
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<td>*</td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>

This being the case, the aid afforded by Otautau was vital for the people at Nightcaps. Although a considerable number of people were also taken to Riverton it was a long journey in 1918 and the establishment of the temporary hospital at Otautau cut the journey in half. There were few cars in Nightcaps at the time but those who did were willing to offer their services if they were in a position to do so. One of the Moss brothers took many victims to Riverton in his car, making so many trips that he wore out two sets of tyres.

On 12 November the Otautau Standard reported that in Nightcaps, the school, bakery, blacksmiths shop and one Moretown mine were closed due to the number down with influenza. A number of Railway staff and staff at the Railway Hotel were also ill and the Nightcaps mines were closed for a day to be disinfected. Over the next week all shops and mines closed in Nightcaps as more and more adults fell victim to influenza. Nightcaps, like many places, had become a 'ghost town' virtually overnight and remained 'deathly silent' for the next three weeks. The Nightcaps coal

126 Otautau Standard 26 November 1918
127 Thompson, p205
128 Otautau Standard 12 November 1918
129 Otautau Standard 24 November 1918
Company recommenced work with a limited number of workers on Tuesday 26 November, having remained idle for two weeks and over the next two weeks businesses began to reopen until all businesses were again operating by 10 December. The township had remained completely idle for two weeks while people battled against the pandemic.

The most important step Nightcaps made in combating the pandemic was the establishment of the temporary hospital in the Nightcaps Presbyterian Church. It had been decided to set up the hospital in the Presbyterian Church because it had recently been renovated to include the addition of a kitchen with a bench, sink and range. This was important because it meant that soup for the patients could be made on the premises instead of the inconvenience of it being made elsewhere and transported to the Church. The temporary hospital opened on 20 November, seven days after the first deaths occurred and two days before the mortality peaked. On the day the hospital opened, two more people died, taking the toll to 17 deaths. Because almost every adult was stricken down by influenza the temporary hospital was reliant on helpers form outside the district to nurse the ill. Mrs Arthur from Otautau was placed in charge of the temporary hospital with Mrs Jan Beck and Miss Grace Beck of Aparima helping her. Mrs McDowell was also a great help doing all the cooking for the hospital.

Mr John Gray the principal of Nightcaps Primary School from 1900 to 1919 was a great asset to the community during this ‘terrifying time’. When he first closed the school he kept up classes for Standard Six pupils who were preparing for their proficiency examinations. However, this only lasted a few days before he had to send the class home because he was needed in a more urgent capacity nursing people in their homes and later at the temporary hospital. The unprecedented demands the pandemic placed on the community meant that any adult not stricken by influenza was an important asset in combating the pestilance.

Even with Mrs Arthur and her helpers and Mr Gray assisting, the temporary hospital was unable to care for all the victims in Nightcaps. One person I interviewed said that it was very difficult to get into the temporary hospital simply because there were not enough helpers to nurse everyone. Although the temporary hospital did a great service for the community, its ability was seriously hampered by the fact that there were never enough helpers to cope with the number of patients. This situation was of course

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130 Otautau Standard 10 December 1918
131 Interview with Mr Sinclair. Mr Sinclair’s family were the builders in Nightcaps and had done the renovations to the Church.
132 Otautau Standard 24 November 1919
133 Interview with Mrs Taylor
134 Boyle History of Education pp13-14, 96
135 Interview with Mrs Taylor
intensified by the fact that there was no doctor in Nightcaps and Dr Stewart was already extremely busy in Otautau. For the week of 1-7 December the situation at the hospital was much improved. The final death in the district occurred on November 29 and no new cases were admitted to the hospital, four people were discharged convalescent and six cases remained, two being children.\textsuperscript{136}

On 30 November the \textit{Southland Daily News} reported that every student of the Otago Medical School served in some part of the Dominion during the pandemic.\textsuperscript{137} Nightcaps was fortunate to have the services of one of these medical students for a period of two weeks from 24 November to 8 December.\textsuperscript{138} Special authority had been granted by the Health Department and the Medical Council as an emergency measure to allow final year students to act as locums for sick doctors or where the doctor had died. This authority allowed students to act as fully qualified doctors except to sign death certificates.\textsuperscript{139} This authority was later extended to include fourth year students. Seventeen fourth year students were accepted to act in this capacity: some were sent to Auckland and Wellington, while eight were kept back for service south of the Waitaki.\textsuperscript{140} In the larger cities second and third year students were also utilised as nurses in the public hospitals.

The services of these students were especially important in country towns, such as Nightcaps, that had no doctor. The student was able to do everything a qualified doctor could do except sign the death certificates and in Nightcaps, Dr Stewart was called upon to do this. The services of the medical student in Nightcaps was also important to Dr Stewart as it released him from his responsibilities in the township and allowed him to concentrate on Otautau patients and the Otautau temporary hospital.

Little is known of the medical student that was in Nightcaps. By the time the student arrived 30 deaths has already occurred and four more people died on the day of his arrival (one at the Otautau temporary hospital), with five deaths (one in Otautau and one in Riverton) occurring during his two weeks in Nightcaps. The student's time in Nightcaps was at the tail end of the pandemic in the district and thus little could be done in the way of prevention: the student's main task, therefore, was to assist with the convalescence of those patients that were still ill.

Prior to the outbreak of influenza in the Nightcaps district, Mr Donald Sinclair snr, a leading figure in Nightcaps, was authorised to establish an inhalation chamber in one of

\begin{flushleft}
\begin{itemize}
\item \textsuperscript{136}Otago Standard 10 December 1918
\item \textsuperscript{137}Southland Daily News 30 November 1918
\item \textsuperscript{138}Otago Standard 30 November and 10 December 1918
\item \textsuperscript{139}Anderson \textit{Doctor in the Mountains} p47
\item \textsuperscript{140}Southland Times 18 November 1918
\end{itemize}
\end{flushleft}
the tiny bank buildings on the Main Street.\textsuperscript{141} It appears that the inhalation chamber was open for about two weeks. It closed on 18 November but had been set up before the armistice celebrations on 8 November. A considerable number of people took advantage of the inhalation chamber while it was operating. Mr Walter Excell, then a seven year old child, remembers his experience of it well. He went with three friends down to the chamber and watched as his friends took the treatment but "chickened" out of having the treatment himself. In retrospect and with the knowledge we have of viruses today, Mr Excell questions the effectiveness of this procedure. "Modern ideas would say that it was quite ineffective but Mr Sinclair was at least trying".\textsuperscript{142}

On the basis of the preceding outline of the pandemic in Nightcaps and Otautau, several questions arise. How much warning did the community receive of the pandemic and were any instructions given as to combating it? How well did Nightcaps prepare for the crisis? Did the community utilise all possible resources in dealing with the crisis? What was the impact of the pandemic on people’s lives?

Establishing the extent to which any prior warning of the pandemic was given in Nightcaps causes some difficulty, in that it cannot be ascertained if the Town Board received any formal notification from the Health Department. I would assume, on the basis that the Otautau Town Board received a telegram from the Health Department, that these telegrams were sent to all local bodies and therefore the Nightcaps Town Board would have received one. The other main source of warnings and instructions on prevention and precautions was through newspapers. The \textit{Southland Times}, the \textit{Southland Daily News} and the \textit{Otautau Standard} (a weekly) were all circulated in the Nightcaps District, although there is no evidence of how widespread this circulation was. I was, however, told that the majority of people in the district got the \textit{Otautau Standard} which came out every Tuesday. All of these newspapers carried notices from the Health Department; the \textit{Otautau Standard} also had a notice form the Otautau Town Board. These notices carried information on how to deal with influenza and instructions on prevention and precautions that should be taken. The newspapers also carried articles on the course of the pandemic throughout New Zealand, especially in the main centres and larger towns. There is, therefore, sufficient evidence to suggest that Nightcaps received prior warning of the pandemic. If these warnings were inadequate, then one can speculate on what other measures could have been taken. Furthermore, it involves the discussion of whether these warnings were adequate throughout New Zealand as it cannot be concluded that they were not adequate in one area but were in another. Every district was in the same situation although it is recognised that rural districts did not have the same access to resources as larger towns and the main centres.

\textsuperscript{141} \textit{Otautau Standard} 19 November 1918

\textsuperscript{142} \textit{Southland Times} 18 August 1977. The effectiveness of this treatment has been discussed in chapter one.
If these warnings had been inadequate for all rural districts one could expect a lack or
and a consistent high death rate in all rural districts. However, this is not the
case. Rural deaths accounted for one fifth of the total influenza deaths in New
Zealand. If the main centres are excluded the ratio becomes two urban deaths to one
rural death.\textsuperscript{143} Therefore the evidence does not support such a claim.

On the basis of these warnings how well did Nightcaps prepare for the pandemic? The
only evidence of any preparation prior to the first deaths in Nightcaps was the
establishment of an inhalation chamber. As an alternative spraying peoples’ throats with
baking soda was a popular remedy.\textsuperscript{144}

\begin{quote}
\textbf{Fluencea Epidemic.}

\textbf{PRECAUTIONARY Directions to Householders.}

The Otago Town Board, at the request of the Minister of Public Health, and after consultation with
Dr A. A. Stewart, issues the following directions to householders, and requests adherence to the rules laid
down to combat the epidemic:

1. Go to bed directly you feel symptoms like pain in the head and limbs, or a "cold."

2. Go to bed in a room not over crowded by a person who is well, and
stay there until the temperature returns to normal.

3. On going to bed take a drink of any kind as hot as possible, remove
sheets, and lie between blankets.

4. Take light diet, such as milk, beef tea, soups and gruel.

5. Don’t deprive yourself by looking
at the bed side

6. Remember the large majority of
persons who take ill get well.

7. Only one member of the family of the house should visit the patient’s
room.

\textbf{8. Don’t allow people to come
into your room and later there.}

\textbf{9. If no doctor has prescribed for
you, take unmedicatedquinina in a
half to a teaspoonful dose in plenty
of water every four hours.}

\textbf{10. Add one teaspoonful of borax acid or borax, one tablespoonful of
baking soda, and one teaspoonful of
salt to a large, full measure of hot water.
Sniff up this solution as hot as can be
be borne through the nose, then
swallow the throat with the solution as
hot as can be borne. Brush the
teeth with the same solution, or with
any antiseptic tooth-paste. Do all these
three times a day.}

\textbf{11. If you believe you catch, try to
put your hands behind your head and
limbs, and a "cold."

\textbf{12. Keep in bed till you feel you
are quite able to get about; this will
be when your temperature is down to
normal.}

\textbf{13. Don’t go outdoors, except into
the air, until the cathartic, or "cold in
the head", if you have this
symptom, is quite gone.}

\textbf{Drink freely of fresh, cold water.}

\textbf{To assist residents to avert or
modify the disease, the Board will
provide FRESH APPLIATION of
either of the following sprays:}

\textbf{No. 1. The formula set out in No.
10 of the directions on opposite
page}

\textbf{To be used as set out in these}

\textbf{Directions 3 times daily.}

\textbf{Special Notice:—Every house-
hold in which a case occurs is
notified to the Town Clerk, verbally, by letter, or by phone
No. 29 in order that a list
may be recorded as desired by
the Health Department.}

\textbf{By Order of the Otago
Town Board,}

\textbf{JOHN PINDER,
Town Clerk.}

\textbf{SPECIAL NOTICE.}

\textbf{Every household in which a case occurs is
notified by the Town Clerk, verbally, by letter, or by phone
No. 29 in order that a list
may be recorded as desired by
the Health Department.}

\textbf{By Order of the Otago Town Board,}

\textbf{JOHN PINDER,
Town Clerk.}

\textbf{Source: Otago Standard
12 November 1918}

\textsuperscript{143} Rice, Black November p141

\textsuperscript{144} Interview with Mr Sinclair
There is no evidence as to whether the shops and public facilities were sprayed with disinfectant, although the Nightcaps coal mines were. Beyond this it appears that no preparation for combating the pandemic was taken before the first death occurred. After the first deaths Nightcaps did take some action to deal with the pandemic (including the temporary hospital) but it was all done in conjunction with Otautau.

Nightcaps had very few resources to utilise in combating the pandemic. There was, of course, no doctor, nor did any of the residents have any medical skills, such as nursing. The Town Board was inexperienced and it cannot be established what, if any, discussion had taken place relating to the pandemic before many of its members fell ill. In Otautau leaflets were distributed to all households reinforcing the notices that appeared in the newspapers. Although leading figures in Nightcaps were in constant contact with the Otautau Town Board leaflets such as the ones distributed in Otautau were not distributed throughout the Nightcaps district.

In the conclusion of his preliminary study of the influenza pandemic in Christchurch, Rice makes the following observations:

*There is a further need to distinguish between macro and micro levels in studying the impact of a disaster such as this, for while there seems little significant change at the national level in economic life or institutions, at the level of small communities, neighbourhoods, families and individuals, the harsh realities of death had far greater meaning and wrought permanent changes in peoples lives.*

The impact the pandemic had on peoples lives in Nightcaps was brought out by the people I interviewed. Thirtyseven families lost at least one person in the pandemic. The three people I interviewed knew the majority of those families and the people who died. How did the community deal with those losses? Phrases such as "we kept a stiff upper lip", "put up with it", "a very sad, terrifying time", and "a terrible dark period for Nightcaps", were used to describe the impact of the deaths. 'It was a very great, terrific sadness. All over town we wondered who would be next'. This is a very important observation as in the main centres it was less likely that you would know the next person who died. In a small community like Nightcaps "wondering who would be next" had a greater impact because everybody knew everybody and thus knew the person that "would be next".

Being frightened of this pestilence that had invaded their lives affected everybodies

145Rice, NZIH 13 p130
146This refers to nuclear families and does not include extended families such as Mrs Mary Bayer and Mr Timothy Cairns who were brother and sister
147Interview with Mrs Taylor
movements around the township. No one went out, except to the one place that everybody met, outside the Post Office, where each day on a black board appeared the names of those who had died and those who were extremely ill.\textsuperscript{148} Listening to people talking about the blackboard meetings, conveys the impression that this was very important to them. For many people it was the only contact they had outside their family, who were most often ill.

The temporary hospital appears to have been a symbol of this "dreadful pestilence" that people were frightened of. No one went near the hospital because they were "frightened of getting the 'flu".\textsuperscript{149} One woman I interviewed was the only person in her family of six children and one parent (her father had died in a mining accident just prior to the pandemic) that did not have the influenza. No member of her family was at the temporary hospital and consequently she never went near it. This woman was 19 years old and working in Otautau at the time of the pandemic but of course had to stay home from work to look after her family. She vividly remembers one morning setting out to catch the train to work and meeting her neighbour who reported that the whole family had come down with influenza. This neighbour later lost her eldest son on 19 November at the Otautau temporary hospital.\textsuperscript{150}

In his observations Rice also mentions that the pandemic wrought permanent changes to peoples lives. Although there were no great changes in the lives of many people, some had to reassess their situation and consider what to do next now their "loved ones' were gone. Mrs Munn lost her husband in the pandemic but remained in Nightcaps and opened a small shop as a branch of Mr Gordon Sinclair's chemist shop in Otautau. Mr Walter Jaggers, the blacksmith, also died in the pandemic and his brother-in-law, Mr Jack Dempster, took over the shop and business.\textsuperscript{151}

Most people who lost "loved ones" in the pandemic stayed in Nightcaps. One man who lost his wife and young daughter stayed in Nightcaps until his death.\textsuperscript{152} However, there were people who shifted away. Four orphaned children (aged eight, eleven, thirteen and fifteen) shifted to the North Island to live with relations after they lost both their parents on the same day. A young woman who was from one of Nightcaps pioneering families lost her husband and young daughter stayed in Nightcaps for a while before remarrying and shifting to Invercargill.

The circumstances many people were left in in the aftermath of the pandemic affected the rest of their lives, especially orphaned children and young widows and widowers.

\textsuperscript{148}Interviews with Mrs Taylor & Mrs Laidlaw
\textsuperscript{149}Interview with Mrs Taylor
\textsuperscript{150}ibid
\textsuperscript{151}Southland Times 18 August 1977
\textsuperscript{152}Interview with Mrs Taylor
This is of course consistent with the general mortality patterns of the pandemic discussed in Chapter one. The higher mortality rate of adult males in the 20-40 age groups meant that one of the major legacies of the pandemic would be a considerable number of young widows (this is on top of the war widows from World War One).

In the third week of December, when most traces of the pandemic had disappeared from Nightcaps, a representative of the Health Department visited the township. The purpose of his visit was to instruct the township on the closing of the temporary hospital. The building along with the equipment such as mattresses and bedding all had to be fumigated according to Health Department Regulations. A similar visit was also made to Otautau. The basic purpose of these visits was to make sure that public facilities used as temporary hospitals were made safe before being reopened for public use. By this point the township was returning to normal. The shops and businesses had reopened, including the coal mines which were again working at full capacity and had recommenced the traditional fortnightly day off on Saturdays. Although the Presbyterian Church was not able to be used for services, a combined service had been held in the school grounds.

Perhaps the most important signs that the community was recovering from the pandemic was the return of recreational activities and 'everyday life'. People could be seen out playing sports and down at the local track. The district had two racing clubs: the Wairio Jockey club and the Wairio Racing Club and people were all keen race goers. Among the signs that everyday life was returning in the weeks following the pandemic was the fact that "Annie Purdie, the butcher's daughter, was singing as she milked the cow on the other side of the hawthorne fence the popular song 'I'm forever blowing bubbles'. Bob Irwin, the draper, could be heard feeding his chooks further up the road." Although these signs indicated that life was returning to normal "it was a saddened people who gradually recovered from the pestilence".

Slowly life returned to normal but fear of the influenza still lurked in people's minds. At the beginning of January 1919 this was to some extent justified. On 14 January the Otautau Standard reported that there had been a fresh outbreak of influenza. A young man from the country returned to his home in Nightcaps with a second attack of influenza. Dr Stewart was called in and quarantined the patient in order to prevent a fresh outbreak in the district. This case was not mentioned again and nor was there a

153 Otautau Standard 17 December 1918
154 ibid
155 Otautau Standard 3 December 1918
156 Southland Times 18 August 1977
157 ibid
158 Otautau Standard 14 January 1919
fresh outbreak, however, it is important to realise that this case reinforced people’s fear of the recent pandemic.

For many decades the Wairio Races were an annual event in January. The day before the races the Otago Standard reported that "the sporting members of the community are in the majority on Wairio Race day; unless recent events affect the minds of some, this year will have no exception to the rule. War and epidemic have apparently not affected the starting spirit of men and women." 159 Did people allow recent events affect the annual race meeting? The Winton Races in November had always been a popular event and were so in 1918 despite reports in the newspapers of the pandemic in the North Island. In 1919, however, "less people went to the Wairio races as they were scared of the 'flu".160

Nightcaps had very high morbidity and mortality rates and at no point did the community organise a committee to combat the pandemic, nor the Town Board take on this responsibility. Rice identifies the promptness and efficiency of relief organisation and more importantly, the level of morbidity as being major influences on the death rate.161 If these factors can be identified as the major reason the death rate was so high in Nightcaps requires further discussion.

First, however, the myth of Nightcaps isolation must be dispelled. Although Nightcaps was geographically isolated it was not at other levels. Nightcaps had its own telephone exchange and the telephone and telegraph were important means of communication. More important though was the daily train linking Nightcaps with Invercargill. This was a vital link for Nightcaps, especially during the pandemic when the train never stopped running. Although the roads were not very adequate in the early years of the century there were a few cars in the district and these too were fully utilised during the pandemic. Thus Nightcaps was not as isolated as one might expect in 1918.

Rice states that

_Leadership was a crucial factor in local organisation to combat the 'flu so to was the extent of morbidity in the adult population: the higher the morbidity rate the greater the likelihood of delay and the greater the likelihood of a high death toll, as at Nightcaps where 80% of adults were stricken_.162

In Nightcaps these two factors were inextricably linked. The high morbidity rate meant that many adults were stricken before relief could be organised, this included members

159 ibid
160 Interview with Mrs Laidlaw
161 Rice, Black November p148
162 Rice, "Crisis in a Country Town", in Historical News no 51 p13
of the Town Board. Mr Donald Sinclair, the Town Clerk and the community’s most prominent citizen could have provided the leadership necessary for community organisation, however, he too contracted the virus and had influenza for three weeks and came close to dying several times.

The Reverend Bandy and Mr Ronald who attended special meetings of the Otautau Town Board were instrumental in helping establish the temporary hospital in the Presbyterian Church but this initiative was too late to establish an effective relief committee and by this point Nightcaps was reliant on the aid afforded by Otautau. Contemporary statements indicated that had this aid not been afforded Nightcaps would have been much worse off.163

Returning to the question of what could have been done prior to the outbreak of influenza in Southland to restrict its entry into the province has already been noted that prior to 1918 influenza was not a notifiable disease, furthermore the general public did not associate influenza with a serious pandemic. Despite Health Department warnings on large gatherings of people, local authorities did not cancel or postpone upcoming events until after the first deaths occurred.164 Local authorities may have decided against such measures not wanting to alarm the public or disrupt people’s life’s. The Royal Commission appointed to investigate the influenza pandemic noted that "no restrictions were placed upon the movements of the people in travelling, even when they had individually been in contact with infected persons."165 Reluctance on behalf of local authorities to impinge upon, and place restrictions on people’s lives prior to the outbreak of the pandemic in Southland directly related to the high morbidity and in some cases mortality rates.

The course of the pandemic throughout the Nightcaps district and the community’s response to the crisis points to three factors influencing the death rate in the district. The high morbidity rate combined with no early organisation of a relief committee and a reluctance on behalf of the local authorities to place restrictions on peoples movements all combined to produce the highest European locality death rate in New Zealand.

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163 The Otautau Standard, the Western Star and the Southland Times all made statements to this effect.
164 see also Rice, Black November and "Crisis in a Country Town" in Historical News no 51
165 AJHR H-31A 1919 p26
CHAPTER THREE - THE VICTIMS

The social impact and implications of the 1918 influenza pandemic affected everybody who lived through it, some more so than others. In a small community like Nightcaps this impact is intensified because it was (and still is today) a closeknit community.

The issues addressed in this chapter have been addressed by Rice on a larger scale in his preliminary study on Christchurch (1979) and in chapter six of Black November (1988). The main source of information has been the death registers for 1918 and while a study of the death certificates is important to gain an understanding of the social impact of the pandemic in Nightcaps, any patterns emerging out of this study cannot be said to represent the pattern of all small towns in New Zealand. There are two reasons for this. First is the fact that the death rate in Nightcaps was not representative of the majority of small towns in New Zealand because it was exceptionally high. Unlike most small towns it did not organise a relief committee to combat the pandemic and its temporary hospital did not open until the pandemic was well established in the district. Although the death rate was high, it is still a very small sample of only 39 death certificates. Broad generalisations cannot be made on such a small sample. To gain an understanding of the social impact of the pandemic in small town New Zealand a cross section of small towns throughout New Zealand must be taken and a study of death certificates of each town made. On the basis of this study one could establish any patterns emerging in small towns in general and distinguish features peculiar to one town or a number of towns. However, such a project is too large to be taken on at this level.

Over a period of two weeks 41 people from Nightcaps died. These deaths ranged in age from two to 70 years old and represent a cross-section of the community. Table 3.1 shows the age/sex structure of the deaths. Male deaths were concentrated in the 15-49 age groups while female deaths were spread over most age groups.

166 see Rice, Black November chapter 9
TABLE 3.1 Age/sex structure of the Victims

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-4</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>5-9</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>10-14</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>15-19</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>20-24</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>25-29</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>30-34</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>35-39</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>40-44</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>45-49</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>50-54</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>55-59</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>60-64</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>65-69</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>70-74</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>23</td>
<td>16</td>
</tr>
</tbody>
</table>

Of all Nightcaps deaths, 59% were male and this figure is not significantly different from the national figure of 63%.\textsuperscript{167} However, this is where the similarity ends. At the national level the worse effected group was males aged 30-34 years old. They suffered at twice the rate as females in the same group.\textsuperscript{168} In Nightcaps more females than males died in this age group. While male deaths were evenly spread over the 15-49 age groups, females were concentrated in the 15-19 and 30-34 age groups. Although the overall male death rate was similar to the national pattern, there were variations in specific age groups.

TABLE 3.2 Conjugal Condition of Victims

<table>
<thead>
<tr>
<th>Males/Mother's Condition</th>
<th>No.</th>
<th>% of Males</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married no issue</td>
<td>7</td>
<td>30.5</td>
<td>17.9</td>
</tr>
<tr>
<td>Married with issue</td>
<td>1</td>
<td>4.3</td>
<td>2.6</td>
</tr>
<tr>
<td>Total Married</td>
<td>8</td>
<td>34.8</td>
<td>20.5</td>
</tr>
<tr>
<td>Bachelor incl. children</td>
<td>14</td>
<td>60.9</td>
<td>35.9</td>
</tr>
<tr>
<td>widower no issue</td>
<td>1</td>
<td>4.3</td>
<td>2.6</td>
</tr>
<tr>
<td>Total</td>
<td>23</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Females/Mother's Condition</th>
<th>No.</th>
<th>% of Females</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married no issue</td>
<td>9</td>
<td>56.25</td>
<td>23.1</td>
</tr>
<tr>
<td>Married with issue</td>
<td>7</td>
<td>43.75</td>
<td>17.9</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\textsuperscript{167}ibid p159
\textsuperscript{168}ibid

In a town dominated by one industry such as coal mining, there tends to be a greater concentration of young single men. It is not surprising to find that male deaths in
Nightcaps reflect this population structure. Of the 23 male deaths, 14 were bachelors, and half of these were aged between 20 and 29. These deaths reflect the susceptibility of adult males to influenza and the concentration of single men in the Nightcaps population. This is all the more noteworthy when one considers that the district lost a large number of its young men in the 'Great War'.

Rice noted that in 1918 Auckland, Wellington, the King Country and Southland were the only regions in which bachelors outnumbered married men. These regions also had the highest death rates. "Their hrjv.<i>.jc-.tvfsingle men may offer a clue to their higher death rates, for the pattern amongst married men and female victims is quite normal and corresponds well with other regions. The differences are contained in the one category."169

At the national level the death rate for married women was 6.3 per 1000 and 5.8 per thousand for spinsters.170 The death rate for married women and spinsters in Nightcaps was slightly higher at 9.8 and 7.6 per thousand respectively. These death rates are slightly higher than the national level but the concentration of female deaths in the 15 to 19 and 30 to 34 age groups may explain this variation.

While deaths tended to be concentrated in the 15 to 49 age groups, a number of young children and older people also died. Four infants died (one male and three female) while no deaths were recorded in the 5-14 age group. Of the four infant deaths, the one male and two of the females were two years old while the third female was four years old. This is consistent with the pattern that emerged at the national level. Children aged between five and 14 were spared a severe death rate while the infant death rate was higher but still below the adult death rate.171 In the one to four age group females suffered at a higher rate than males in Nightcaps. While the male death rate was 1.09 per thousand, females suffered at the rate of 3.3 per thousand. In his 'Report on the Influenza Epidemic in New Zealand' Makgill found that the only age group in which females suffered at a higher rate than males was in children under 15 years old.172 Makgill, unlike Rice, did not distinguish between infants and young children, though this variation is consistent with both their findings.

Males over the age of 50 made up 17.4% of all male deaths in Nightcaps and females made up 12.5% of all female deaths. Deaths in these age groups represent 15.4% of all deaths in Nightcaps whereas infant and young child deaths made up only 10.3% of the total deaths. The total number of deaths in these two categories were still less than

169p167
170ibid p169
171ibid p160
172Makgill, AJHR 1919 H-31 p31
One of the major social implications to arise out of the pandemic was orphanhood. The traditional dictionary definition of an orphan is a child bereaved on one or both of its parents, whereas the popular definition is a child bereaved of both parents and for the purpose of this study I have adopted the popular definition. Many children lost both parents in the pandemic but the number that lost one parent was considerably higher and this is reflected in Nightcaps. A total of 46 married couples died in the pandemic leaving 135 orphans to be cared for by the state. 173 Orphans were placed under the care of the Education Department and an allowance of 10s 6d was payable to boys under the age of 16 years and girls under the age of 18 years of age by the Health Department, providing the child was not in employment. 174

In Nightcaps one married couple in their forties died leaving four children, two girls ages eight and eleven and two boys aged thirteen and 15. The father had been a miner and both parents died in their home on 21 November. These four children represented 2.9% of the total orphaned children in the pandemic and after their parents death moved to the North Island to live with relatives.

\[\text{TABLE 3.3 Orphanhood}\]

<table>
<thead>
<tr>
<th>Parents</th>
<th>Male</th>
<th>Female</th>
<th>Children's Ages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-4</td>
<td>5-9</td>
<td>10-14</td>
</tr>
<tr>
<td>30-34</td>
<td>4</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>35-39</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>40-44</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>45-49</td>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>50-54</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>55-59</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>60-64</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>65-69</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>70-74</td>
<td>7</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>8</td>
</tr>
</tbody>
</table>

173 Rice, Black November p173
174 Cuff, The Great Scourge p157
A total of 6550 children (under 20) lost one or both parents in the pandemic, 135 orphaned and 6415 lost one parent. In Nightcaps 26 children lost one or both parents, four orphaned and 22 (15 boys and seven girls) losing one parent. A total of twelve families lost either their mother or father in the pandemic. Considering young men's susceptibility to influenza it could be expected that more children would have lost their father than their mother, but this was not the case, nor should any significance be placed on it. Because the numbers are so small it can not be said to represent any emerging pattern. Furthermore, as bachelors outnumbered married men in Southland and Nightcaps it would only be significant if married men greatly outnumbered bachelors and women.

Including all the offspring of those parents that died, 45 children lost a total of 14 parents. Those children ranged in age from one year to 46 years old. One 68 year old farmer was survived by his wife and eleven children (six males and five females) aged between 26 and 46 years old. Another man, a 70 year old gardener, left a wife and eight children aged between twelve and 25 years old, four of which were under 20: the only son aged 16 and three daughters aged 18, 14 and twelve.

Of the seven men with children who died one was a widower and was survived by three children, two boys aged 17 and 16, and one girl aged eleven. This 45 year old farmer died on 22 November and had the influenza for only three days. Thus the total number of children orphaned by the pandemic was seven, the four children who lost both their parents in the pandemic and the three children who had already suffered the loss of their mother were left completely orphaned when the pandemic took their father.

Of the six women with children widowed by the pandemic, four had children under the age of 20 to bring up. One young woman suffered the tragic loss of not only her husband but also her only child. One woman was left with three school age children to bring up on her own and another woman was in the same situation with two children. An influenza pension was available to women widowed in the pandemic. However this

### Table 3.4 Ophanhood

<table>
<thead>
<tr>
<th>Age</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-19</td>
<td>17</td>
<td>9</td>
</tr>
<tr>
<td>20+</td>
<td>7</td>
<td>12</td>
</tr>
</tbody>
</table>

24  21
was only available to women with children. The only woman with no children to be
widowed in the pandemic was Mrs Munn. Her husband had been an engineer for the
Coal Company and the small shop she opened would have been an important source of
income. One young husband tragically lost his wife and four year old daughter (the
only child) in the pandemic while four men were left with children aged between one
and 19 to care for and another two men survived their wives along with an adult child
each. Widowers left with children to bring up qualified for an allowance of 25/- per
week to provide female help with the children. One of these men was left with an
one year old and a three year old to bring up.

Surprisingly all these families stayed in Nightcaps at least for the next few years. This
is surprising because Nightcaps, with its dominant economic activity of coal mining,
had a relatively transient population with people coming and going quite regularly.
Widows all had family in the district, either brothers and sisters and in some cases
grown children. One such example is Mrs Jaggers, whose brother took over her
husband's blacksmith shop. The widowers that stayed on usually did for business
reasons; one man was the publican and another a farmer. Because these families all
stayed in Nightcaps the social impact of this particular aspect of the pandemic would
have been very high. In 1919 when the school year began approximately a dozen
children from a ro.l of 80-90 pupils had lost a parent. Mr Sinclair remembers a number
of children, some his friends, who lost their mother or father.

Another feature of the influenza deaths that can be traced through death certificates is
family relationships. In Nightcaps a total of five families suffered the loss of two family
members. These were the husband and wife already mentioned, the brother and sister,
Mr Timothy Cairns and Mrs Mary Bayer, discussed in chapter two, and in three
families a parent and a child died.

Rice found that 47 households nationwide lost one parent and one child with a total of
94 victims. The three households in Nightcaps that lost a parent and a child represented
6.4% of all such households in New Zealand. What was particularly tragic about two of
those households is that it was the spouse and only child that died, in both cases the
parents were young, in their twenties and early thirties, and both children were infants.

Another facet of this study is the occupational distribution of the pandemic victims.
While this sample is too small to carry out a study of occupational categories it is
interesting to note the occupations of the victims.

\[175^{ibid}
\[176^{Interview with Mr Sinclair}
<table>
<thead>
<tr>
<th>Occupation</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Miner</td>
<td>9</td>
</tr>
<tr>
<td>Farmer</td>
<td>4</td>
</tr>
<tr>
<td>Labourer</td>
<td>5</td>
</tr>
<tr>
<td>Blacksmith</td>
<td>1</td>
</tr>
<tr>
<td>Engineer</td>
<td>1</td>
</tr>
<tr>
<td>Gardener</td>
<td>1</td>
</tr>
<tr>
<td>Cook</td>
<td>1</td>
</tr>
<tr>
<td>Dependant:</td>
<td></td>
</tr>
<tr>
<td>Wife</td>
<td>9</td>
</tr>
<tr>
<td>Children</td>
<td>7</td>
</tr>
<tr>
<td>Not Known</td>
<td>1</td>
</tr>
</tbody>
</table>

Of those that died the biggest group was the dependants, made up of wives and children. This group represented 41.2% of all deaths. Miners represented 23.2% of all deaths. If dependants are excluded then miners represent 39.2% of the deaths.

Does the fact that Nightcaps was a coalmining community answer the question of why the death rate was so high? If so, one would expect a consistently high death rate in all coalmining communities, which is not the case. Kaitangata suffered four deaths with a death rate of 2.3 per 1000 and none of these victims were miners. The death rate in coalmining towns like other towns appears to be consistent with factors such as morbidity rates and the town's preparedness. Denniston had 18 deaths with a death rate of 18.5 and like Nightcaps suffered a high morbidity rate thus leaving no adults to organise a relief committee. Blackball, on the other hand, had a death rate of only 1.9 with ten victims: the resident doctor had taken notice of early warnings and the town was prepared for the onset of the pandemic.\textsuperscript{177}

The coal mining towns did not develop a pattern of their own but rather were consistent with the factors that emerged from most towns. If the town was prepared for the pandemic's onset with relief measures in place and did not have a high incidence of morbidity it appears that it would have got off lightly. At the other end of the scale was Nightcaps, completely unprepared and victim of a severe morbidity rate which resulted in a high death rate. Furthermore, the occupations of the Nightcaps victims is consistent with a town that had two dominant economic activities: coal mining and farming.

One question that could be asked of coal miners is whether they were more susceptible to influenza than the average person? Miners are more susceptible to respiratory disease and the conditions of work involve crowding at each shift change creating ideal conditions for the disease to spread.

\textsuperscript{177}Rice, \textit{Black November} p157
conditions for the spread of the virus. It might then be expected that there would be a high morbidity rate among miners, however, to conclude that miners were more susceptible this morbidity rate would have to be significantly higher than the morbidity rate of all men in the relevant age groups. Such a supposition is difficult to prove because systematic information was not gathered on those who suffered from influenza and we therefore have very few details pertaining to those who recovered.

The most logical explanation for the high incident of death among the miners is that they were concentrated in the age groups that were most susceptible to influenza and their occupation does little to explain their deaths and should not be over-emphasised. This is consistent with Rice’s findings. *There is no clear evidence that the epidemic hit any particular social group harder than another: the distribution reflects the proportions of the population at large*.\(^{178}\)

One of the problems with relying on the information on death certificates is that they can often be vague or the information is simply left out. In this sample the majority of the death certificates stated “influenza, pneumonia” as the cause of death and in some cases “coma” was also listed. On each death certificate the duration of illness was also added although Rice found that more often than not doctors were too busy, or there was no one to ask.\(^{179}\) In a larger sample it would be unlikely to have the duration of illness for all the death certificates in the area of study.

How did the influenza spread into the Nightcaps district? The use of contraction rates to establish when influenza was introduced was discussed briefly in chapter one in relation to the Winton Races and the armistice celebrations, however, these events were not the only way the virus spread throughout the community. It is widely recognised that gatherings of people enhanced the spread of the virus and there were a number of public gatherings in early November that must be considered. There was of course, the armistice celebrations and the Winton races but furthermore everyday public gatherings were not stopped until the second week of November. Banks did not close until 19 November, hotel bars, clubs and other places of entertainment were not ordered to close until 13 November. Schools were not closed and church services stopped until mid-November. This indicates that people were still gathering together up until the end of the middle of November although the first deaths had already occurred, and of those that died only two had not yet caught the influenza.

\(^{178}\)Rice, NZJH no 13 p124

\(^{179}\)ibid p115
TABLE 3.6 Contraction and Death Rates of Victims

<table>
<thead>
<tr>
<th>Number of People</th>
<th>Date of Contraction</th>
<th>Date of Death</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Looking at the dates of contracting influenza in relation to specific public gatherings a pattern emerges. Between one and three days after the gathering a peak occurs in the influenza's occurrence. The virus first entered the Nightcaps district at the end of October and the beginning of November and this may very well have been incidental considering that Nightcaps had a daily link with Invercargill and other parts of western Southland. The first major peaks occurred on the fifth and eighth of November and the biggest peak on 10 November, two days after the armistice celebrations. The next peak occurred on 12 November and by this point the majority of those who died had caught the influenza. Their peaks all occurred on and around three days after public gatherings. The biggest gathering was the armistice celebration that all of Nightcaps attended. The other two gatherings occurred on the Sunday prior to the celebration and the Sunday immediately after them; these were Church services of the various denominations in the district. In 1918 there were two churches in Nightcaps, the Presbyterian and the Methodist. Roman Catholics worshipped at Wreys Bush or Otautau. The majority of the families in the district were regular church goers and thus these gatherings each Sunday would have helped spread the virus throughout the district. On 10 November, two days after the armistice celebrations, seven people contracted influenza. This was

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\(^{180}\) The contraction rates are based on the death certificates and are taken to be representative of the overall contraction rate in Nightcaps.
the largest peak and indicates that the majority of the people that attended the armistice
celebrations came into contact with the virus that day.

**TABLE 3.7 Religious Affiliation of Victims**

<table>
<thead>
<tr>
<th>Religion</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presbyterian</td>
<td>22</td>
</tr>
<tr>
<td>Methodist</td>
<td>3</td>
</tr>
<tr>
<td>Salvation Army</td>
<td>4</td>
</tr>
<tr>
<td>Anglican</td>
<td>2</td>
</tr>
<tr>
<td>Catholic</td>
<td>7</td>
</tr>
<tr>
<td>No Religion</td>
<td>1</td>
</tr>
</tbody>
</table>

There is one final peak in the contraction rate and that is two days after the Winton Races. It is therefore possible that some people who went to the races brought the virus back with them. It was concluded in chapter one that the Winton Races were not responsible for the introduction of influenza into the Nightcaps district. It is, however, possible that the Winton Races prolonged the pandemic in the district by reintroducing the virus into the district.

When I was conducting my interviews I wanted to establish if there was any event at the time that people "blamed". I found that no one really "blamed" any particular event for the introduction of the pandemic into the Nightcaps district. Every district was getting the influenza and Nightcaps was no exception. The people were, however, adamant in their blame of the Prime Minister and the Niagara for introducing the influenza to New Zealand.

*They blamed Bill Massey, the Prime Minister for bringing it on the boat. I think it is true because they let him off in Wellington but they wouldn't let anyone else off. They blamed it for starting the spread throughout New Zealand.*\(^{181}\)

Although this theory was discredited at the time by the official Health report on the pandemic, the people who lived through it continued to believe it.

It is difficult to make broad generalisations and conclusions based on this sample and although the patterns that emerge out of a study on Nightcap's deaths show some similarities to the national patterns there were also some disparities. In general the Nightcaps deaths are representative of the high morbidity rates experienced in the district. What cannot be doubted is that the pandemic had a considerable social impact

\(^{181}\)Interview with Mr Sinclair
intensified as every member of the community knew those who died.
CONCLUSION

Southland suffered one of the highest regional death rates in the 1918 influenza pandemic and yet as evidenced in the newspapers the prevailing attitude was that Southland would not suffer from the malignant form of the influenza present in the North. It is therefore surprising that some of the highest locality death rates occurred in western Southland.

The high death rate in Nightcaps resulted from a combination of two factors. The first was the morbidity rate, while the average morbidity rate was approximately 40%, Nightcaps suffered at a rate as high as 80%. The second major factor was the general unpreparedness of the community. Although the Health Department had issued warnings and notices, no action was taken in Nightcaps to prepare for the malady, this was made more difficult by the fact that Nightcaps had no doctor. Action to combat the pandemic was only taken after the first deaths occurred and it appears that this was the case in many towns. When action was taken, it was done in conjunction with the Otautau Town Board and Nightcaps was reliant on the Wallace hospital in Riverton and the Otautau temporary hospital for aid. When it became obvious that action had to be taken to combat the pandemic there was no one able to do so and women from Otautau and Aparima had to be called in to care for the patients at the temporary hospital when it was established.

While systematic organisation of the town to deal with the pandemic occurred in Invercargill, it did not occur in towns such as Otautau and Nightcaps. These small rural towns did not have the access to facilities and resources as the larger towns and main centres and, as evidenced by this study, these small towns reacted to the pandemic and organised relief in different ways to Invercargill.

The main difference in the rural experience of the pandemic was the intensity of the social impact on the community. The pandemic had taken the lives of 41 members of the community. People had lost relatives and friends and were left with a fear of the big 'flu that had turned their town into a ghosttown virtually overnight.

The 1918 influenza pandemic brought fear and suffering into the homes of New Zealanders. On 8 November, the people of Nightcaps celebrated the armistice of the 'Great War' but the weeks that followed this celebration wrought suffering on the members of this community unlike anything before, yet in the local histories of this district the 'terrible influenza epidemic' is not discussed at any length. It is mentioned in relation to prominent citizens such as the school principal, Mr Gray and the help he afforded at the temporary hospital, but there is no roll of honour for those who died in the pandemic beside the honour rolls for those who lost their lives in the 'Great War'.
and World War II. The influenza pandemic is almost a hidden part of Nightcaps, and indeed our history, kept alive only in the memories of those who lived through it. In many ways this is like World War I. The soldiers upon returning to New Zealand did not talk of their experiences and the society did not want to know. New Zealand had lost a great many of its finest young men in this war but people continued to believe in the necessity of the war because if they could not believe in the cause, the losses would be unbearable. But the influenza affected everybody, men, women, children and old people and it struck at the heart of society; the family. This time there was no 'cause' to believe in, or 'reason' for these deaths. The pestilence had entered their community, taken their loved ones, and disappeared. It had a profound effect on many people's lives but for no apparent reason. There were no joyous celebrations in the aftermath of the pandemic, only a sadness for the victims. In The Great Adventure, Jock Phillips et al said the following of World War I -

*Despite the extent of the tragedy - or perhaps because of its magnitude ... there appears to have been ... an unconscious need to repress the pain.*

To those who lived through the influenza pandemic, it was the same.

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182 Phillips et al, *The Great Adventure* p1
APPENDIX ONE: WALTER EXCELL

SOUTHLAND TIMES August 18 1977

The Excell family lived in the main street (Johnston Road) of Nightcaps right opposite the Police station, then occupied by a genial constable Dan Callanan.

There were about 300 people resident in the town and we had preliminary warnings of the coming of this dangerous pestilence. There was a bit of mild panic but seemingly little could be done about it except suffer it and hope for the best.

The leading man of the town at the time was Ronald Sinclair senior. He set up some contrivance in one of the tiny bank buildings opposite the butcher shop of Purdue and Reed. My friends Reg, Sid and Gordon Wakelin (sons of the Railway Guard Bill) went up to try this method and of course I watched proceedings tentatively from the open doorway. Mr Sinclair was operating the gadget which looked like a miniature blowlamp and this he guided onto the membranes of the throat. The idea was, seemingly, to make the throat resistant to the germs.

After watching this business I chickened out and quietly made off. How effective was the procedure? Modern ideas would say that it was quite ineffective but Mr Sinclair was at least trying.

One by one the people of the town were struck down by the 'flu and would take to their beds. It began with a mild fever and gradually worked itself up till some were in the grip of a raging delirium. The most seriously affected were the strong men. and then the deaths began.

At first, old Mr James Grant, the carter, would get out his black four wheeled hearse with its two horses in silver mounted harness and the mourners would slowly walk the two miles to the cemetery to bury their lost loved ones. But soon this had to be given up as the mourners themselves took to their beds - and the town took on a deathly silence.

Then one day, hearing some vehicle creaking up the street, I peered out to see Mr Grant driving his carrier's dray, and on it a coffin. All on his own, he was proceeding about his sad duty. There was no-one else to go. And to this day there are unmarked graves in the Nightcaps cemetery with the occupant unknown.
My mother was first to go down in our family of two parents and five children. She was followed quickly by my father. We children seemed to have a greater resistance than our elders as I remember why I was sent to bed when all that seemed to be wrong was I and my brother George had persistent nose bleeding and felt a bit hot. We resented it further as, at the time, the 'flu has not yet taken its real grip of the town and we could see through our bedroom window a monster bonfire being built to celebrate the coming of peace. But confined to our beds we had to stay and we could only watch enviously as Mr Sinclair, with a flaming torch, set the bonfire going and the merrymakers sang and danced. But they too were soon to join us.

Soon all our family were stricken except my eldest brother Ernie, then aged eleven years, and baby Joyce. Ernie struggled manfully with the tasks of feeding and looking after the baby. I must have been an unnerving experience for an eleven year old boy to feed his baby sister, change her naps and make porridge each morning for his ailing parents and three brothers. But he came through with flying colours.

Besides Ernie we had another guardian angel. Mr Bob Sheddan, a miner, by some quirk, had escaped being struck down. He must have had some natural immunity which warded off the disease. Daily he made his rounds of stricken families, and prepared them soup. You can imagine how we looked forward to his visits.

My father was the most seriously stricken in our family. An engineer, in his delirium, he imagined himself a one cylinder combustion engine, with that piston going up and down, oh so slowly, and these two poppet valves opening and closing. If they ever stuck or failed he was done for.

Suddenly he took off, still in his night clothes, and cleared out of the house. Across the road he ran, hurdled Bill Wakelin's gate and was soon at the back door scaring seven bells out of Mrs Wakelin's maiden sister Miss Norris. They kindly restored his to bed.

In all about 50 people died in the town. Knowing what we do today about mutant viruses one of which must have been the pathogen causing this visitation, it is easy to understand this circumstance. Nightcaps was an isolated community in a world wide sense and would have escaped many of the minor illnesses which larger centres of population would suffer. Thus the people would have little immunity against any when it did come.

On one day the midday train from Invercargill bore eleven coffins. Wattie Jaggers the blacksmith would no longer make his anvil ring at the corner blacksmiths. Ted Moss had lost his wife and child. The eldest of the Purdie family, Bill, was gone. Donald Munn, the coal company man was missing.

It was a saddened people who gradually recovered from the pestilence.
But life must go on and it was not long before all our family were recovered. Annie Purdie, the butcher's daughter was singing as she milked the cow on the other side of the hawthorn fence the popular song "I'm Forever blowing Bubbles". Bob Irwin the draper, could be heard feeding his chooks further up the road, Jack Dempster took over his brother-in-law's blacksmith's shop, Mrs Munn opened a little shop as a branch of Gordon Sinclair's the druggist in Otautau. Things became as near to normal as possible.
struck down for weeks and when he finally returned to look at his mine, it had filled up with water, feet above the submerged pump at the sump at the foot of the main drive. There was only one possible hope. The steam valve at the pump might possibly have been left open. It was worth a try.

Wattie got steam up on his boiler. Then with little hope he opened the boiler valve to send the steam pressure down to the pump. Wonder of wonders, there was a clacking sound and great spurts of water emerged from the delivery pipe.

It was then that he saw the figure of Sandy coming across the flat. "I went down and opened the valve for you," he said. "That must be worth a bag of lollies." Yes, Sandy got his bag of lollies. He had that feature of character which I'm sure is still very much alive today in Southland. Help your neighbour.

Walter Excell
Invercargill
APPENDIX THREE

Information Contained on a New Zealand Death Certificate in 1918.

- date and place of birth

- name and occupation

- sex and age

- cause of death, duration of illness, name of certifying doctor

- name of mother and father, mother's maiden name, father's occupation

- date and place of burial

- name of minister and religion

- country of birth, length of stay in New Zealand

- if married, age on marriage, to whom, age of widow/widower (if living)

- age and sex of issue
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