

CHAPTER TWO

NOTIFYING TUBERCULOSIS, 1898-1930: Locating and supervising the tubercular - debates, implementation and disappointment

Until we link tuberculosis with the acute infectious diseases, we will not individually have put ourselves in correct posture for attack. But there is a practical difference. In the acute infections our first working question is: "Whence did this infection come?" In pulmonary tuberculosis our first question must be: "Whether [sic] has this infection gone – is going?"¹

In chapter one I noted the importance public health reformers placed on making tuberculosis a notifiable disease so that health authorities could supervise the tubercular and give individual advice on preventive behaviour with the goal of limiting the spread of infection. New York City provided an example. In that city physicians, institutions and 'other persons' were required to advise the Board of Health the details of any consumptive who came under their notice. Sanitary inspectors then visited the premises, distributed instructions to the family and advised on disinfection. When a death occurred or a consumptive vacated their home, the Board of Health posted a notice on the door advising that until disinfected, the home was infectious.² In 1901 Dr William Ramsay Smith, Chairman of South Australia's Central Board of Health, said, 'If you are to deal with consumption in an effective way, you must have the means of knowing where it exists and what are the physical circumstances of the sufferers; hence the necessity for effective notification'.³

¹ J.H.L. Cumpston, C.M.G., M.D., D.P.H., 'Tuberculosis in Australia', *Medical Journal of Australia (MJA)*, 8 August, 1931, p. 162.

² Vivian Voss, F.R.C.S, Eng., 'Contagiousness of Tuberculosis', in *Report of the Sixth Meeting of the Australasian Association for the Advancement of Science*, John Shirley (ed.), Brisbane, January 1895, Australasian Association for the Advancement of Science, p. 828 ML.

³ W. Ramsay Smith, 'Consumption and its Scientific Aspects', lecture, Adelaide Democratic Club on 8 September, 1901, p. 10.

But notification of tuberculosis raised more complex social, political, economic and diagnostic issues than diseases like scarlet fever, diphtheria or typhoid fever that ran a shorter course and caused fewer deaths. Isolation, normally the aim of notification, was more difficult for tuberculosis because isolation would have to be much more prolonged than for other contagious diseases and assessment of cure or arrest more difficult to determine. Intermittent periods of relatively good health raised questions about how long consumptives could fairly be placed under public health scrutiny, and lengthy supervision of consumptives would tax existing resources. Diagnosis, especially in early stages, was difficult. Added to these problems was a lingering doubt in the community and among some physicians about the transmissibility of the disease. Despite these difficulties and the doubtful success of notification it remained at the forefront of the anti-tuberculosis campaign even though the dates of introduction varied across the States.⁴ This chapter examines the political and administrative process of introducing notification in three states, the ultimate disappointment with its results and why it failed to meet expectations.

Compulsory notification of tuberculosis in Australia began in 1898 in South Australia but the process was not complete nationally until 1929 when New South Wales extended notification across the entire state. The issue was contested in medical and political debates. An examination of these debates is important for two reasons. First, they provide details of the medical perspective in the first decade of the twentieth century laying a foundation from which to view both shifts and continuities through later decades. Second, they illustrate the dominant voices of

⁴ In 1903 the metropolitan area of Sydney declared tuberculosis notifiable but remained the only area in New South Wales until 1915 when the disease became notifiable in proclaimed areas but

State employed public health physicians. In the period between 1900 and World War I this group of medical professionals was less cohesive than it would later become but the early debates are a pointer to its later direction and influence. The effects of notification are then assessed by examining the profession's disappointment with the implementation of the system they had propounded including the statistical information confirming the unsatisfactory results. Finally, an examination of shortcomings in local infrastructure and resources, together with problematic diagnoses and haphazard co-operation by general practitioners explain why a system designed to find 'whether ... this infection [has] gone – is going'⁵ did not meet expectations.

The medical profession, statisticians and public health authorities recognised the epidemiological value of notification but the main impetus was not to collect data on contagious diseases but to apply sanitary measures aimed at containing the diseases. Public health acts and regulations directed local authorities to implement a range of measures following reports of infectious disease. These included street cleansing, disinfection of premises, isolation of streets or districts, inspection of houses, speedy burial of the dead and isolation of patients in homes or hospitals.⁶

not throughout the whole state until 1929. It was 1911 before Western Australia introduced the measure and not until 1919 in Tasmania.

⁵ Cumpston, *MJA*, 8 August, 1931, p. 162

⁶ *Health (Amendment 1883) Act* (Vic), ss. 70-82. *Health Act 1890*, (Vic), ss. 119-123. *Public Health Act 1896*, (NSW), ss. 21-34. *Public Health Act 1902*, (NSW), ss. 33-46. *The Public Health Act 1873*, (SA), ss. 41-44. *The Public Health Acts Amendment Act 1884*, (SA), ss. 2-7. *The Health Act 1898*, (SA), ss. 127-146.

DEBATING THE NOTIFICATION OF TUBERCULOSIS

South Australia

South Australia was the first Australian state, and among the first jurisdictions in the world, to legislate for compulsory notification of pulmonary tuberculosis. During the 1890s reports by the South Australian Registrar General showed deaths from pulmonary tuberculosis outnumbered all other diseases and the mortality rate was declining more slowly than other infections, notably diphtheria. If all tubercular diseases were included the difference was even greater. Tubercular disease was clearly the most lethal in the infectious category.⁷ Table 2.1 details the annual deaths from infectious diseases from 1891-1897 showing the dominance of pulmonary tuberculosis. In 1891 pulmonary tuberculosis deaths were almost double the other major killers, diphtheria and influenza. Between 1891 and 1897, for example, diphtheria deaths declined by 87% as a result of the general downward trend in mortality and the introduction of an antitoxin in 1895.⁸ Pulmonary tuberculosis on the other hand declined by 6%.

The first proposal to make tuberculosis notifiable in South Australia occurred in 1896. A health amendment bill dealing mainly with control of infectious diseases came before the Legislative Council, the upper house of the South Australian parliament. Dr Alan Campbell, a prominent South Australian physician active in the public health arena, proposed the inclusion of tuberculosis in the list of infectious diseases. Even though the extent of tuberculosis mortality was of

⁷ At this point some Members of Parliament remained unconvinced of its infectious nature.

⁸ Claire Hooker, 'Diphtheria, Immunisation and the Bundaberg Tragedy: A Study of Public Health in Australia', *Health History*, July 2000, Volume 2, Number 1, p. 55. J.H.L Cumpston, M.D., D.P.H., *The History of Diphtheria, Scarlet Fever, Measles, and Whooping Cough in Australia*, Commonwealth of Australia, Department of Health, Service Publication No. 37, 1927, p. 108. Cumpston noted that the diphtheria anti-toxin was not used in Australia until 1895 and that the death rate had declined before its introduction.

concern to public health authorities⁹ the Central Board of Health did not support Campbell's proposal and the bill lapsed so that a new consolidated bill could be considered.¹⁰

The South Australian Parliament considered a re-drafted bill in 1897. This new bill proposed extending public health powers to manage infectious disease through notification and subsequent supervision but tuberculosis was not mentioned in this category. On the advice of Horatio Whittell, President of the Central Board of Health, control of tuberculosis was to be addressed through regulation of the meat and milk industry. Whittell believed that the primary form of transmission was from the ingestion of infected food rather than airborne particles from human to human. That Whittell held this view illustrated the still fluid nature of aetiological understanding of tuberculosis particularly as in 1888 had urged the adoption of early notification of communicable diseases.¹¹

Unhappy with this approach Campbell again placed the question of human to human transmission and tuberculosis management on the parliamentary agenda. He assured Members of Parliament that the new science of bacteriology confirmed the contagiousness of tuberculosis through human contact and called on parliament to make tuberculosis notifiable as the imperative basis of control. Bacteriology, he said:

...would not admit of doubt ... and speaking to the public with authority it demanded a recognition of its truths, or it proclaimed in the same breath the absolute certainty of disease. It was this certainty that put the demands of public health on a footing to-day it never held before. And it was this certainty that gave the reason to legislators to embody

⁹ Sandra Holton, 'Social Medicine in Nineteenth Century South Australia', *Community Health Studies*, Volume 7, Number 2, 1983, pp. 130-131.

¹⁰ South Australia, Legislative Council, *Parliamentary Debates*, 20 October, 1896, p. 229; 21 October, 1896, p. 237; 29 October, 1896, pp. 264-265.

¹¹ H.T. Whittell, M.D., 'Section of State Medicine. Chairman's Address', *Transactions of the Intercolonial Medical Congress of Australasia*, 1888, p. 236.

in law that amount of compulsion that the truths amount of compulsion that the truths of science say is absolutely necessary for the safety of the public from disease. ... The proper way to control infectious diseases began with notification to the authorities.¹²

Table 2.1

Annual Deaths from Infective Diseases in South Australia (From Registrar-General's Reports)

Disease	1891	1892	1893	1894	1895	1896	1897
Erysipelas	5	10	13	10	13	29	16
Puerperal Fever	15	14	19	14	21	48	11
Scarlet Fever	4	2	5	35	10	4	7
Non-Puerp'ral Septicaemi	12	9	11	9	11	22	12
Diphtheria	173	106	100	97	37	21	22
Enteric Fever	73	83	62	80	71	93	106
Pulmonary Tuberculosis	329	307	340	356	335	308	308
Other Tuberculosis	94	80	107	89	105	104	88
Tabes Mesenterica	26	26	13	16	11	9	14
Measles	..	..	261	28	2	..	..
Whooping Cough	42	12	121	60	40	17	..
Influenza	172	40	47	53	115	59	37
Chicken-pox	1	2	2	..	..	..	..
C-bro-spinal Meningitis	..	1	..	..	..	..	..
Syphilis	9	5	8	6	3	4	4
Aneurism	6	12	8	9	8	10	7

Source: Frank S Hone, B.A., M.B., B.S., 'The Present Position of Notification of Disease in South Australia', *Medical Journal of Australia*, Vol. 1, No. 22, May 29, 1915, p. 505.

Trying to forestall objections, he insisted that notification would not lead to isolation of consumptives as they 'did not require isolation, but a case of diphtheria did',¹³ nor would notification be an invasion of liberty because he believed boards of health would act with prudence.

Further steps towards notification were made in 1897. The Legislative Council recognised tuberculosis as a contagious disease by agreeing to add it to a clause requiring local boards of health to disinfect premises after a tuberculosis death as a

¹² South Australia, Legislative Council, *Parliamentary Debates*, 24 August, 1897, p. 178; 4 November, 1897, pp. 251-252.

¹³ South Australia, Legislative Council, *Parliamentary Debates*, November, 1897, pp. 251-252.

means of preventing the spread of disease.¹⁴ Still unsatisfied, Campbell continued to press for notification. Opponents of notification fell into two categories. Some questioned the veracity of the science while others thought the logistical problems were too great. One Member, Ebenezer Ward, who was not a medical practitioner, declared that tuberculosis was not a communicable disease and therefore the colony ‘would be making itself a laughing stock’ if the disease was included in the Bill.¹⁵ More pragmatic opposition, particularly from James O’Loughlin, the Chief Secretary, together with the Central Board of Health, centred on the cost of notifying such a pervasive disease and on the complexity of handling notification of a disease that could be of long duration and whose sufferers often spent many years in relatively good health. O’Loughlin also saw a problem in applying a chronic disease to other legislative clauses designed for acute conditions. For example, clause 120 prohibited any person knowingly suffering from an infectious disease from entering a public place without taking precautions against spreading the disease. It also prohibited such persons from entering places of common entertainment, ships and public transport without first notifying an official of the ship or public vehicle. This appeared reasonable for illnesses of short duration, but ‘intolerable’ for chronic diseases.¹⁶ Whittell warned of the dangers of interfering with medical discretion as he believed it was often better not to inform a tubercular patient of their fate. He had advised the Government that the health bill was

¹⁴ South Australia, Legislative Council *Parliamentary Debates*, November, 1897, p. 328. Bill for an Act relating to Public Health, 27 July, 1898, Legislative Council Records, Parliament of South Australia.

¹⁵ South Australia, Legislative Council, *Parliamentary Debates*, 16 August, 1898, p. 100, Ebenezer Ward. Ward had been a journalist and gained some notoriety in that role. He was regarded as an eloquent parliamentary speaker and had served briefly as a minister in the mid 1870s. [J.B. Hirst, ‘Ward, Ebenezer (1837-1917)’, *Australian Dictionary of Biography (ADB)*, adb.anu.edu.au/biography/ward-ebenezer-4799]

¹⁶ South Australia, Legislative Council, *Parliamentary Debates*, 16 August, 1898, p. 100, (James O’Loughlin).

designed to manage diseases very different from tuberculosis.¹⁷ While Campbell drew on the increasingly dominant theory that transmission between infected humans spread the disease, Whittell maintained his belief in the main danger coming from diseased milk and cattle. Some non-medical parliamentarians rejected contagion altogether. Others simply saw the task as too difficult for local authorities, too expensive, or too interventionist.

Despite these objections, in 1898, Campbell garnered enough support from his parliamentary colleagues to make tuberculosis notifiable under a separate clause. It was not listed as an infectious disease thus overcoming some of the objections of how it might be applied to other clauses. The clause was carried by ten votes to six and required doctors to report cases of pulmonary tuberculosis:

Every medical practitioner attending on or consulted by any person suffering from pulmonary tuberculosis shall, so soon as the fact becomes known to him, report the same to the Local Board of the district in which the person resides: Provided such notification shall not be necessary if the case has been previously reported to the same Local Board. Penalty – Five Pounds.¹⁸

While in the case of other infectious diseases the onus to notify fell not only on a physician, but also on family members or landlords, pulmonary tuberculosis required notification only by a physician. It was also listed and noted separately throughout the relevant sections of the Act.¹⁹ The clause on notification itself passed without debate in the Lower House, the House of Assembly, but the proposed payment of two shillings and sixpence for each notification came under question. Some Members, notably Labor Members Egerton Batchelor and William Archibald, argued that payment for notification would allow the unscrupulous in the medical profession to notify the disease simply for profit and it was likely

¹⁷ *ibid.*, 22 September, 1898, p. 201, (James O’Loughlin, Chief Secretary).

¹⁸ South Australia, House of Assembly, A Bill for An Act relating to Public Health No. 42, 4 October 1898, House of Assembly Records, s. 129.

¹⁹ *The Health Act 1898*, (S.A.), ss. 127, 128, 129.

doctors would notify only the poor for fear of losing wealthy patients.²⁰ Such views allowed opponents of the bill to suggest the legislation would ‘let loose a horde of bloodhounds who would have their noses in everybody’s back-yard.’²¹ Other Members defended the medical profession but the outcome of the debate was to specify payment for notification of a person with an ‘infectious disease’ and as tuberculosis was not listed as such but named separately throughout the bill, payment for notification of tuberculosis was effectively negated. This built into the Act a disincentive to notify tuberculosis. Though the principle of notification of tuberculosis was not debated in the House of Assembly a number of politicians expressed opposition to the entire act as too interventionist and unnecessary. William Archibald, of the Labor Party, feared that the provisions of the Act would only be applied to the poor arguing that the best means of eliminating consumption was to improve workers’ conditions, but he was the only participant in the debate on the bill who put this position.²²

The differentiation of tuberculosis from other diseases like typhoid, scarlet fever, and diphtheria reflected the different nature of the disease in public health terms and the disparate understandings of the disease’s aetiology. The term pulmonary tuberculosis rather than the better known and feared ‘phtthisis’ was used in an effort to minimise alarm. Further, by excluding tuberculosis from the broad category of infectious disease it was hoped to satisfy some of the concerns of

²⁰ South Australia, House of Assembly, A Bill for An Act relating to Public Health No. 42, s. 130, Parliamentary Library, South Australia. *The Health Act 1891*, (S.A.), s. 129. South Australia, House of Assembly, *Parliamentary Debates*, 8 December, 1898, pp. 1053-1054, (Egerton Batchelor, William Archibald). Frank S Hone, B.A., M.B., B.S., ‘The Present Position of Notification of Disease in South Australia’, *MJA*, 29 May, 1915, pp. 503-504.

²¹ South Australia, House of Assembly, *Parliamentary Debates*, 8 December, 1898, p. 1054, (Alexander Poynton, Flinders Electoral District).

²² South Australia, House of Assembly, *Parliamentary Debates*, 2 December, 1898, pp. 1006-1007, 1010, (William Henry Carpenter, Encounter Bay Electoral District, Patrick McMahon Glynn,

opponents and to gain public acceptance of a provision that was a clear departure from the way in which legislators and the public had viewed tuberculosis.²³ Thomas Borthwick, Adelaide's City Health Officer, told the Australasian Medical Congress in 1905 that subsuming pulmonary tuberculosis under infectious diseases would have 'caused much hardship in many cases, and, in a new departure which might prove to be premature, it was incumbent to disarm opposition as far as possible'.²⁴ The *South Australian Health Act 1898* had a long passage through parliament from attempts at amendments in 1896 to final promulgation in January 1899, which finally made notification of tuberculosis by doctors compulsory.

Notification obliged local boards of health to take action. This was to take the form of a visit from a nurse or health officer who was to instruct residents on disinfection procedures, advise on general hygiene, and inform the consumptive on how to behave in order to protect family, friends and the broader community. In a measure that protected wealthier South Australians, this procedure was not pursued if the notifying physician advised against it.²⁵ The severity of action and detail of instruction was again largely differentiated from other infectious diseases, although methods varied between districts. Instructions for scarlet fever, measles, diphtheria and typhoid were generally more extensive than for tuberculosis.²⁶ For example, the Mayor of Unley noted in his report of 1907 that pulmonary tuberculosis did not attract the same level of stringent action as other infectious diseases and indicated that regulations were sometimes loosely interpreted. He said,

North Adelaide Electoral District); 9 December, 1898, pp. 1071-1072 (John Downer, Leader of the Opposition and former Premier, Albert Peake, Albert Electoral District).

²³ T. Borthwick, M.D., Edin., 'Compulsory Notification of Phthisis', *Australasian Medical Congress Transactions*, 1905, Adelaide, 1907, p. 450.

²⁴ *ibid.*.

²⁵ SRSA, GRG8/1907/134, The Local Board of Health for the City of Adelaide.

²⁶ SRSA GRG8/1/1907/134, Correspondence from Metropolitan Local Boards to Central Board of Health, Isolation of infectious diseases - Stating means employed.

In the case of Pulmonary Tuberculosis, which is made compulsory for the Medical attendant only to report, the measures taken are not so severe. The patient in such a case is kept under observation by the nurse keeping in touch with the case, and she also visits – unless the Medical practitioner undertakes to see that proper precautions are taken, and to advise the Board of change of residence, or if death ensues. Disinfection, however, is never omitted when the patient leaves the house for good or dies. In the cases of Pulmonary Tuberculosis the restrictions respecting isolation are not carried out, and the movements of the patient, with but few exceptions, are unrestrained.²⁷

Adelaide Council also allowed doctors to protect their relationship with patients. Before the City of Adelaide proceeded with action the attending physician was asked if there was any objection to the patient being visited by an officer of its health department. It was hoped that such a precaution would overcome fears that notification would lead to unacceptable interference.²⁸ Adelaide Council provided doctors with the written instructions, a request to comply and offered a fee to induce notification of consumptives' movement from residence to residence.²⁹ That the Council felt this action was necessary indicated patient and medical resistance to council intervention.

On the other hand, some councils, adopted more stringent methods. The Port Adelaide Board of Health reported more careful supervision and disinfection. A second case of tuberculosis in a household led to some renovations as well as disinfection, while patients were required to be either isolated in a separate room in their home or sent to a hospital.³⁰ Local health authorities viewed the lack of consistent application of the Act across districts as an impediment to the success of notification and convened a conference in 1909 to try to reach a common interpretation of how to apply the legislation.

²⁷ SRSA GRG8/1/1907/134, Isolation of infectious diseases – Stating means employed, From Local Board of Health, City of Unley, 23 October 1907.

²⁸ 'The Fight Against Tuberculosis in Australasia', *The Australasian Medical Gazette*, (AMG) 20 January, 1902, p. 31.

²⁹ *ibid.*, p. 32.

³⁰ SRSA GRG8/1/1907/134, Secretary of the Local Board of Health, City of Port Adelaide to the Central Board of Health, 17 October, 1907.

The purpose of the conference was to reach a consensus on a uniform system but participants could not reach a consensus on the point at which sufferers could pass on their infection or how long supervision of those notified should continue. One participant proposed that all notifications include a certificate indicating whether or not the person was infectious and this suggestion revealed a range of different approaches. Some officers believed consumptives needed to be supervised for a number of years, one official suggesting that reported cases be certified as cured twice a year for four years before being pronounced cured and removed from local board supervision. Others believed this to be too severe. Some delegates said that all consumptives were infectious and had to be treated as such while others disagreed that all cases were infectious and argued for notification of infectious cases only. Still others questioned the science of bacteriology and the communicability of tuberculosis.³¹ The chronic nature of the disease, vagaries of symptoms and a lack of medical consensus on when the tubercular could definitely infect others blocked the boards' attempts to systematise notification across all districts.

Victoria

In Victoria death rates from pulmonary tuberculosis were higher than in South Australia and particularly high in the gold mining town of Bendigo. In 1898 Victoria's death rate was 128.5 per 100,000 compared with South Australia's 89.6 per 100,000. Table 2.2 shows Victorian death rates in Melbourne and the two gold mining towns of Bendigo and Ballarat. Like South Australia, tuberculosis in all its forms killed many more than other major communicable diseases like diphtheria,

³¹ Conference on Consumption, *A Digest of Proceedings of the Conference of Representatives of Local Boards of Health in the Metropolitan Area of Adelaide, 1909*, pp. 15-16, 20, SLSA.

scarlet fever and typhoid fever. As table and graph 2.2 demonstrate, between 1903 and 1907, pulmonary tuberculosis accounted for 67.2% of deaths from the main contagious diseases.

Victoria had passed a comprehensive public health act in 1890, which gave power to the Board of Public Health to proclaim diseases to be infectious within two categories. Quarantinable non-endemic infections like small-pox, plague and cholera would be designated as ‘malignant, infectious or contagious’ while endemic infections such as diphtheria, scarlet fever and typhoid would be ‘dangerous, infectious or contagious’. For a disease to become notifiable it had to be declared prevalent in specific areas so that notification came into effect local government district by local government district rather than throughout the whole state.³² In August 1901 the Board proclaimed pulmonary tuberculosis to be ‘dangerous, infectious or contagious’³³ and by 1903 it was notifiable in 25 districts and in 32 by 1907. But Victoria had 208 local government districts.³⁴ Thirty-two was also a low number compared with the number of districts in which acute infections were notifiable.³⁵

³² Victoria, Department of Public Health, *Report of the Board of Public Health*, 1908-9-10, Victoria, Govt Printer, Melbourne, p. 10, Butlin Collection, JLS.

³³ Victorian Department of Public Health, *Report of the Board of Public Health 1898-1904*, Victoria, Govt Printer, Melbourne, p. 6-7, Butlin Collection, JLS.

³⁴ Kevin O’Toole and Neil Burdess, ‘Municipal Wards in Victoria, 1982-1999’, *Electronic Journal of Australian and New Zealand History*, 18 October, 2003, www.jcu.edu.au/aff/history/articles/otoole_burdess.htm, pp. 1-2.

³⁵ Victoria, Department of Public Health, *Report of the Board of Public Health for the Years, 1905-6-7*, Victorian Parliamentary Papers, (VPP) 1908, pp. 10, 12. E.G. Leger-Erson, L.R.C.P., ‘Sanitary Administration and Reform in Australia’, Section of Public Health, *Australasian Medical Congress, Transactions of the Eighth Session*, October, 1908, J. Kemp, Government Printer, Melbourne, 1909, p. 154.

Table 2.2**Death Rate per 100,000 From Pulmonary Tuberculosis In Victorian Towns And Cities 1891-1938**

Period	Greater Melbourne	Ballarat	Bendigo	Geelong
1891 - 1900	167	171	241	Not calculated
1901 - 1905	139	153	227	Not calculated
1906 - 1910	108	115	212	Not calculated
1911 - 1915	91	103	165	Not calculated
1916 - 1920	83	112	160	Not calculated
1921 - 1925	69	67	119	46
1926 - 1930	59	52	107	42
1934	47	53	61	18
1935	48	47	92	33
1936	50	13	104	38
1937	44	37	94	65
1938	44	42	93	23

Source: A1928, 458/10 Section 2, Public Health Department, Bendigo, 'Tuberculosis in Bendigo', 19 November 1940. [Source of Health Department's statistics, Victorian Year Book 1938-1939.]

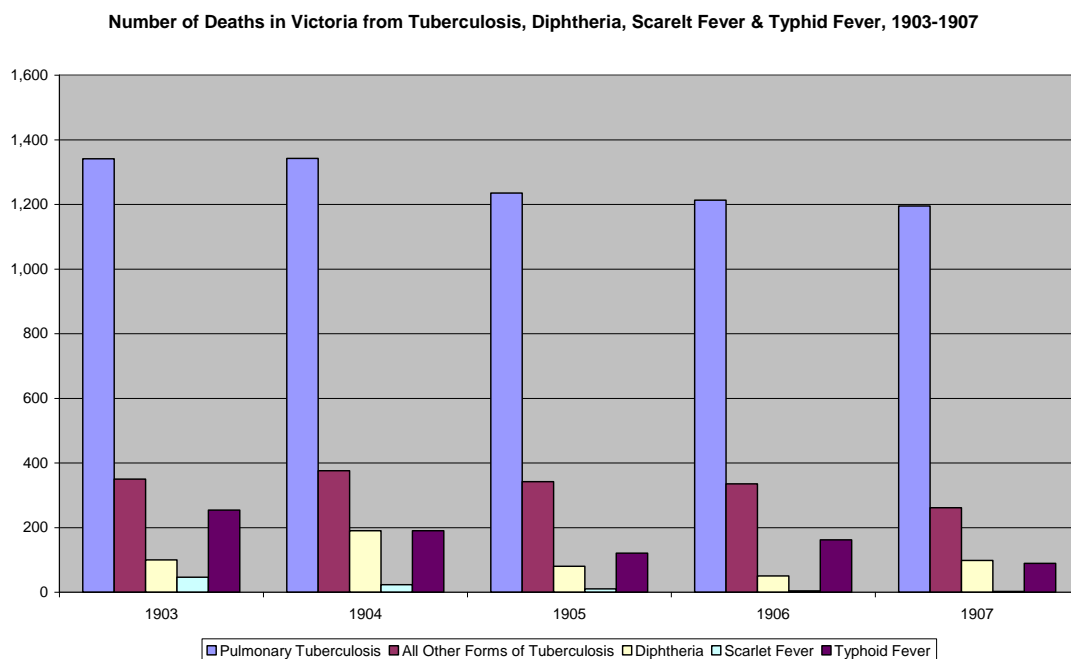
Table 2.3**Number of Deaths in Victoria from Tuberculosis, Diphtheria, Scarlet Fever & Typhoid Fever, 1903-1907**

	a. Pulmonary Tuberculosis	a. All Other Forms of Tuberculosis	b. Diphtheria	b. Scarlet Fever	b. Typhoid Fever
1903	1,341	350	100	46	254
1904	1,342	376	190	23	190
1905	1,235	342	80	10	121
1906	1,213	335	50	4	162
1907	1,195	261	98	2	89
TOTAL	6,326	1,664	518	85	816
PROPORTION OF TOTAL	67.20%	17.70%	5.50%	0.90%	8.70%

a. Source: Australia, Department of Trade and Customs, Committee Concerning Causes of Death and Invalidity in the Commonwealth, *Report on Tuberculosis*, 1916, p. 40.

b. Source: Victoria, Department of Public Health, *Report of the Board of Public Health for the Years 1905-6-7*, Victoria, Parliamentary Papers, 1908, p. 10.

Chart 2.3.1



Sources: Committee Concerning Causes of Death and Invalidity in the Commonwealth, *Report on Tuberculosis*, Commonwealth of Australia, Department of Trades & Customs, 1916, p. 40.

Dept of Public Health, *Report of the Board of Public Health for the Years 1905-6-7*, Vic. P.P. 1908 p. 10.

Between 1897 and 1904 the number of districts in which typhoid was notifiable increased from 141 to 171, diphtheria from 130 to 159 and scarlet fever from 166 to 180.³⁶ By 1909 tuberculosis was notifiable throughout Victoria³⁷ but not before a lively debate in the forums of the medical profession.

Notification of tuberculosis divided members of the Victorian Medical Society who debated the issue throughout 1904 and 1905. Objections to notification were raised on economic, social and medical grounds. Tuberculosis was so much more pervasive than other contagious diseases, opponents argued, that effective notification would be extremely expensive. Not only did boards of health require

³⁶ Victoria, Department of Public Health, *Report of the Board of Public Health for the years 1898-1904*, p. 6

³⁷ Victoria, Department of Public Health, *Report of the Board of Health*, 1908-9-10, p. 11.

staff for inspection, advice and disinfection, but also accommodation for the worst cases. From the consumptive's perspective social ostracism, loss of employment and economic hardship was the likely outcome of notification.³⁸ Although few doctors at this stage challenged the orthodoxy of contagion, differences emerged around the relative importance of the microbe and the host. Evidence of high rates of infection without active disease led many to conclude that the good health of the individual was better protection than reduced exposure to the bacillus. Interventions like notification therefore were seen as a great deal of effort for little benefit.³⁹ One physician argued:

It is manifestly unscientific to attempt the obviously impossible, and in the case of pulmonary phthisis, no amount of isolation and no degree of disinfection could ever be applied that would yield a benefit in any way proportionate to the enormous cost of carrying them out. ... It is safe to assert that the bacillus of tubercle holds a position that cannot be carried by any frontal attack with disinfectants, chemical or otherwise; but there is cheering and stimulating evidence ... that the position may be successfully turned by giving our attention more closely to the living conditions under which a human soil is produced, which is not merely favourable to the growth of the bacillus... but actually invites it.⁴⁰

He stated that improvements in living conditions in England were responsible for that country's declining death rate but offered no specific ideas on how doctors might contribute to this end in Australia. Few would have argued with the need to improve the health of individuals as a protection against tuberculosis, but rather than offer specific solutions, doctors generally proffered vague statements. They often advocated government pensions for poor consumptives, but usually stressed the need for more hospital or institutional accommodation for poorer patients. Doctors and middle class reformers failed to reconcile their understanding of tuberculosis as a class based disease with their social and political philosophy. Rather than looking to broad social and economic reform to improve living

³⁸ 'The Compulsory Notification of Phthisis', *Intercolonial Medical Journal*, (IMJ) 20 May, 1904, pp. 260-261.

³⁹ *ibid.*, p. 261.

⁴⁰ *ibid.*, pp. 261-262.

conditions as a means of prevention, middle class reformers resorted to solution by the individual. Thus the sanatorium was to modify individual behaviour. Nancy Tomes in her excellent study of the impact of the germ theory on American society illustrated this dilemma faced by anti- tuberculosis campaigners. Aware of the impact of poor housing on the tuberculosis problem, their publicity nevertheless largely blamed careless consumptives and dirty homes of the poor for spreading the disease.⁴¹

Advocates of notification countered arguments about social and economic hardship by drawing socio-economic distinctions. Visiting practitioners could make decisions about whether local health officials need become involved. As in South Australia, wealthier patients might be notified but spared a visit from the local health officer. ‘The well-to-do patient’, said Dr Jefferis Turner, ‘will not be interfered with in any way, his own medical attendant making himself responsible’.⁴² Such distinctions assured private practitioners that notification need not threaten their relationship with paying clients. James Jamieson, Health Officer for Melbourne, suggested problems with notification would be mitigated if the Central Board instructed local authorities to exercise discretion, which in effect meant to concentrate on the poorer sections of the community. ‘Phthisis’, he said, ‘was essentially a disease of the poorer classes, and very few precautions were taken by these classes to prevent its spread.’⁴³

⁴¹ Nancy Tomes, *The Gospel of Germs: Men, Women, and the Microbe in American Life*, Harvard University Press, Cambridge, Massachusetts, 1998, p. 131.

⁴² A. Jefferis Turner, M.D. Lond., D.P.H. Camb., ‘The Notification of Consumption’, *IMJ*, 20 July, 1904, p. 365

⁴³ ‘Medical Society of Victoria Special Meeting’, *IMJ*, 20 August, 1905, p. 333.

For proponents of notification the epidemiology of tuberculosis and the science of bacteriology left no doubt that management of the disease demanded intervention by the state. They pointed to the dominance of tuberculosis in the State's mortality rates, the largely accepted science that bacteria from consumptives' sputum constituted the primary source of infection, and the potential for consumptives to be non-infectious if they observed precautions. Although the health of the host remained important, they looked to research suggesting the infective power of the bacillus and the increasing risk of contracting active disease with ongoing exposure to the bacillus. In any case, the intent of notification was to improve the living conditions and habits of the consumptive as well as combat the microbe. Improvements to living conditions included disinfection of homes, increasing ventilation, and advising on good personal hygiene and preventive measures such as the destruction of sputum and reserving special cutlery and crockery for the consumptive member of the household. Any attempt to deal with tuberculosis as a contagious disease through private practice alone was impossible because the majority of patients either did not seek medical advice or did so only on a casual basis thereby making it impossible for doctors to ensure precautionary measures were observed. The problem required a public health solution and a public health solution required notification.⁴⁴

Despite some reservations, the Victorian Medical Society agreed that notification was necessary but questions arose around medical discretion, appropriate timing of notification, administrative resources and a lack of appropriate accommodation for both early and advanced cases. Few doctors in these early years had complied with notification, councils often receiving advice only as a result of a death. As in South

⁴⁴ Turner, 'The Notification of Consumption', *IMJ*, 1904, pp. 359-364.

Australia, different interpretations of compulsory notification and methods of implementation among councils and health officials, as well as medical debates on when sufferers were most likely to spread their disease complicated the issue.⁴⁵ At the Victorian Medical Society's special meeting on notification in 1904 four council medical officers presented their ideas on how to institute notification. Dr Argyle of Kew believed that notification of all cases was a drastic measure, that notification would result in 'an anti-tuberculous faddism, and practitioners would evade the law by not diagnosing incipient cases'.⁴⁶ He believed practitioners should be allowed more discretion to notify only when the illness was at a more severe stage. His counterparts from Hawthorn and Prahran supported more complete notification but were concerned about a lack of confidentiality, particularly as some councils had adopted the practice of reading names and locations in open meetings. What they all agreed on was the need for confidentiality, practitioner discretion and for state run sanatoria and hospitals for consumptives.⁴⁷

New South Wales

New South Wales was slower than Victoria and South Australia to introduce state-wide notification. The mortality rate from pulmonary tuberculosis was lower than Victoria but still the leading cause of death by disease. New South Wales did not pass a general public health act until 1896. Instead, public health matters were administered under a number of different acts including *Infectious Diseases Supervision Act* and the *Dairies' Supervision Act*. The *Infectious Diseases Supervision Act*, quickly enacted in 1881 during a smallpox epidemic, was a single

⁴⁵ 'Compulsory Notification', *IMJ*, 20 July, 1905, pp. 301-302. 'Medical Society of Victoria Special Meeting', *IMJ*, 1905, pp. 333-337.

⁴⁶ 'Medical Society of Victoria Special Meeting', *IMJ*, 1905, p. 334.

⁴⁷ *ibid.*, pp. 333-337.

page Act establishing a Board of Health and requiring notification of smallpox.⁴⁸ The Dairies' Supervision Act of 1886 was the first legislation to specifically consider tuberculosis. It made tuberculosis in dairy cattle notifiable and forbade the sale of milk at risk of contamination or infection.⁴⁹ When the New South Wales parliament debated a health act in 1896 discussions on controlling infectious diseases drew only one mention of pulmonary tuberculosis. William (Billy) Hughes, Labor Member and future prime minister, raised the question of tuberculosis as a contagious disease, but the matter was passed over because the Act allowed the government to declare any disease infectious at any time making specific mention of tuberculosis unnecessary.⁵⁰

Table 2.4

New South Wales Infectious Diseases Death Rates per 100,000, 1884-1905

	Measles	Scarlet Fever	Whooping Cough	Diphtheria and Croup	Enteric (Typhoid) Fever	Phthisis
1884-1888	6.9	13.00	16.6	42.5	51.3	106.9
1889-1893	13.4	7.4	20.4	49.8	29.4	91.3
1894-1898	10.4	6.00	13.3	22.4	28.9	82.7
1899-1903	5.5	2.9	18.9	8.9	26.00	83.5
1904	1.5	3.5	10.2	12.9	17.2	82.6
1905	2.00	1.4	0.3	7.8	16.2	71.6

Compiled from 'Vital Statistics', *The Official Year Book of New South Wales 1905-6*, Government of New South Wales, Government Printer, 1907, pp. 249-255.

As noted in chapter one, J. Ashburton Thompson, Chief Medical Officer in New South Wales and President of the Board of Health, set out a prevention scheme for tuberculosis in 1899 including notification of all pulmonary cases as the only

⁴⁸ *Infectious Diseases Supervision Act 1881*, (No. 25) (NSW). P.H. Curson, *Times of Crisis, Epidemics in Sydney 1788-1900*, Sydney University Press, Sydney, 1985, 16-18.

⁴⁹ 'The Fight Against Tuberculosis in Australia', *AMG*, 20 November, 1901, p. 487.

⁵⁰ New South Wales, Legislative Assembly, *Parliamentary Debates*, October, 1896, Volume 85, pp. 3841-3842.

means to properly map the disease. Opposition to notification was not consistent with new scientific understanding.⁵¹ He said:

...to profess to wish that phthisis were prevented – to admit its communicability from the sick, to admit that consumptives are the main cause of its maintenance and diffusion, to admit the facts of local incidence and of house infection (all of which things, I suppose, we all do admit) – and then to oppose notification on any ground short of demonstrated impossibility, seems to be sheer capriciousness or sentimentality.⁵²

Despite Thompson's views on notification not all the State's Board of Health members were as enthusiastic, some being satisfied with meat and dairy supervision and the provision of sanatorium beds.⁵³ The Board discussed adding tuberculosis to the infectious diseases' list but believed the restrictions under the Act could not be applied to tuberculosis, that it needed specific legislation.⁵⁴ Concerned doctors and members of local Boards of Health called for action. Late in 1904 the New South Wales branch of the British Medical Association called on the Board of Health to initiate compulsory notification⁵⁵ and in 1906 a conference of suburban municipalities sought power to implement notification.⁵⁶ Councils also wanted the Government to provide more institutional accommodation for indigent consumptives. The tone of the conference suggested municipalities were anxious about the numbers of consumptives living in their districts and stressed the importance of restricting immigration of the tubercular. Although the Mayor of Ashfield, the convener of the conference, said the intent was not to separate people from their families, the tenor of the meeting lacked sympathy for the ill concentrating on how to limit tuberculosis sufferers' exposure to the broader

⁵¹ J. Ashburton Thompson, M.D., D.P.H., 'On the Guidance of Public Effort Towards the Further Prevention of Consumption', (Address to Intercolonial Medical Congress) *IMJ*, Vol. IV, No. 10, 20 October, 1899, pp. 500-501.

⁵² *ibid.*, p. 502.

⁵³ New South Wales, Legislative Council, *Parliamentary Debates*, 3 August, 1910, Vol 38, pp. 1313-1316, 1318, (Henry Normand MacLaurin).

⁵⁴ 'British Medical Association News', *AMG*, 21 November, 1904, p. 586.

⁵⁵ *ibid.*.

⁵⁶ *Sydney Daily Telegraph (D.T)*, 5 May 1906. *Sydney Morning Herald, (SMH)*, 7 May 1906, p. 9

community. The following year Kuring-gai Shire Council, north of Sydney, approached the Premier asking the Government to make tuberculosis compulsorily notifiable.⁵⁷ Responding to this pressure the Board of Health recommended notification to the Government but it was another four years before a bill came before parliament.⁵⁸

The *Local Government (Tuberculosis Notification Bill)* was introduced in 1910. In drafting the legislation the New South Wales' Government ignored the Central Board of Health's recommendation to by-pass local boards of health and instead proposed notifying all forms of tuberculosis to local authorities as South Australia and Victoria had done. Opposition to the bill centred on arguments about whether transmission occurred mainly from ingestion of food or from infected consumptives (as in South Australia twelve years earlier), whether all forms of the disease or just pulmonary should be notified, and the proposed central role of local authorities. Some argued that existing legislation on meat and milk had reduced the death rate and such a harsh measure as notification was unnecessary. This was the position of Sir Normand MacLaurin, a Member of the Legislative Council since 1889, a prominent physician and former chair of the Board of Health who argued forcefully against notification. He was a physician of an earlier generation than those advocating notification. Born in 1835 in Fife, Scotland, he practised until 1905, had been a medical witness at public enquiries, Chair of Anatomy & Physiology at the University of Sydney and vice chancellor of that University.⁵⁹ MacLaurin asserted that Koch 'had made a great blunder' when he differentiated

⁵⁷ 'The Treatment of Consumption', *SMH*, 28 October, 1907, p. 6.

⁵⁸ New South Wales, Legislative Council 1910, *Journal*, Vol. 75, 1910, 20 July 1910, 3 August, 1910, pp. 34, 56. New South Wales, Legislative Council), *Parliamentary Debates*, 3 August, 1910, p. 1319, (Henry Normand MacLaurin).

the bovine and human bacillus. In support of his argument he asserted the veracity of a 1909 analysis of 33 years of mortality from tubercular disease by John G. Trivett, the State's statistician. Trivett's analysis showed an overall mortality decline, which he attributed to preventive legislation already in place namely the *Infectious Disease Supervision Act of 1881*, *Dairies Supervision Act of 1886*, *Diseased Animals and Meat Act of 1892* and *Public Health Acts*, and the recently consolidating act of 1902.⁶⁰ McLaurin's colleague, fellow physician and close friend Charles Mackellar, agreed that the proposed notification measure was too harsh. MacKellar was on the Board of Health and had been in the Legislative Council since 1885 where he had demonstrated an interest in public health. He had introduced the *Dairies Supervision Act* of 1886 that MacLaurin lauded as the main reason for mortality decline of tuberculosis. MacKellar, however, supported notification of tuberculosis in the pulmonary form but condemned the notion of giving authority to local councils. Pressure to act against the disease, he said, did not 'justif[y] a measure ... which will give additional power to every paltry municipality that fails to exercise the powers it already has'.⁶¹ Members of the Legislative Council who were physicians debated each other. Dr John Nash supported the bill and expressed incredulity at opponents who were prepared to accept notification if it were restricted to the pulmonary form and if notifications went directly to the Central Board and not to local authorities. At this point the

⁵⁹ Ann M Mitchell, 'MacLaurin, Sir Henry Normand (1835 – 1914)', Australian Dictionary of Biography, Online Edition, <http://adbonline.anu.edu.au/biogs/A100320b.htm>.

⁶⁰ John B. Trivett, Government Statistician, *A Statistical Analysis of the Mortality from Tubercular Diseases during the Last Thirty-Three Years*, Government Printer, Sydney, 1909, pp. 78-80.

⁶¹ New South Wales, Legislative Council, *Parliamentary Debates*, 3 August, 1910, Volume 38, p. 1326.

legislation lapsed because parliament was prorogued prior to a general election on 14 October, 1910.⁶²

In the meantime, after vigorous debate, the Sydney Council acted alone. The Municipal Council of Sydney, mainly at the urging of its Medical Officer, W.G. Armstrong, passed by-laws for notification in October 1904. These by-laws went beyond the South Australian Act by requiring notification of all pulmonary cases in the City of Sydney not only by medical practitioners but also by householders.⁶³ Armstrong was opposed in Council by Dr Camac Wilkinson, a prominent Sydney anti-tuberculosis campaigner, who doubted the prophylactic value of notification without isolation.⁶⁴ But Armstrong argued that the by-laws were designed to enable the Council to educate on precautionary measures and to know if consumptives changed residence. Council could then disinfect vacated properties.⁶⁵ Wilkinson was out-voted twelve to three⁶⁶ and the City of Sydney became the only area of New South Wales where pulmonary tuberculosis was notifiable until 1915.⁶⁷

Shortly after the New South Wales parliament had rejected the *Local Government (Tuberculosis Notification) Bill* in 1910 the Labor Party came to power with a comprehensive health policy on its platform.⁶⁸ In 1912 the new Labor Government

⁶² New South Wales, 'Bills of the Session 21st Parliament, 5th session, *Parliamentary Debates*, Volume 37, p. 13. New South Wales, Legislative Council, *Parliamentary Debates*, 10 February 1915, Volume 57, p. 2335, (John Garland).

⁶³ City of Sydney Archives (COSA), *By-Laws*, 18 October, 1904, approved, 16 January, 1905, pp. 95-97. COSA, CRS 29, *Proceedings of Council*, 12 October, 1904, p. 298. New South Wales, *Report of the Director-General of Public Health, New South Wales, for the year 1919*, Govt. Printer, Sydney, 1920, p.29.

⁶⁴ 'Crusade Against Consumption', *SMH*, 13 October, 1904, p. 3.

⁶⁵ 'British Medical Association News', *AMG*, 21 November, 1904, pp. 581-585.

⁶⁶ COSA, CRS 29, *Proceedings of Council*, 12 October, 1904, p. 298.

⁶⁷ The City of Sydney By-laws contained the term 'phthisis' defined as consumption of the lungs or consumption of the throat. [COSA, *By-Laws*, 18 October, 1904, pp. 96-97.]

⁶⁸ *The Worker*, 16 February 1911, pp. 3, 13; 5 October 1911, p. 3. W.A. Holman, M.L.A., *Policy Speech*, 14 October 1913, The Worker Trustees, Sydney, p. 7. New South Wales Political Labor League, 'Twelve Reasons Why You Should Vote Labor', u.d., circa 1913, ML. *The Worker*, 2

established a Tuberculosis Advisory Board,⁶⁹ which recommended compulsory notification of pulmonary tuberculosis where sputum samples contained *tubercle bacilli* and in cases in which the sufferer could not be nursed at home because poverty or other circumstances, which would create a risk to themselves and their communities. In February 1915, Fred Flowers, Minister for Public Health, introduced a health amendment bill, which included provisions to notify pulmonary tuberculosis.⁷⁰ More cautious than the previous attempt in 1910 the Minister followed the Tuberculosis Advisory Board's proposal to notify only if bacilli were present in the sputum.⁷¹ Ultimately notification was restricted to the two most populous areas of the State, the Sydney metropolitan area and the Hunter River district. In 1916 the measure was extended to the Blue Mountains, a destination of many consumptives seeking a climate cure.⁷² The *Medical Journal of Australia* declared this to be 'one of the most important measures directly concerned with the prevention of disease'.⁷³ Despite intentions to extend notification throughout the state, it was not until March 1929 that this occurred.⁷⁴

IMPLEMENTING NOTIFICATION

The introduction of notification and methods used to implement the policy varied between the three states. It was 31 years after the South Australian legislation before compulsory notification of pulmonary tuberculosis was extended to the

July 1914, p. 15. Brian Dickey, 'The Labor Government and Medical Services in NSW, 1910-14', in Jill Roe (ed.), *Social Policy in Australia Some Perspectives 1901-1975*, Cassell, 1976, pp. 60-73.

⁶⁹ *The Worker*, 14 August 1913, p. 4. New South Wales, Legislative Assembly, *Parliamentary Debates*, 9 February 1915, p. 2289.

⁷⁰ New South Wales, Legislative Assembly, *Parliamentary Debates*, 9 February 1915, p. 2289.

⁷¹ *ibid.*, 10 February 1915, p. 2342. *Public Health (Amendment) Act, 1915*, (NSW), s. 10.

⁷² New South Wales, *Report of the Director-General of Public Health, New South Wales for the year ended 31st December, 1914*, p. 9; *Report of the Director-General of Public Health 31st December, 1916*, 1918, p. 11.

⁷³ 'A Year's Work', *MJA*, 6 January 1917, p. 13.

entire state of New South Wales. In Victoria sufferers became subject to provisions in the Health Act applicable to other infectious diseases, something South Australia had deliberately avoided. Moreover, methods of reporting and supervision varied between local health authorities. Public health physicians constantly complained that inconsistency in administering notification impeded its success. The issue was a constant theme in reports and discussions in public health forums. Every report on tuberculosis called for uniform notification and better administrative follow up.

An assessment by prominent South Australian physician, Frank S. Hone, provided an example. In 1915 he assessed the effect of notification in South Australia concluding that, although the death rate had declined, it was not as substantial as advocates for notification had predicted. Notification had served mainly to highlight the complexity of dealing with the disease and the need for greater control of 'refractory infectious cases'.⁷⁵ Hone's South Australian colleague, W. Ramsay Smith, Chair of the South Australian Central Board of Health, was more sanguine than Hone. Reporting to an international conference in 1912, he reported that notification levels were improving with some local authorities having accomplished a great deal despite problems with poor information about the movements and location of consumptives.⁷⁶

But Hone still found little improvement as late as 1931. According to Hone doctors often did not notify until the patient was dead. Others were too cautious and failed

⁷⁴ New South Wales, *Report of the Director-General of Public Health 1929*, Government Printer, 1930, pp. 5, 51.

⁷⁵ Frank S Hone, B.A., M.B., B.S., 'The Present Position of Notification of Disease in South Australia', *MJA*, 29 May 1915, p. 504.

⁷⁶ W. Ramsay Smith, M.D., C.M., D.Sc., F.R.S. (Edin), *Twelve Years' Experience of Compulsory Notification of Pulmonary Tuberculosis in South Australia*, Government Printer, 1913, pp. 5-6, BSL Special Collections.

to diagnose early enough, which resulted in many contacts of patients being infected and thereby infectious before diagnoses were made on the first sufferer. Even when appropriately notified, tracing the source of infection was almost impossible because, unlike acute infections, it was often years between primary infection and manifestation of the disease. Moreover, Australian statutes and administration lacked a uniform approach while administration by local government was inefficient either because of inherent difficulties of monitoring a chronic condition, or lack of money and facilities.⁷⁷ In 1931 he wrote:

The foe is retreating, but the force of facts compels the belief that notification, as hitherto practised, has played but a minor part in causing the retreat.⁷⁸

The general tenor of medical opinion amongst publicly employed doctors was one of disappointment with the results. They did not, however, question the measure itself, only its application.

One indicator of disheartening results from notification was that deaths outnumbered the notifications proving tuberculosis was under notified. An excess of deaths over notifications was largely limited to the first few years of notification but even though the ratio improved, tuberculosis was still under notified. In South Australia deaths exceeded notifications during the first year of the legislation's enactment, while Victoria experienced four years of excess deaths over notifications. The New South Wales figures should be considered only from 1916, the first year notification extended beyond the City of Sydney when deaths as a percentage of notification fell from 311% to 77%. Despite gradual improvement, table 2.6 indicates a high level of under-notification. As noted in chapter one, the 1916 survey in Massachusetts estimated that nine or ten active cases of disease

⁷⁷ Hone, *MJA*, 8 August 1931, pp. 163-166.

⁷⁸ *ibid.*, p. 163.

existed for every death from tuberculosis⁷⁹ while the most conservative contemporary estimate was one case for every death. As notification figures include those coming to attention only after death, even on the most conservative estimate of morbidity, notification laws and regulations were not capturing the tubercular population. For example, the best result evident from table 2.6 was South Australia in 1916 when deaths were 59% of notifications. Using the most conservative morbidity formula of one living sufferer for every death, notifications fell short by 114 cases or 15% of estimated cases. Using the same conservative formula Victoria's worst result since the early years of notification was in 1920 when notification numbers fell short by 1,048 or notifications comprised only 47% of a conservative estimate of phthisis cases.

Once notification had been in place for one to four years notification numbers began to exceed deaths indicating that doctors slowly began to advise authorities of their tuberculosis cases. But this trend towards increased notifications was not steady and often declined. Between 1899 and 1926 South Australia's deaths as a percentage of notifications reached their lowest in 1916 at 59% but rose again to highs of 79% in 1919 and 72% in 1926. In 1908 Victoria's percentage fell below 100% and reached a low of 61% in 1917 but in 1920 deaths again exceeded notifications and did not go below 77% between 1921 and 1926. The picture is similar in New South Wales after 1916 when notification was extended beyond the City of Sydney. Deaths as a percentage of notifications reached its lowest of 74% in 1920 but deaths exceeded notification rates in 1919, 1922 and 1924.

⁷⁹ Robin Walker, *Historical Studies*, 1983, p. 445.

In his study of tuberculosis in Britain F.B. Smith recorded similarly disappointing notification rates. For example, in 1927 47% of tuberculosis deaths in London had either not been notified at all or only within three months before death. As late as 1942-3 8% of deaths in England and Wales had not been notified and a further 42% had been brought to the notice of authorities only within a year of death. Notification in England and Wales began on a voluntary basis in a few local government areas, but others were daunted by the work inherent in the process. The central government brought in compulsory notification across the country in 1912 but Smith argues that both doctors and patients avoided notification where possible and that an efficient system was not attained.⁸⁰ The similar experiences in Australia and Britain point to the logistical and administrative difficulties entailed in detecting this chronic affliction.

A further signal to public health physicians that policies were not having the desired impact was that the death rate remained higher than anticipated when notification was first introduced. South Australia was an apt example. Although it was the first State to introduce notification, and did so state-wide, after 1905 its death rate rose above the national average for the first time.⁸¹ Victoria too was consistently higher than the national average. New South Wales, on the other hand where notification came a decade later than South Australia and not state-wide until 1929, had a death rate below the national average. Table 2.5 shows death rates for Australia and the three states of South Australia, Victoria and New South Wales.

⁸⁰ F.B. Smith, *The Retreat of Tuberculosis 1850-1950*, Croom Helm, London, 1988 pp. 69-70.

⁸¹ Hone, *MJA*, 8 August, 1931, p. 163. Also see table 2.5.

Table 2.5**Commonwealth And States' Death Rate from Tuberculosis of the Respiratory System per 100,000 of Population, 1910-1924**

YEAR	NSW	VIC	QLD	SA	WA	TAS	Commonwealth
1910	63.9	81.1	51.2	83.5	77.5	68.1	70.0
1911	66.2	83.0	57.6	70.9	64.5	66.8	70.4
1912	61.4	78.8	52.9	75.5	73.7	62.4	67.6
1913	65.9	74.0	54.3	76.4	65.7	59.2	67.5
1914	62.3	71.5	44.5	65.3	71.6	47.4	62.9
1915	58.4	64.5	49.9	76.6	73.8	53.0	61.5
1916	60.0	71.3	53.6	76.8	70.3	58.7	64.6
1917	53.1	64.3	45.7	77.1	69.9	47.9	58.3
1918	56.1	65.8	48.4	71.6	79.2	46.4	60.3
1919	62.8	71.1	56.4	72.0	92.2	57.1	66.9
1920	53.0	63.7	46.0	66.0	77.6	50.4	57.8
1921	52.5	66.9	44.3	66.6	77.9	61.4	58.7
1922	48.9	58.0	38.9	63.6	73.9	48.0	53.1
1923	50.4	64.5	44.0	62.4	61.7	62.7	55.7
1924	51.1	56.8	37.1	62.7	61.5	59.6	52.8

Source: Commonwealth of Australia, 1926, *Report of the Royal Commission on Health, 1926*, Appendix 2, 62.

In 1925 Gordon Hislop, a physician at the Melbourne Hospital with an interest in tuberculosis, observed that Australia's death rate, while low compared with other countries, still remained too high and declining rates did not permit Australia to 'sit Micawber-like awaiting the approach of the death rate to be infinitesimal'.⁸² The decline in mortality did not accelerate as prevention enthusiasts had predicted, sometimes the decline slowed. In Sydney between 1881 and 1904, death rates declined by 85 per 100,000 or 47% but after notification began in the City of Sydney, overall decline in the metropolitan area between 1904 and 1915 was 30 per 100,000 or 37%. Nor did Sydney's rate of decline improve after notification was extended to suburban areas in 1915. From 1916 to 1927 the rate declined by only 11%. Melbourne followed a similar pattern during these years. Between 1881 and 1901 death rates fell by 32%, but between 1901 and 1909 as tuberculosis

⁸² J. Gordon Hislop, M.B., Ch.B. (Melbourne), M.R.C.P. (London), *MJA*, 17 January, 1925, p. 52.

gradually became notifiable in districts across Victoria, the decline in death rates fell to 20%. The situation improved between 1909 (when the disease became notifiable throughout the state) and 1927, but the rate of decline merely returned to pre 1900 levels. Bold statements that public and private preventive measures would eliminate the disease proved to be hyperbole.

Role of Local Government

Physicians and reformers' expectations of notification were not fulfilled. The medical profession was constantly reminded of the gap between ideas, legislation and reality. Notification was strongly advocated by public health physicians and in general they persuaded politicians to their view. Implementation, however, rested on the general practitioner's willingness to comply, the patient's willingness to seek medical advice and on an adequate local infrastructure with the means and will to take the necessary follow-up steps of disinfection, dispensing of advice and regular visiting. Despite a rising public discussion on the importance of the population's health for the strength of the nation, State governments devolved routine public health management to local government, which was often poorly equipped both politically and economically to implement legislation efficiently.

Tuberculosis undoubtedly taxed the resources of local authorities already accused by the Central Board of Health of poor public health management because of a paucity of funds and staff.⁸³ For example, the Local Board of Health in the country district of Meningie noted the Council had attempted to apply the provisions of the

⁸³ South Australia, Parliament 1892, *Central Board of Health, Eighteenth Report, 1891-2*, Parl Paper, No. 132, 1892, Adelaide, pp. 5-6.

Table 2.6

Notifications, Deaths & Deaths as a Percentage Of Notifications Of Pulmonary Tuberculosis in NSW, Victoria, SA

YEAR	NSW			VIC			SA		
	Note A			B			F		SA
	Notific- ations	Deaths	%	Notific- ations	Deaths	%	Notific- ations	Deaths	%
1899							228	318	139%
1900							310	301	97%
1901							352	306	87%
1902							323	299	93%
1903							346	305	88%
1904	146	1174	804%	413}	1342	325%	333	298	89%
1905	128	1037	810%	603}	1235	205%	352	290	82%
1906	118	1020	864%	780} C	1213	156%	341	307	90%
1907	161	976	606%	841}	1195	142%	448	293	65%
1908	112	1021	912%	1352	1209	89%	526	352	67%
1909	196	1062	542%	1283	1087	85%	433	363	84%
1910	184	1057	574%	1457	1078	74%	388	338	87%
1911	222	1099	495%	1407	1108	79%	412	292	71%
1912	265	1078	407%	1327	1087	82%	429	329	77%
1913	228	1210	531%	1376	1052	76%	561	335	60%
1914	293	1178	402%	1410	1031	73%	487	290	60%
1915	361	1122	311%	1509	942	62%	493	339	69%
1916	1499	1157	77%	1653	1047	63%	608	361	59%
1917	1319	1017	77%	1562	952	61%	606	361	60%
1918	1308	1093	84%	1480	937	63%	475	332	70%
1919	1102	1216	110%	1297	1084	84%	421	331	79%
1920	1509	1118	74%	932	990	106%	561	335	60%
1921	1240	1129	91%	1302	1025	79%	517	337	65%
1922	1045	1080	103%	1158	887	77%	478	319	67%
1923	1218	1114	91%	1088	997	92%	478	334	70%
1924	1096	1165	106%	1060	900	91%	551	336	61%
1925	1195	1023	86%	1064	937	88%	540	332	61%
1926	1150	1144	99%	1043	924	89%	483	346	72%

Notes

A In City of Sydney from 18 October 1904

B Melbourne and suburbs 1903: outside cities 1905: whole state 12 May 1909

F Notifiable 1898 Act

Compiled from: J.H.L. Cumpston, *Health and Disease in Australia, A History*, introduced and edited by M.J. Lewis, AGPS, Canberra, 1989, pp. 289-90. Death and Invalidity Committee, *Report on Tuberculosis*, 1916, p. 40. South Australia, *Annual Report of the The Central Board of Health 1933*, 1935, p. 10.

new Health Act, but could not do so in the whole district because it 'would be burdensome beyond the resources of the funds of the Council'.⁸⁴ In South Australia infectious disease deaths tripled once pulmonary tuberculosis was included in the category. In 1902 the district of East Torrens recorded 36 deaths from infectious diseases, 31 attributed to pulmonary tuberculosis. By 1902 the Adelaide district recorded 85 deaths from pulmonary tuberculosis and 29 from other infectious causes, mainly typhoid fever.⁸⁵ Table 2.8 shows deaths from infectious diseases recorded in the Central Board of Health Mortuary Record book for the Adelaide district for the years 1901 to 1903. Under the 1898 Health Act the responsibility for managing infectious diseases rested with the various Local Boards of Health and therefore the inclusion of pulmonary tuberculosis added to their work and costs. Local Boards had the power to erect hospitals or to make other arrangements to accommodate contagious cases but instead of building hospitals they paid existing hospitals, usually the Adelaide, to take contagious cases.⁸⁶ The Act required doctors to advise Local Boards if any person suffering from an infectious disease (including pulmonary tuberculosis) resided in buildings where milk or other food was stored or manufactured. With the agreement of the Central Board of Health, local boards could order the closure of premises until the ill person was removed and all necessary precautions implemented.⁸⁷ Local boards of health were required to take act on notifications of pulmonary tuberculosis mainly through a visit from a nurse with instructions on how to disinfect premises, offer advice on hygienic measures for the home and on how the consumptive must behave in order to

⁸⁴ SRSA GRG8/1900/134, Memorandum, Clerk of the District Council of Meningie to the Central Board of Health, 21 March, 1900.

⁸⁵ Central Board of Health Infectious Diseases Mortuary Book, Adelaide, 1900-1902, GRG 8/31, SRSA.

⁸⁶ Ian L.D. Forbes, *From Colonial Surgeon to Health Commission: The Government Provision of Health Services in South Australia 1836-1995*, Openbook Publishers, Adelaide, 1996, pp. 144-145.

protect family, friends and the broader community. This procedure though, was not pursued if the notifying physician advised that it was unnecessary and that is the physician would ensure proper precautions were followed.⁸⁸

As with notification itself, the severity of action and detail of instruction was differentiated from other diseases.⁸⁹ The Mayor of the City of Unley, for example, noted that measures for tuberculosis were not as severe as other diseases. A visiting nurse maintained contact and checked that precautions were taken unless a medical practitioner agreed to undertake that task. In the case of all other diseases the patients were required to be isolated but in the case of tuberculosis the isolation requirement was not enforced.⁹⁰ In the City of Adelaide the permission of the physician was sought before a patient received a visit from a health officer in the hope this would allay concerns about the authorities interfering in the relationship between the physician and patient.⁹¹ This procedure indicated that patients and doctors were reluctant to accept Council intervention.

⁸⁷ *The Health Act*, (SA) Part VIII, Section 132, pp 22, 23.

⁸⁸ The Local Board of Health for the City of Adelaide. Public Health Department Correspondence, GRG8/1, 1900-1907, CBH file no. 134, 1907, SRSA.

⁸⁹ SRSA, GRG8/1/1907/134, 1900-1907, CBH file no. 134, 1907, Correspondence from Metropolitan Local Boards to Central Board of Health re: Isolation of infectious diseases Stating means employed.

⁹⁰ Local Board of Health, City of Unley 23 October 1907, Public Health Department Correspondence Files 1900-1907 GRG8/1, File No. 134, 1907, Correspondence from Metropolitan Local Boards to CBH – Subject Isolation of infectious diseases – Stating means employed, SRSA.

⁹¹ 'The Fight Against Tuberculosis in Australasia', *AMG*, January 20, 1902, p. 31

Table 2.7**Pulmonary Tuberculosis: Death rates per 100,000 of Mean Population in Sydney and Melbourne 1881 - 1928**

Year	Sydney	Overall Decline	Melbourne	Overall Decline
1881	181		227	
1882	206		231	
1883	150		223	
1884	193		244	
1885	203		239	
1886	172		212	
1887	162		232	
1888	168		215	
1889	101		135	
1890	148		200	
1891	143		173	
1892	123	1881-1904	192	1881-1901
1893	117	47%	185	32%
1894	116		176	
1895	100		182	
1896	98		159	
1897	88		161	
1898	107		169	
1899	101		135	
1900	95		140	
1901	114		155	
1902	103		143	
1903	101		140	
1904	96		135	
1905	81		122	1902-1909
1906	78		115	20%
1907	74		116	
1908	70		115	
1909	69	1905-1915	97	
1910	72	37%	97	
1911	69		99	
1912	57		100	
1913	65		88	
1914	56		89	
1915	51		77	
1916	54		86	
1917	46	1910-1927	79	1910-1927
1918	48	11%	83	35%
1919	40		87	
1920	51		79	
1921	49		81	
1922	46		67	
1923	44		69	
1924	49		65	
1925	38		63	
1926	44		59	
1927	48		63	
1928	53		-	

Source: J.H.L. Cumpston, (Director General of Health for Commonwealth)
 'Tuberculosis in Australia', *MJA*, 8 August, 1931, Vol. II, No. 6, 160.

Even allowing for under-notification, patients supervised only by their own doctor and frugal supervision by some local boards, the inclusion of tuberculosis increased the work of local authorities in disease management. Giving control to local authorities would always make the success of notification problematic. As E.G. Leger-Erson told Australasian Medical Congress in 1908,

Thirty-four years' experience as a medical practitioner has convinced me for twenty years past, that the great cause of weakness in the cordon of sanitary defence against preventable disease in Australia is the bad administration of the laws affecting the public health by the municipal bodies while acting in their capacities as Boards of Health in the several states.⁹²

Table 2.8

Deaths from Infectious Diseases in the Adelaide District, 1901-1903

YEAR	Plague	Typhoid Fever	Perperal Fever	Other Fevers	Diphtheria	Whooping Cough	Pulmonary Tuberculosi s	Erysipelas
1901	0	10	0	0	4	1	22	0
1902	0	26	0	0	2	0	85	1
1903	1	12	6	1	3	0	63	3

Compiled from State Records of South Australia GRG8/31, Central Board of Health Infectious Diseases Mortuary Record Book

EXTRACT OF INSTRUCTIONS FOR NOTIFIED CASES OF PULMONARY TUBERCULOSIS

The Local Board of Health for the City of Adelaide

‘For patients’

Don’t spit – except into containers where the contents can be destroyed

Indoors – spit into - small paper bags or a piece of rag –which afterwards can be burnt – or spit into a container with disinfectant – empty and wash in boiling water at least once every day

Outdoors – spit into special flask – carry in pocket – wash out after in boiling water

If spitting into handkerchief – put in boiling water or disinfectant solution before handkerchiefs dry

Don’t swallow expectoration

Don’t kiss anyone on the mouth

Drink boiled or sterilised milk

Be outdoors as much possible (subject to medical advice)

Live in good ventilation

Sleep with windows open

‘Precautions to be Taken by Attendants on Patients.’

wash hands after attending the patient

never eat from the same vessel as the patient

burn or disinfect uneaten patient food

boil utensils used by the patient

air and sunshine in room as much as possible

help patient with their precautions

if there is diarrhoea, it is advisable to disinfection motions.

Disinfectants suggested

‘Boiling for ten minutes kills the disease germs.’

Disinfectant solution – shake two tablespoons of

Carbolic Acid in a pint of boiling water

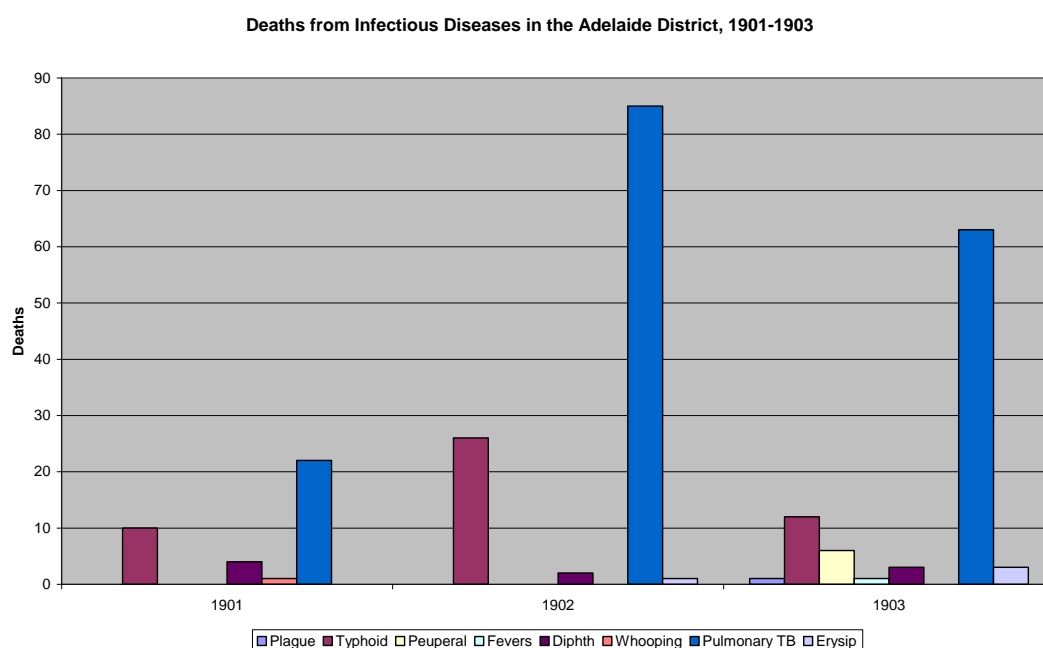
or, dissolve half an ounce of Corrosive Sublimate

and one ounce of Hydrochloric Acid in three gallons of water.

Source: SRSA, GRG8/1/1907/134, The Local Board of Health for the City of Adelaide. ‘Disinfection. Pulmonary Tuberculosis’ Public Health Department Correspondence, 1900-1907, Correspondence from Metro Local Boards to CBH, re: Isolation of infectious diseases stating means employed.

⁹² E.G. Leger-Erson, ‘Sanitary Administration and Reform in Australia’, *Australasian Medical Congress*, 1908, p. 140.

Chart 2.8.1



Compiled from State Records of South Australia GRG8/31, Central Board of Health Infectious Diseases Mortuary Record Book

From the 1890s to the 1930s, complaints about local government inertia with regard to public health appeared regularly in medical journals, health department reports and in parliaments. Criticism centred on the influence of sectional interests in public health policy.⁹³ In 1896 the President of the Medical Congress called for greater centralisation of public health administration to remove it from ‘the fortuitous and baffling currents of local political feeling’.⁹⁴ As was evident in the parliamentary debates in South Australia and New South Wales, some politicians too had reservations about the efficiency of municipal government when it came to matters of public health. Given the view that infectious diseases could not be dealt

⁹³ For a concise discussion of similar issues in England during an earlier period see Anthony S Whol, *Endangered Lives Public Health in Victorian Britain*, J.M. Dent & Sons Ltd., London, 1983, chapter 7.

⁹⁴ ‘The President’s Address’, *Intercolonial Medical Congress of Australasia, Transactions of the Fourth Session*, Dunedin, New Zealand, 1896, The Otago Daily Times and Witness Newspapers

with efficiently by numerous local boards, there must be a question over how parliament expected local boards to accommodate notification of a disease like pulmonary tuberculosis.

Many complaints against local authorities first made early in the twentieth century were still being voiced well into the 1920s. Some of the problems included neglect of statutory requirements, failure to employ qualified public health staff, and giving health inspectors other duties such as rate collecting. Reports of central public health authorities regularly cited a lack of interest and knowledge on the part of councils and a great reluctance to spend money on public health sometimes because of financial constraints, sometimes through a lack of interest in public health, and sometimes because of political expediency.⁹⁵ By the 1920s, while many districts had adopted appropriate procedures, poor follow up was still evident. An investigation by the Commonwealth Department of Health into tubercular invalid pensioners in the early 1920s found few tuberculosis pensioners received visits from health officers.⁹⁶ Giving evidence to a Royal Commission on Health in 1924 the medical officer for Kalyra Sanatorium in South Australia implied a poor level of supervision in that State when he called for the establishment of an after-care association to ensure consumptives received regular visits and support. He said, 'I

Company, Limited, Dunedin, 1897, p. 32, Australasian Royal College of Physicians Library, Sydney.

⁹⁵ J.R. Baker, LL.B., 'Notes on the Public Health Legislation of Australasia', *Transactions of Australasian Medical Congress*, 1905, p. 437. Leger-Erson, 'Sanitary Administration and Reform in Australia', *Transactions of Australasian Medical Congress*, 1908, pp. 142-143. Smith, 'Twelve Years' Experience of Compulsory Notification of Pulmonary Tuberculosis', *Fifteenth International Congress*, 1913, pp. 5-6. New South Wales, Legislative Assembly, *Parliamentary Debates*, 1914-15, Vol. 57, pp. 2287, 2415. New South Wales, *Report of the Director-General of Public Health New South Wales, for the year ended 31st December, 1913*, 1915, pp. 7-8. *31st December, 1917*, 1919, p. 79. Victoria, Department of Public Health, *Third Report of the Commission of Public Health 1924-25*, pp. 44, 54, *Fourth Report of the Commission of Public Health 1925-26*, pp. 21-22, 32.

⁹⁶ M.J. Holmes, D.S.O., M.B., D.P.H., and Frank R Kerr, D.S.O., M.B., D.P.H., 'Some Figures and Conclusions Drawn From An Investigation Into Tuberculous Invalid Pensioners In Australia', *MJA*, 12 April, 1924, p. 358.

have known cases of chronic consumptives in whom no one took an interest, and they have had to live at home to the danger of their family'.⁹⁷ As late as 1933 the South Australian Central Board of Health reported that some boards of health did not have a trained nurse inspector to deal with infectious diseases and tuberculosis. The Central Board recommended monthly visits to tuberculosis patients in their homes⁹⁸ but visits alone could be of little benefit to the poorest victims of the disease who did not have the means to observe preventive measures. Without space for isolating the sick, consumptive parents slept in poorly ventilated rooms with their children and often shared meagre living space with numerous children and other adults. One example provided to the Royal Commission was of a consumptive woman sharing a four roomed house with nine others including seven children.⁹⁹

A major concern for physicians reporting on public health was the status and role of the local medical officer of health. Health officers ranged from medically unqualified public officials to certified sanitary inspectors to publicly employed doctors and doctors in private practice acting as part-time health officers. Public health physicians argued that efficient public health management required full-time medical officers of health with specialist knowledge who were free to perform their duties in the interests of an entire community. They should not therefore also be in private practice in the district where their public health duties might clash with the

⁹⁷ Royal Commission on Health 1925, *Minutes of Evidence*, Govt Printer, Melbourne, 1925, question 16446.

⁹⁸ South Australia, *Annual Report of the Central Board of Health for year ended December 31st*, 1933, Govt. Printer, Adelaide, pp. 10, 11.

⁹⁹ Royal Commission on Health 1925, *Report*, together with Appendices 1(c) and 11(d), 1926, p. 81.

interests of patients on whom they relied for their livelihood.¹⁰⁰ In New South Wales, where local government had developed more slowly in the nineteenth century than Victoria and South Australia,¹⁰¹ the 1896 act provided for centrally appointed and funded medical officers.¹⁰² This provision indicated the central board and legislature's lack of confidence in local authorities. By 1925, however, no further appointments had been made and New South Wales still operated with only two full-time medical officers of health, one for the metropolitan area and one for the Hunter River district. Local practitioners in large towns still acted as government medical officers performing specific duties under government direction.¹⁰³ Even where full-time Medical Officers of Health were employed they still had to rely on the cooperation of councils and local practitioners to manage public health matters and variations across districts were considerable. Medical Officers found that some councils and local practitioners co-operated well with State requirements, while others were indifferent. In 1917, for instance, the District Medical Officer for the Hunter River district reported a lack of understanding and implementation of public health regulations particularly notification of tuberculosis. He wrote:

Local Authorities are not as energetic in discharge of their duties as is desirable in regard to health matters. There is no doubt that the tendency is to leave the bulk of the health work to the Public Health Department, and then to do everything possible to avoid carrying out the instructions received. Of course, this cannot be said of all, but it occurs sufficiently often to show that for efficiency the whole Public Health administration should be in the hands of the Public Health Department.¹⁰⁴

¹⁰⁰ J. Ashburton Thompson, M.D., D.P.H., 'The Medical Officer of Health', Section of Public Health, *Australasian Medical Congress, Transactions of the Eighth Session*, October, 1908, J. Kemp, Government Printer, Melbourne, 1909, pp. 129-130.

¹⁰¹ New South Wales, *Official Year Book of New South Wales 1905-6*, W.A. Gullick, Government Printer, 1906, p. 706. New South Wales districts were not required by law to form local authorities until the passage of The Shires Act passed late in 1905.

¹⁰² J. Ashburton Thompson., 'The Medical Officer of Health', *Australasian Medical Congress*, 1908, pp. 130-133.

¹⁰³ Royal Commission on Health 1925, *Minutes of Evidence*, question 5676.

¹⁰⁴ New South Wales, *Report of the Director-General of Public Health, New South Wales, for the year ended 31st December, 1917*, p. 79, Butlin Collection, JLS.

In Victoria, with the exception of large metropolitan districts, councils employed local general practitioners on a part-time basis, often on relatively meagre salaries, a situation that sometimes resulted in a lethargic approach by the medical officer. As the District Health Officer for north-western Victoria commented in 1925, 'the slackness of Medical Officers of Health can be accounted for by the smallness of the salaries paid them by the councils'.¹⁰⁵ In 1919 a new health act in Victoria provided for District Medical Officers but part-time locally appointed council Medical Officers of Health remained in place and acted independently from District Medical Officers.¹⁰⁶ Consequently, reports of District Medical Officers continued to find problems with the system. In his 1925-26 report the Health Officer of the Western area found doctors complied well with notifying diseases like diphtheria and scarlet fever but not tuberculosis. He thought the reasons were doubts in diagnosis, a reluctance to stigmatize their patients and a belief that notification of tuberculosis achieved little in comparison with other infections.¹⁰⁷ In South Australia the situation was worse. Whereas New South Wales, and from 1919 Victoria, employed medical practitioners to investigate health conditions in local districts, South Australia's Central Board of Health employed only one medical officer who was the chair of the Central Board. Investigations were conducted by five sanitary inspectors. South Australian local health boards were required to appoint a medical officer of health, but this officer was only required to be a medical practitioner, 'when practicable'.¹⁰⁸ The medical profession's desire to increase the remuneration, role and status of medical officers of health reflected in

¹⁰⁵ Department of Public Health, Victoria, *Third Report of the Commission of Public Health, 1924-25*, p. 58.

¹⁰⁶ Royal Commission on Health 1925, *Report*, p. 20.

¹⁰⁷ Victoria, Department of Public Health, *Fourth Report of the Commission of Public Health, 1925-26*, p. 38.

¹⁰⁸ Royal Commission on Health 1925, *Report*, pp. 116-117.

part a self-interested protection of the profession's power and status but also a desire to improve prevention at the local level.¹⁰⁹

The situation improved gradually throughout the 1920s. Capital city councils appointed full-time Medical Officers of Health with public health qualifications and some Medical Officers of Health and councils acted diligently.¹¹⁰ Rural areas were generally worse than metropolitan areas but wide variation existed and public health physicians continued to press for central and uniform management of public health matters including the management of tuberculosis.

Inadequate expenditure on public health also worked against adequate notification of pulmonary tuberculosis. One of the first quarrels with the concept of notification was the expense of running such a public health policy for a chronic affliction.¹¹¹ These fears were well-founded as local and state governments failed to invest sufficient funds. But it was also variability in public health expenditure that reduced the effectiveness of public health policy. Table 2.9 details total health expenditure of twelve local authorities in the four states of Victoria, Queensland, New South Wales and South Australia. The lowest amount spent per head of population was five shillings in Newcastle, the highest sixteen shillings in South

¹⁰⁹ James A. Gillespie, *The Price of Health Australian Governments and Medical Politics 1910-1960*, Cambridge University Press, Cambridge, 1991, pp. 31-56.

¹¹⁰ B. Burnett Ham, D.P.H. (Camb.), M.D., M.R.C.S., L.R.C.P., 'The Spirit of Hygeia in Australia', *Transactions of the Sixth Session of the Intercolonial Medical Congress of Australasia*, 1902, Government Printer, Hobart, 1903, p. 424. 'The Public Health', *AMJ*, 16 December, 1911, p. 235. Smith, 'Twelve Years' Experience of Compulsory Notification of Pulmonary Tuberculosis', 1913. New South Wales, *Report of the Director-General of Public Health New South Wales, for the year ended 31st December, 1913*, Government Printer, Sydney, 1915, pp. 8, 92. Victoria, Department of Public Health, *Third Report of the Commission of Public Health 1924-25*, p. 58; *Fourth Report of the Commission of Public Health 1925-26*, pp. 25, 41, 42; *Fifth Report of the Commission of Public Health, 1926-27*, p. 3.

¹¹¹ South Australia, Legislative Council, *Parliamentary Debates*, 22 September 1898, p. 201 (Hon James Vincent O'Loghlin, Chief Secretary).

Grafton and an average across the twelve districts of eight shillings.¹¹² These figures do not show the expenditure on specific anti-tuberculosis measures but the higher the expenditure, the more likely that measures were taken. The government medical officer for Newcastle's sanitary district, the Hunter River, where expenditure was comparatively low, reported an inadequate compliance among health officials in relation to notification of tuberculosis. In 1917 he reported 60 notifications, 62 visits to consumptives, 21 disinfections, and 46 deaths.¹¹³ While the number of visits matches notifications expectations were that each consumptive be visited more than once. For the purpose of assessing whether these figures match expectations comparison with the previously noted conservative formula of one consumptive for every death provides a guide. Newcastle health authorities should have recorded at least 96 visits. Even 192 visits would have been only twice in a year to each patient and below the frequency considered necessary.

At the State level too, expenditure did not match expectations. In Victoria the Public Health Board unsuccessfully proposed a scheme of control for tuberculosis to the government every year from 1921 to 1927. The Board recommended capital expenditure of £130,000 with an additional £16,000 annual maintenance. The maintenance proponent of £16,000 alone would have increased the existing state government expenditure on tuberculosis and infectious disease in Victoria by 21%.¹¹⁴ Frustrated with the Government's unwillingness to embrace its recommendations the Commission's report of 1926-27 noted:

... all expenditure in relation to tuberculosis should be regarded as of national concern and defrayed from the Consolidated Revenue, and that as continuity of

¹¹² Calculated from figures presented in Royal Commission on Health 1925, *Report*, Appendix no. 28, p. 114.

¹¹³ New South Wales, *Report of the Director-General of Public Health New South Wales, for the year ended 31st December, 1917*, p. 74.

¹¹⁴ Royal Commission on Health 1925, *Report*, Appendix 4(d), p. 71, Appendix 29, p. 114.

control is essential for success, the tuberculosis estimates should be framed by the Commission and not made dependent on political exigencies.¹¹⁵

Two years after this report the country faced the disruption of the Great Depression making improvements to the system even more difficult to achieve.

Diagnosis

Notification was also impeded by diagnostic problems. In 1905 Dr. M. McIntyre Sinclair, Resident Medical Superintendent of the King's Tableland Sanatorium in New South while pondering the difficulties of prognosis, said:

The disease is so variable in its course, so full of surprises, and the symptoms and complications [are] open to so many interpretations...¹¹⁶

D. Kennedy wrote similarly in 1914,

The problem of the diagnosis of early pulmonary tuberculosis is still, one of the most difficult in medicine.¹¹⁷

Twenty years later the obstacles to early diagnosis and detection remained. In 1934 the medical profession found it necessary to hold a meeting during its Medical Congress devoted to the diagnostic difficulties of tuberculosis. D.R.W. Cowan told the Congress,

I have learnt from my own experience that it is almost impossible to diagnose early tuberculosis when one has to rely on symptoms and physical signs. This fact is not sufficiently recognized by medical practitioners, with the result that the early case, for which so much can be done by modern methods ... continues to elude us. Only too often the patient is allowed to drift to an advanced stage before the disease is recognized.¹¹⁸

¹¹⁵ Victoria, Department of Public Health, *Fifth Report of the Commission of Public Health*, 1926-27, p. 5.

¹¹⁶ R.M. McIntyre Sinclair, M.D., Glasgow, D.P.H., Camb., 'The Prognosis of Pulmonary Tuberculosis', *Transactions of the Seventh Session of the Australasian Medical Congress*, Adelaide 1905, Government Printer, Adelaide, 1907, p. 38.

¹¹⁷ D. Kennedy, M.A., M.D., 'The Early Diagnosis of Pulmonary Tuberculosis', *AMJ*, 21 March, 1914, p. 1480.

¹¹⁸ D.R.W. Cowan, M.B., B.S., (Adelaide), 'The Need for Care in the Diagnosis of Pulmonary Tuberculosis', Combined Meetings of Section of Medicine and Section of X-Ray and Electrical Therapy, *Transactions of the Australasian Medical Congress, 1934*, Australasian Medical Publishing Company, 1935, p. 44.

Table 2.9**Summary of Particulars Respecting Twelve Local Authorities, Expenditure on Health Services**

	Total Population	Total Revenue	Health Expenditu	Health as percentage of total %	Health Expenditure per Person Shillings
Bendigo	26,000	£56,049	£13,100	23	10/-
Geelong	14,818	£54,000	£5,000	9	6/-
Newcastle	90,250	£51,000	£22,901	45	5/-
Toowoomba	22,000	£60,000	£11,000	18	10/-
Port Pirie	11,800	£19,000	£7,000	37	12/-
Lithgow	13,000	£52,285	£8,089	15	12/-
Lismore	9,389	£22,510	£3,525	16	8/-
Grafton	5,000	£9,312	£3,372	36	14/-
South Grafton	1,430	£4,978	£1,148	23	16/-
Glen Innes	5,000	£23,191	£2,447	11	10/-
Maryborough	4,826	£8,000	£1,400	18	6/-
Peterborough	3,000	£4,000	£1,000	25	6/-
TOTAL	206,513	£364,325	£79,982	22	8/-

Source: Royal Commission on Health, 1925, *Report*, Appendix No. 28, p. 114.
Percentage and expenditure per head of population are my calculations.

Diagnostic ambiguities frustrated the preventive goal of notification. The vagaries of symptoms, physical signs and available diagnostic tests made precise diagnosis of early tuberculosis difficult. A range of symptoms common to early infection could easily be attributed to other causes as could physical signs. Laboratory tests of sputum were reliable only if *tubercle bacilli* were found in the sputum, but not every specimen from consumptives' lungs contained bacilli, therefore a negative test did not preclude disease.¹¹⁹ Nor did the immune reaction to diagnostic tests by

¹¹⁹ In 1914, the Government Bureau of Microbiology reported on specimens with varying results. One case, examined three times, gave a positive, then negative, then positive result. A further two cases gave two negative results, then a positive. One case examined five times, gave four

tuberculin provide a clear answer. Positive responses were elicited from healed lesions as well as active disease. As one honorary physician at the Royal Prince Alfred Hospital, Sydney, said in 1923:

...there is no single physical sign which is pathognomonic of the structural changes, and no single symptom or constitutional disturbance pathognomonic of the toxæmia. And to this we may add that there is no single biological test conclusive, in the present state of our knowledge, of the presence of an active tuberculous lesion.¹²⁰

Moreover physicians disagreed on the hierarchy of physical signs, symptoms, medical history and specific tests in the diagnosis. More thoughtful, often hospital based physicians, advocated a broad approach which took account of as much evidence as possible including x-rays, sputum tests, symptoms, physical signs, and sometimes immune responses to tuberculin.¹²¹ Yet even this approach did not always produce a certain diagnosis nor did it catch all cases.

General practitioners were often criticised for their unwillingness or inability to diagnose tuberculosis before it reached an advanced, terminal stage. Addressing the 1934 Medical Congress Darcy Cowan a prominent physician in the anti-tuberculosis campaign from South Australia cited ten cases of pulmonary tuberculosis that had been missed by the treating physician. For example, a trained nurse suffering tiredness and tachycardia was treated by her doctor for six months before being sent for a goitre operation. Examination then found cough, morning sputum containing *tubercle bacilli* and an x-ray detected cavitations in her right lung. In a further example, a 19 year old man with two siblings suffering from active tuberculosis complained of tiredness and weight loss. His general

negative results and then a positive. [New South Wales, *Report of the Director-General of Public Health, New South Wales for the year ended 31st December, 1914*, p. 183.]

¹²⁰ S.A. Smith, M.B., CH.M. (Sydney), 'The Diagnosis of Early Pulmonary Tuberculosis', *Transactions of the First Session of the Australasian Medical Congress (British Medical Association), Melbourne, 1923*, Supplement to the Medical Journal of Australia, 16 February, 1924, p. 23.

practitioner told him he was not ill and advised him to travel north to build up his strength. He did this, but returned in three months when x-ray examination revealed active disease in both lungs and his sputum was shown to contain numerous *tubercle bacilli*. He died six months later.¹²²

While medical superintendents of sanatoria, hospital dispensary consultants and physicians who observed overseas practices were able to reach their own conclusions about how to best diagnose early tuberculosis, many general practitioners lacked such knowledge. Australian universities did not arm the medical graduate with extensive knowledge of tuberculosis. Nor in the main were they trained well enough in chest examination to be fully aware of the subtleties of physical changes associated with tuberculosis.¹²³ It was not until the 1930s that this situation began slowly to change. In 1929 the Federal Health Council urged universities to include a compulsory clinical component devoted to tuberculosis in undergraduate curricula.¹²⁴ In response one university professor admitted that it was possible for a medical student to graduate from an Australian university without ever having examined a case of pulmonary tuberculosis.¹²⁵ As late as 1937, the Sydney University Medical Journal complained that the poorly funded medical library held no specific text on tuberculosis.¹²⁶

¹²¹ There was no consensus on the safety of using tuberculin, either on the skin or subcutaneously, for diagnosis.

¹²² Cowan, 'The Need for Care in the Diagnosis of Pulmonary Tuberculosis', *Transactions of the Medical Congress*, 1934, p. 31.

¹²³ A. Stewart, M.B., 'The Importance of Early Diagnosis in Pulmonary Tuberculosis from a Public Health Point of View', *MJA*, 14 April, 1917, p. 313. Sinclair Gilles, M.A., M.D., D.P.H., 'Home and Institutional Treatment of Pulmonary Tuberculosis from the Point of View of Public Health', *MJA*, 8 August, 1931, p. 168.

¹²⁴ NAA: A1928, 1105/32, Letter, the Federal Director-General of Health to Dr. L.S., Latham, 107 Collins Street Melbourne, 10 April, 1929.

¹²⁵ NAA: A1928, 1105/32, Letter, M.J. Holmes, Director, Division of Tuberculosis and Venereal Disease, to the Federal Director-General of Health, 13 June 1929.

¹²⁶ John Atherton Young, Ann Jervie Sefton, Nina Webb (eds.), *Centenary Book of the University of Sydney Faculty of Medicine*, Sydney University Press, Sydney, 1984, p. 432.

In addition, general practitioners, especially in country regions, did not always have easy access to laboratories. Laboratory facilities in country regions including many of the larger towns were insufficient in number.¹²⁷ Even where laboratories existed in country regions they were over burdened. Reporting on the Bendigo laboratory in 1925 a doctor noted:

The most striking feature of the internal arrangements of that Laboratory at present is that the existing staff is unable to effectively cope with the routine activities even by dint of regularly working after the usual hours, sometimes until after midnight.¹²⁸

Although capital cities had public laboratories, they often struggled to meet the increasing demands placed on them. In Victoria in 1924, apart from a recently established Commonwealth Laboratory at Bendigo, one laboratory at the Melbourne University served the entire state.¹²⁹ In 1926 the District Health Officer for the Western Region in Victoria believed a lack of laboratories and thus an inability to confirm diagnosis contributed to under reporting of tuberculosis.¹³⁰ Directors of laboratories complained that routine work took so much of their time that research was impossible and delayed routine work.¹³¹ The problem was more acute in country regions where specimens, which had to be sent to capital cities, were often rendered negative by travel, time, climate or damage in the post.

Conclusion

By the turn of the twentieth century leaders of the Australian medical profession especially those employed by the States, urged governments to make tuberculosis a notifiable disease and bring sufferers under the scrutiny and supervision of health

¹²⁷ Royal Commission on Health 1925, *Report*, p. 26.

¹²⁸ NAA: A1928, 458/10 Section 2, Health Laboratory, Letter, Noel M. Gutteridge to J.H.L. Cumpston, Director-General, Commonwealth Department of Health, 15 October 1925.

¹²⁹ Royal Commission on Health 1925, *Minutes of Evidence*, questions 22093, 22087.

¹³⁰ Victoria, Department of Public Health, *Fourth Report of the Commission of Public Health Victoria 1925-26*, p. 38. In South Australia too, one laboratory served the state.

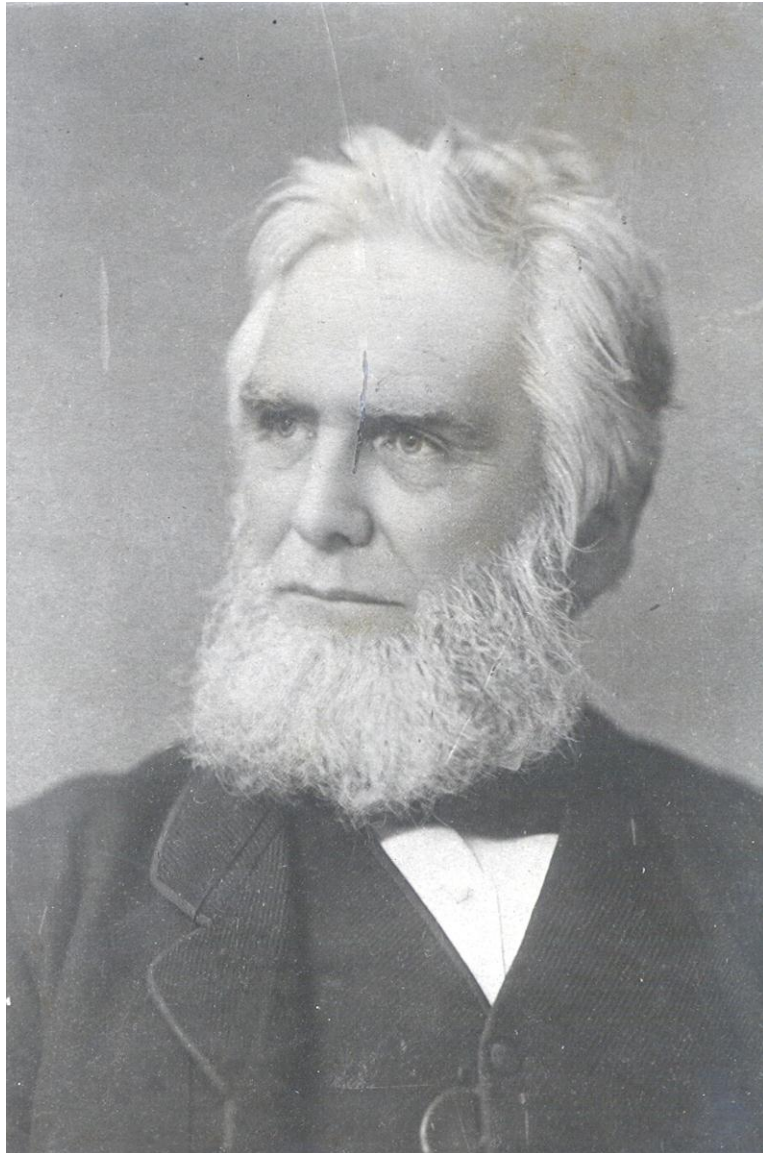
authorities. But notions of notifying this chronic disease, so different to all other contagious diseases and so pervasive, was vigorously debated within the profession and amongst politicians before measures were put in place. Each of the three states examined in this chapter came to notification in different ways. South Australia passed early state-wide legislation in 1898 making notification by medical practitioners compulsory. Victoria followed in 1901, but did not directly legislate for state-wide notification, merely giving individual districts the power to notify. This led to notification being gradually adopted district by district. In New South Wales notification began with by-laws passed by the Sydney City Council and was not legislated for in State Parliament until 1915 and even then not for the entire state until 1929. In addition, administration of the laws varied between states and within states from district to district.

Much of the hope expressed in arguments for notification remained unfulfilled. Government parsimony, uneven implementation of regulations by local authorities, private practitioners' relationship with their patients and diagnostic difficulties all contributed to the policy's failure to meet the expectations of its advocates. For the tubercular, their disease had become a public rather than a private condition. Regulatory action allowed the state to oversee personal habits. Once a patient was diagnosed with a chronic disease like tuberculosis, the disease became a central part of that person's identity in a way that episodic illness did not.¹³² Public health responses to tuberculosis emphasised the primacy of tuberculosis in the patient's identity and imposed on them a responsibility to protect others from their infection often driving sufferers to avoid notification. Nevertheless, notification and the

¹³¹ Royal Commission on Health 1925, *Minutes of Evidence*, questions 15940, 9581.

identification of tuberculosis as a public health issue helped to reveal the extent of the problem and the obstacles to effective prosecution of preventive measures.

ILLUSTRATION 3



Thomas Horatio Whittell (1826-1899). President of the Central Board of Health, South Australia .1883 – 1899.

Source: University of Adelaide Digital Library

¹³² Charles Rosenberg, 'Banishing Risk Continuity and Change in the Moral Management of Disease', in Allan M. Brandt and Paul Rozin, (eds.), *Morality and Health*, Routledge, New York, 1997, pp. 37-38.