

Koori Health Counts!

Information from the reports of Koori Hospital Liaison Officers
For 2003/04



Published by the Victorian Government Department of Human Services
Melbourne, Victoria

© Copyright State of Victoria 2005

This publication is copyright, no part may be reproduced by any process except in accordance with the provisions of the *Copyright Act 1968*.

This document may also be downloaded from the Department of Human Services web site at:

www.dhs.vic.gov.au

www.health.vic.gov.au/koori

Authorised by the State Government of Victoria, 555 Collins Street), Melbourne.
Printed by Bigprint.

TABLE OF CONTENTS

KOORI HEALTH COUNTS!	4
ACKNOWLEDGEMENTS	5
EXECUTIVE SUMMARY	6
1 INTRODUCTION	8
<i>A Koori Hospital Liaison Officer's Perspective</i>	8
2 POPULATION OVERVIEW	10
3 BACKGROUND	12
3.1 <i>Identification of Aboriginal people</i>	13
3.2 <i>Reports received</i>	13
4 ADMISSIONS OF ABORIGINAL PEOPLE TO HOSPITAL	14
4.1 <i>Number of admissions</i>	14
4.2 <i>Admissions of males and females</i>	17
4.3 <i>Age of Aboriginal patients</i>	19
4.4 <i>Main reasons for Aboriginal admissions to hospital</i>	22
5 BIRTHS OF ABORIGINAL BABIES	31
5.1 <i>Aboriginal births 2003/04</i>	31
5.2 <i>Aboriginal births 1996 – 2003/04</i>	32
5.3 <i>Aboriginal mothers and fathers, 2003/04</i>	33
5.4 <i>Age of Aboriginal mothers</i>	33
5.5 <i>Birth weights of babies of Aboriginal mothers</i>	34
5.6 <i>Gestation</i>	35
5.7 <i>Type of delivery</i>	36
5.8 <i>Additional information about mothers and babies</i>	36
6 DEATHS OF ABORIGINAL PEOPLE	38
6.1 <i>Why is this information important and how is it used?</i>	38
6.2 <i>Information available about deaths in the Aboriginal community</i>	39
6.3 <i>Stillbirths</i>	41
7 CONCLUSION	43
8 APPENDICES	44
Appendix 1: Feature article.....	45
Appendix 2: Information provided by Liaison Officers.....	51
Appendix 3: KHLO data collection form.....	54

KOORI HEALTH COUNTS!

The aim of these publications is to improve the availability of Aboriginal health information in Victoria and to provide the information in a way that is appropriate for use within the community.

The purpose of Aboriginal health information is:

- to monitor changes in the health of the Aboriginal community;
- to provide a basis for decision making on Aboriginal health priority issues and programs;
- to help achieve adequate resources for health programs and health services for Aboriginal people;
- to develop appropriate health promotion programs and health screening programs; and
- to ensure that mainstream health care services are appropriate and accessible to the Aboriginal community.

The Koori Human Services Unit welcomes comments and suggestions on ways of improving the quality of information on the health of Aboriginal people in Victoria.

In this publication, the term Aboriginal includes all Aboriginal and Torres Strait Islander people.

Koori refers to Aboriginal people from south-eastern Australia. We have chosen to use the term Aboriginal rather than Koori, except when Koori is part of a title, to reflect the fact that not all Aboriginal people in Victoria are Koori.

Acknowledgements

This report was made possible by the commitment and generous assistance of the following:

- Koori Hospital Liaison Officers (KHLOs) who completed and submitted monthly Hospital Admission reports;
- Newly appointed KHLOs who generously provided the information not reported to the Koori Human Services Unit (KHSU) during the period the KHLO position was vacant;
- Hospital Information Managers and staff from the medical records sections responding to our queries relating to hospital admissions and mothers' and babies' birth details;
- Koori Hospital Liaison Officer Program Supervisors who have been supportive in the continued reporting of KHLO data;
- The Maternal and Child Health Nurse from Sunshine Hospital who has commenced reporting Aboriginal births occurring at Sunshine Hospital;
- Metropolitan Health and Aged Care Division, for data from the Victorian Admitted Episodes Dataset (VAED); and
- Perinatal Data Collection Unit for the Aboriginal mothers' and babies' data identified in the Perinatal Morbidity Statistics form.

We acknowledge Lil Clark, KHLO from Robinvale, who has written "*From the Koori Hospital Liaison Officer's Perspective*". Her longstanding contribution and commitment to the KHLO program is greatly appreciated.

For further information and copies of this report please contact:
Koori Human Services Unit
GPO Box 4057
Melbourne Victoria 3001
Tel 9616 7032
Fax (03) 9616 8899
Also available at website: or <http://www.health.vic.gov.au/koori>

Executive summary

In 2003/04 eighteen (18) Victorian hospitals employed Koori Hospital Liaison Officers funded by the Department of Human Services to facilitate access to the hospital and its services for the Aboriginal community. In rural Victoria, the Liaison Officers were employed in hospitals in areas with large Aboriginal populations. Liaison Officers were also employed at four metropolitan hospitals, which admit large numbers of Aboriginal patients. The Koori Hospital Liaison Officer program did not cover all areas of Victoria.

Each Liaison Officer reports monthly on the number of Aboriginal patients admitted to hospital and provides details of age, sex and cause of admission. Births and deaths are also reported. There are many health conditions which do not require admission to hospital, but the rate of hospital admissions is an indication of the prevalence of serious illness within the community.

In 2003/04 Koori Hospital Liaison Officers reported:

- 7,343 admissions of Aboriginal patients to hospital.
- 310 newborn Aboriginal babies.
- 65 deaths of Aboriginal people.
- The major causes of admission were renal dialysis, mental health problems, respiratory diseases, circulatory diseases, pregnancy-related admissions, accidents and injuries and diabetes-related admissions. Aboriginal people are over-represented in these specialities.
- More women than men were admitted to hospital.
- There was a large number of births to younger mothers.
- Almost half the deaths were of people less than 50 years old, reflecting the low life expectancy suffered by the Aboriginal community.
- Fifteen per cent of babies weighed less than 2,500 grams, which is more than double the rate of low birth weight non-Aboriginal babies.
- The perinatal mortality rate was 36 per 1,000 Aboriginal births, compared to 12 for non-Aboriginal births.
- Where the health of Aboriginal and non-Aboriginal people can be compared, the health status of Aboriginal people was lower.

Reports provided by Koori Hospital Liaison Officers contain important information for service planning, as the Aboriginal status of all admissions is certain. However, the Victorian Admitted Episodes Dataset (VAED) is used to provide comparative and additional information.

This is the first publication for a financial year. Until 2002 Koori Health Counts was published each calendar year. Data from January-June 2003 was published separately to allow a transition to financial year reporting.

Liaison Officers have reported data to the Koori Human Services Unit for many years. The quality of data received has improved steadily over that time. Where possible, the last ten years of data have been presented as a comparison to the current year.

From 1995 to 2003/04 Koori Hospital Liaison Officers reported:

- The number of admissions of Aboriginal people has increased from 2,642 in 1995 to 7,343 in 2003/04.
- The ratio of male to female admissions varies from year to year; however, the number of female admissions is always equal to or greater than the number of male admissions.
- The number of pregnancy-related admissions has remained almost constant, although it has decreased steadily as a percentage of total admissions.
- Admissions of older adults (aged 25-44, 45-64) have increased dramatically from 1994, while admissions of children, younger adults and the elderly have increased very little.
- Admissions for renal dialysis have increased greatly. Patients receiving renal dialysis are most commonly aged between 35 and 64 years.
- The number of diabetes-related admissions has also increased.
- The percentage of Aboriginal mothers aged less than 20 has not changed between 1994 and 2003/04 (approximately 20%).
- The percentage of babies with low birth weight has remained very high (15%).
- The rate of stillbirths fluctuates annually due to the small number of births but has remained higher than the non-Aboriginal rate.

1 Introduction

A Koori Hospital Liaison Officer's Perspective Lil Clark, KHLO, Robinvale District Health Services

Koori Health in Koori Hands.

Koori health will always be a concern for all of us and more so for the Koori people themselves. We of an older generation have all grown up listening to our Elders about what was right and what was wrong. Basic survival and the traditional sharing and caring of our people were the strengths of our families.

I grew up in the era of moving from one town's mission on to another. My early years were spent in Murrin Bridge mission at Lake Cargelligo, NSW. I then moved to Munatunga mission in Robinvale and finally settled in the town area of Robinvale.

My childhood days at the missions were among my happiest as this was a time when we were all together laughing and sharing good times. We made do with whatever we could find for play, even making mazes through the aniseed bushes and retracing our steps to find our way out to the end.

Our Elders cautioned us about the dangerous things in life and instilled in each and every one of us the need to look after each and every person, man, woman and child. We were well fed, clothed and had the warmth and closeness of our families to keep us happy and well.

This is why the Koori Hospital Liaison Officer position is so important to me. It allows Koori people to play an important role in the health care of Koori people in their local community.

While we are employed by a mainstream agency we as Koori Hospital Liaison Officers are here for our people. We are here to ensure that mainstream health services are delivered with a culturally sensitive approach and are more accessible to our people. Many of our people still have a lack of trust in mainstream agencies, which may be caused by bad experiences in the past. We cannot erase the bad memories of the past but we can try to encourage and support our people through the health systems of today, especially when suffering a serious health problem and an admission to a hospital is inevitable.

To some of our people the health system is like the maze of aniseed bushes and sometimes it seems there is no end to it all. Koori Hospital Liaison Officers help Koori people through the health care system maze and will always be here to help support and guide them throughout that long journey.

Robinvale is only a small community and there may be very few admissions to the hospital. I am kept busy with providing other services such as discharge

follow-ups, referrals and assistance to GPs, home visits and much more. This is where people feel most comfortable and can discuss other issues.

As a Koori Hospital Liaison Officer, I am aware of the broader needs of Koori people in our community. For example employment, housing, education and health needs of our people. Part of my role is to provide better understanding about health related issues through referral to other health care services, health promotion and education, as prevention is better than cure.

Other services accessed by the Koori community at Robinvale District Health Services are:

- Audiology
- Community Health Nurses
- Dietitian
- Occupational Therapy
- Physiotherapy
- Podiatry
- Social Workers
- Visiting services: Drug and alcohol counsellors, Domestic Violence and Mental Health Nursing.

My role also involves empowering people with the skills to make decisions based on their health care needs and life. It may not necessarily be a health condition as such, but if left unattended the issue may have a serious impact on the person's health and wellbeing. I firmly believe a holistic approach is needed to achieve better outcome for Koori people when accessing health care.

Lil Clark
Koori Hospital Liaison Officer
Robinvale District Health Services

2 Population overview

In order to understand the pattern of Aboriginal hospital admissions, the distribution and age of the Aboriginal population must be understood. The Aboriginal population is younger than the non-Aboriginal population, with more young children and fewer older adults.

Only 0.6% of Victoria's population is Aboriginal, a smaller proportion than any other jurisdiction, although Victoria has 6.1% of the total Aboriginal population, more than South Australia, Tasmania or Australian Capital Territory. Because the Aboriginal population of Victoria forms a small proportion of the total state population, and is dispersed in mainly urban areas across the state, it is difficult to identify Aboriginal people accurately in administrative data collections.

Estimated Indigenous population, Australia, by jurisdiction, 30 June 2001¹

Jurisdiction	Indigenous population	% Australian Indigenous Population	% jurisdiction population
New South Wales	134,888	29.4	2.0
Victoria	27,928	6.1	0.6
Queensland	125,910	27.4	3.5
Western Australia	65,961	14.4	3.5
South Australia	25,544	5.6	1.7
Tasmania	17,384	3.8	3.7
Australian Capital Territory	3,909	0.9	1.2
Northern Territory	56,875	12.5	28.8
Australia	458,520	100	2.4

According to the 2001 Census, the estimated residential Aboriginal population of Victoria is 27,928 people. The population is divided almost equally between metropolitan and country regions. Loddon Mallee, North and West Metropolitan, Southern Metropolitan and Hume Regions have the highest Aboriginal populations, whereas the regions where Aboriginal people form the highest proportion of the population are Gippsland, Hume and Loddon Mallee.

Victorian Aboriginal population by DHS region, 2001.

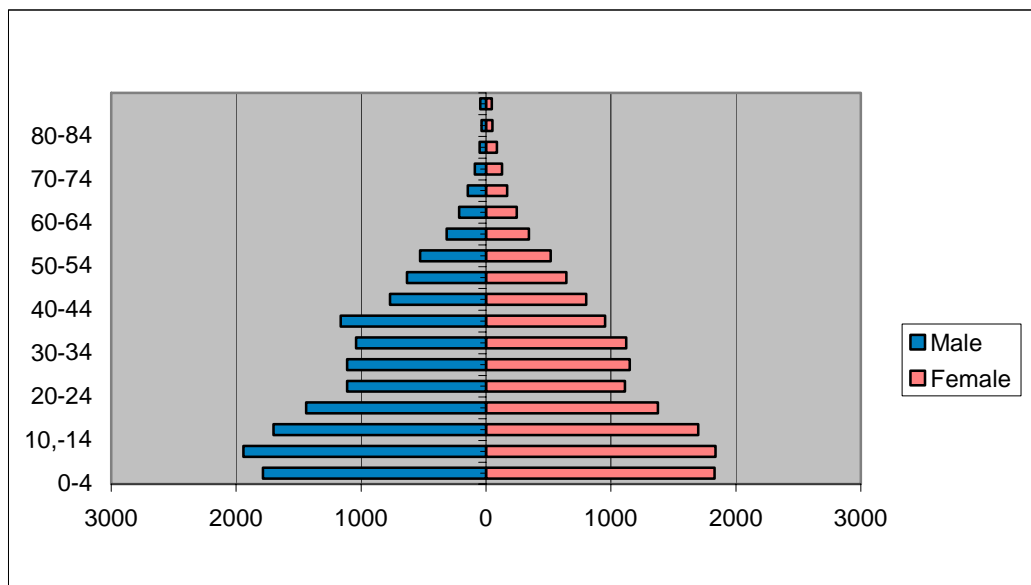
DHS Region	Regional Aboriginal Population.	Aboriginal population as % total regional population
Barwon-South Western	2,465	0.72
Eastern Metropolitan	2,459	0.25
Gippsland	2,972	1.24
Grampians	1,679	0.81
Hume	3,166	1.20
Loddon Mallee	4,252	1.45
North West Metropolitan	4,283	0.50
Southern Metropolitan	4,094	0.36
Western	2,558	0.50
Victoria	27,928	0.58

Source: Australian Bureau of Statistics, 2001.

¹

Australian Indigenous Health *InfoNet* (2004) *Overview of Indigenous health: January 2004*.
http://www.healthinfonet.ecu.edu.au/html/html_keyfacts/keyfacts_overviews.html

Figure 1: Victorian Aboriginal population by age-group and sex, 2001



Source: Australian Bureau of Statistics, 2001.

Figure 2: Victorian Aboriginal and non-Aboriginal populations by age, 2001



Source: Australian Bureau of Statistics. Estimated Residential Population 2002. <http://www.healthinfonet.ecu.edu.au/frames.htm>

3 Background

The Koori Hospital Liaison Officer Program was established in Victoria in 1982 as one of the major recommendations of the Working Party into Aboriginal Health. The program's main goals have been to ensure Aboriginal and Torres Strait Islander people have access to mainstream health care services, to advise Aboriginal communities of the type of services available to them and to increase the cultural awareness and sensitivity of health care service providers to the distinctive health needs of Aboriginal patients and their families.

Knowledge of the Aboriginal community is a significant component of the role of Koori Hospital Liaison Officers. This allows them to gain trust among the Aboriginal community, to promote the use of health services and encourage patients' willingness to disclose Aboriginal status when using the health services. Improving the collection of Aboriginal status by hospitals is also one of the main objectives of their role. This is done by KHLOs visiting inpatients and ensuring an accurate record of the patient's Aboriginal status is captured in the system if not done at the point of admission. On occasions where a patient is not visited by the KHLO or the patient is not known to the KHLO (i.e. where admission occurs after hours, weekends etc.) extra measures are taken by the KHLO to validate the patient's Aboriginal status and rectify any inaccuracy. Overall the presence of a KHLO in the hospital represents an extra assurance that the quality and accuracy of information received on Aboriginal patients is certain.

In 2003/04 there were eighteen Liaison Officers. Fourteen positions were in rural hospitals and four positions were based at hospitals in the Melbourne metropolitan area. Liaison Officers undertake a broad range of tasks associated with improving the access of Aboriginal people to mainstream health care services, primary health care and preventative health programs.

One of the responsibilities of Liaison Officers is to complete a standard report form each month. A copy of the report is sent to the Koori Human Services Unit of the Department of Human Services (DHS). The information in these reports is used to monitor the Koori Hospital Liaison Officer Program. Aggregated information from these reports is also used for policy development and planning. The Liaison Officer also provides a copy of the report to the hospital's senior medical record administrator for use in checking on the recording of Aboriginal admissions by hospital staff.

When the details provided by the Liaison Officers about hospital admissions are combined, some valuable information can be provided about patterns of illness in the Aboriginal community. As data provided by the Liaison Officers covers about 80% of all Aboriginal admissions to Victorian hospitals, it provides a comprehensive picture of Aboriginal hospital usage. The reports are also extremely important as a cross-check on mainstream sources of information on births and deaths in the Aboriginal community, such as the Victorian Admitted Episodes Dataset (VAED), the Perinatal Data collection and the Registry of Births, Deaths and Marriages.

3.1 Identification of Aboriginal people

Since 1993 it has been mandatory for all Victorian hospitals to report identification of Aboriginal and Torres Strait Islander patients. All patients should be asked at every admission if they are Aboriginal and/or Torres Strait Islander. The patient's self-identification is then recorded by the hospital. No other level of identification, such as community acceptance, which may be required in other circumstances, is needed to enable the hospital to record the patient as Aboriginal or Torres Strait Islander. However, Liaison Officers may have additional information, which will enable them to identify patients not recorded as Aboriginal by the hospital system.

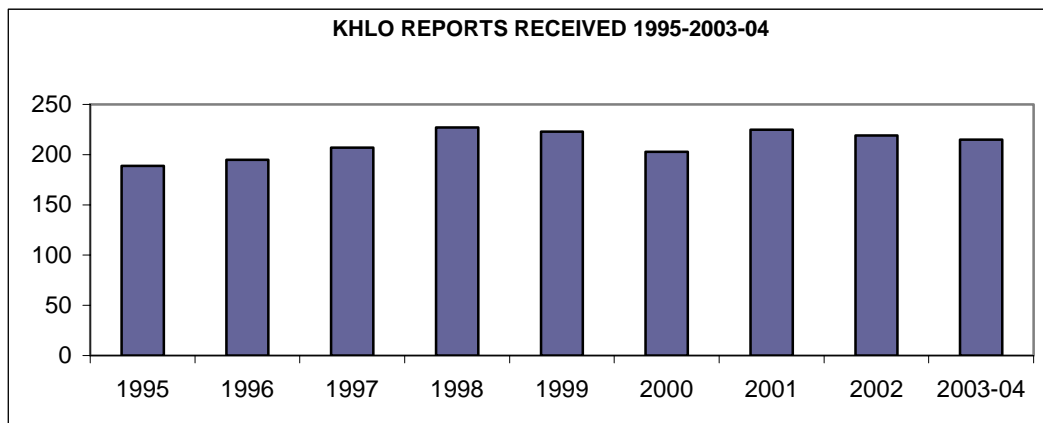
3.1.1 Foreshadowing a new funding and program approach in 2004/2005

From July 2004 a new program *Improving Health Care for Aboriginal and Torres Strait Islander Patients* will operate. The program will involve:

- Amalgamation of the formerly separate Koori Hospital Liaison Officer Program funding and the 10% Aboriginal Weighted Inlier Equivalent Separation (WIES) supplement into a single funding stream through WIES.
- An increase in the Aboriginal WIES Supplement to 30%.
- A focus on cultural change in health services leading to improved identification and health care for Aboriginal patients.

3.2 Reports received

Chart 1: Total number of monthly reports received from Liaison Officers.



Source: KHLO data, 1995-2003/04.

Chart 1 shows a slight decline in the number of monthly reports received for 2003/04, compared to the past two years (2001 & 2002). The decline is due to the cessation of reports from the Aboriginal Women's Business Worker at the Royal Women's Hospital, which were provided from 1997 to early 2002. In previous years a vacant KHLO position created a wide gap in the information received by the Koori Human Services Unit. From 2002/03 the Unit has emphasised strongly the need for reports to be provided even when the position is vacant.

4 Admissions of Aboriginal people to hospital

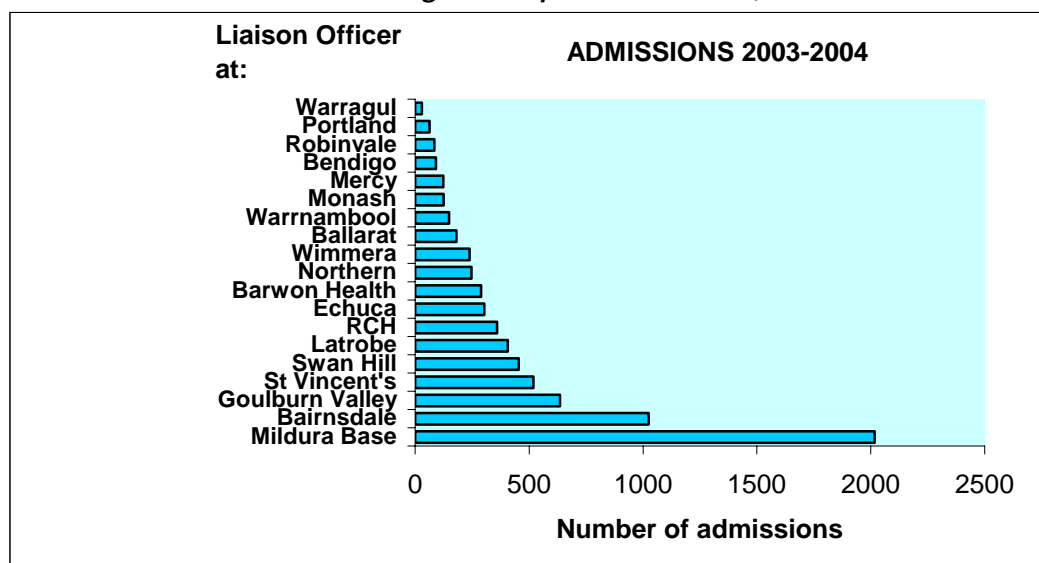
The number of admissions of Aboriginal people to Victorian hospitals is increasing annually. The major causes of admission are renal dialysis, diabetes-related, respiratory diseases, mental disorders, pregnancy-related admissions and circulatory diseases. Very young children and older adults are most frequently admitted.

4.1 Number of admissions

4.1.1 Number of admissions 2003/04

In 2003/04 KHLOs reported 7,343 admissions to hospital for Aboriginal people (Chart 2). As in previous years, the highest number of admissions was at Mildura Hospital, with Bairnsdale, Goulburn Valley, St Vincent's, Swan Hill, Latrobe and Royal Children's hospitals also reporting high numbers of admissions.

Chart 2: Total number of Aboriginal hospital admissions, KHLO data 2003/04



Source: KHLO data, 2003/04.

Aboriginal admissions are also reported through the Victorian Admitted Episodes Dataset (VAED), which collects patient data from all hospitals. The KHLO dataset and VAED are used together to monitor hospital identification. The VAED is also used to compare Aboriginal and non-Aboriginal patterns of admission (Table 1 below).

KHLOs visited or were aware of most Aboriginal patients in their hospitals. At Mildura and Goulburn Valley, KHLOs identified more Aboriginal clients than the VAED. The KHLOs at Mercy and Northern hospitals identified the same number of Aboriginal patients as the VAED. KHLOs are successfully identifying Aboriginal patients despite the fact that they are not present at the hospitals after hours.

Table 1: Number of Aboriginal admissions to individual hospitals in 2003/04

Hospital where admission occurred	Aboriginal admissions reported by KHLO	Aboriginal admissions reported by hospital (VAED)	Difference between KHLO and VAED	% total Aboriginal admissions (VAED)
Mildura	2017	1960	57	25.5
Bairnsdale	955	968	-13	12.6
Goulburn Valley	635	625	10	8.1
St Vincent's	518	589	-71	7.7
Swan Hill	454	482	-28	6.3
Latrobe	406	443	-37	5.8
Royal Children's	362	411	-49	5.4
Echuca	303	323	-20	4.2
Geelong	288	358	-70	4.7
Northern	247	247	0	3.2
Wimmera	229	230	-1	3.0
Ballarat	177	211	-34	2.7
Warrnambool	149	155	-6	2.0
Mercy	124	124	0	1.6
Bendigo	91	93	-2	1.2
Robinvale	85	91	-6	1.2
Portland	63	66	-3	0.9
Monash MC	61	89	-28	1.2
Warragul	30	37	-7	0.5
Total	7194	7502	-307	97.7

Non KHLO hospitals where admissions were reported by KHLOs:

	KHLO	VAED		
Orbost	67	73	-6	1.0%
Dandenong	63	86	-23	1.1%
Stawell	12	10	2	0.2%
Other	7	5	2	0.0%
Total non KHLO hospitals	149	174	-25	2.3%
Total admissions to above hospitals	7343	7676	-333	100%
Total all Victorian hospitals		9438		

Source: KHLO data 2003/04, VAED data 2003/04.

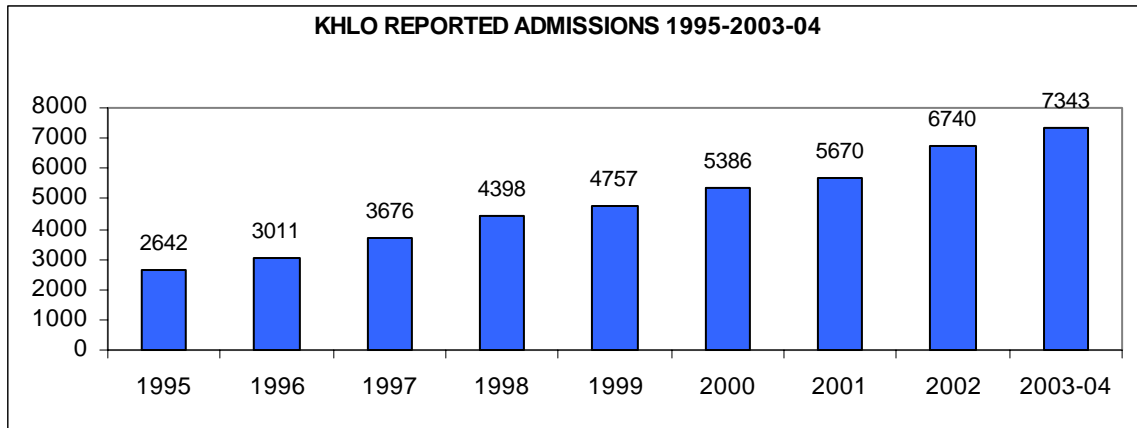
Notes: Admissions at Orbost are reported by KHLO at Bairnsdale.
 Admissions at Dandenong are reported by KHLO at Monash.
 Monash figures included admissions at MMC – Moorabbin.
 Admissions at Dimboola and Stawell are reported by KHLO at Horsham
 Full year's data have been reported by Bendigo and Monash hospitals, however, KHLO positions at both hospitals have been vacant for most of 2003/04, which may affect the accuracy of data provided to the Koori Human Services Unit.

4.1.2 Admissions 1995 – 2003/04

The number of admissions reported by Liaison Officers has risen steadily between 1995 and 2003/04.³ Increases are due to greater numbers of Aboriginal people attending hospitals, improved identification of Aboriginal people and better recording of renal dialysis, for which one patient can require many admissions. Conversely, decreases in the number of admissions from year to year are often due to cessation of dialysis.

³ KHLOs are the main providers of Aboriginal admission data. When a vacant position is filled, the new KHLO is then asked to provide admission reports generated through the medical record system to cover the period when the position was vacant. While this process has contributed to the steady increase of admissions reported to the department, the accuracy of patients' Aboriginal status may be compromised, which will be reflected in some data items as indicated in the later part of this report

Chart 3: Total number of Aboriginal hospital admissions 1995-2003/04



Source: KHLO data, 1995-2003/04.

Table 2: Admissions reported by KHLOs, 1995-2003/04.

Hospital	1995	1996	1997	1998	1999	2000	2001	2002	2003/04
Mildura	807	996	913	1032	1045	943	1329	1558	2017
Bairnsdale	286	220	408	581	516	670	710	798	955
Goulburn Valley	233	333	519	536	567	713	518	552	635
Swan Hill	134	137	173	254	416	465	342	413	454
Echuca	159	129	296	311	244	463	482	375	303
St Vincent's	150	200	211	236	329	462	448	681	518
Geelong	118	126	144	139	218	243	220	280	288
Royal Children's	198	235	286	343	268	232	240	282	362
Northern								159	247
Mercy	43	53	11	98	122	139	149	119	124
Warrnambool	37	55	47	114	108	126	147	154	149
Wimmera Health	48	54	51	59	86	-	165	150	229
Ballarat	107	90	110	126	174	115	133	257	177
Royal Women's	-	-	78	150	161	119	107	64	-
Robinvale	131	138	139	122	100	106	131	139	85
Latrobe Regional	36	33	35	42	90	374	148	349	406
Portland	57	62	64	68	73	52	110	75	63
Bendigo	65	93	86	54	67	46	76	102	91
Warragul	30	41	34	20	43	43	59	33	30
Monash Medical	3	16	45	36	30	12	63	55	61
Orbost	-	-	-	-	46	54	38	41	67
Dandenong	-	-	26	37	39	2	28	24	63
Other	-	-	-	40	15	7	27	80	18
Total	2642	3011	3676	4398	4757	5386	5670	6740	7343
% Increase from 1998					8.2	22.5	28.9	53.3	67.0

Source: KHLO data, 1995- 2003/04.

Notes: Fluctuations in admission numbers at some hospital are due to dialysis admissions.
 Royal Women's Hospital ceased to report in 2002.
 Northern Hospital commenced reporting in 2002.
 The KHLO position was moved from Dimboola Hospital to Wimmera Base Hospital (Horsham) in 2001.

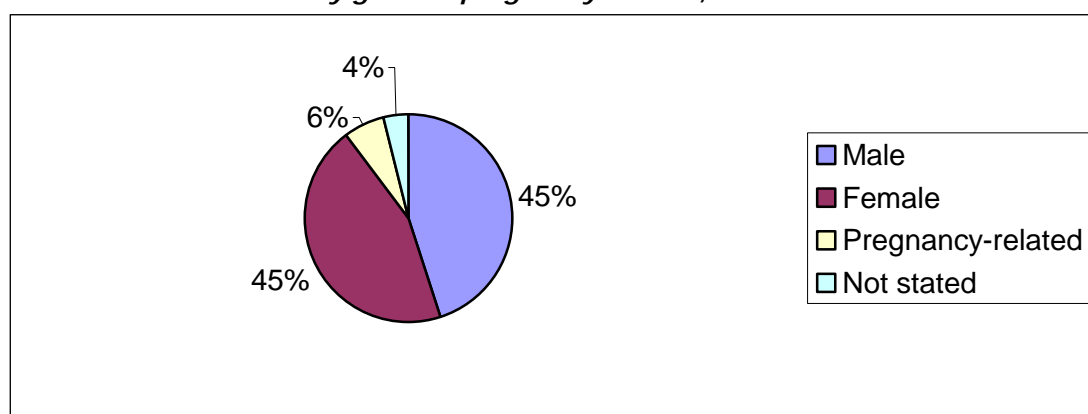
4.2 Admissions of males and females

Males and females are admitted to hospital for different causes. It is important to differentiate between male and female admissions because quite different pictures of health status are presented. In general, men are more reluctant to seek medical treatment and present later in the course of an illness.

4.2.1 Admissions of males and females in 2003/04

Of the 7343 hospital admissions reported by KHLOs, 51.2% (3756) were female, 44.9% (3300) were male and the gender was not reported for 3.9% (287). Female admissions included 470 (6.4%) pregnancy related admissions.⁴

Chart 4: Admissions by gender/pregnancy related, 2003/04



Source: KHLO data, 2003/04.

Note: Excludes 287 patients where gender was not reported.

4.2.2 Admissions of males and females 1994-2003/04

The number of admissions for pregnancy related conditions has decreased from a peak in 1998. Pregnancy related admissions have declined as a percentage of total admissions each year, due to the greater increase in other admissions.

Between 1997 and 2002 the number of female admissions was higher than the number of male admissions, even when pregnancy related admissions were counted separately. From 2002 to 2003/04, the number of male admissions increased by 14% compared to 3% for non-pregnancy related female admissions. Equal numbers of males and females were admitted in 2003/04.

While the higher number of female admissions in earlier years was partly due to the information received from the Royal Women's Hospital from 1997-2002, the increase in male admissions for 2003/04 could be attributed to the increase in dialysis treatment for males.

⁴ The high number of admissions for which gender was not reported is due to reporting arrangements with Northern Hospital, which provides only the number of admissions, not age, sex or reason for admission.

Table 3: Admissions of males and females 1994-2003/04

Admissions	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003/04
Male	652	1159	1364	1566	1628	1793	2091	2387	2887	3300
Female (not pregnancy related)	574	1155	1276	1691	2201	2463	2862	2798	3186	3286
Female (pregnancy related)	187	324	368	417	560	501	425	484	499	470
% Male	46	44	45	43	37	38	39	42	44	47
% Female (not pregnancy related)	41	44	43	46	50	52	53	49	48	47
% Female (pregnancy related)	13	12	12	11	13	10	8	9	8	6
Total	1417	2642	3011	3676	4398	4757	5378	5669	6572	7056

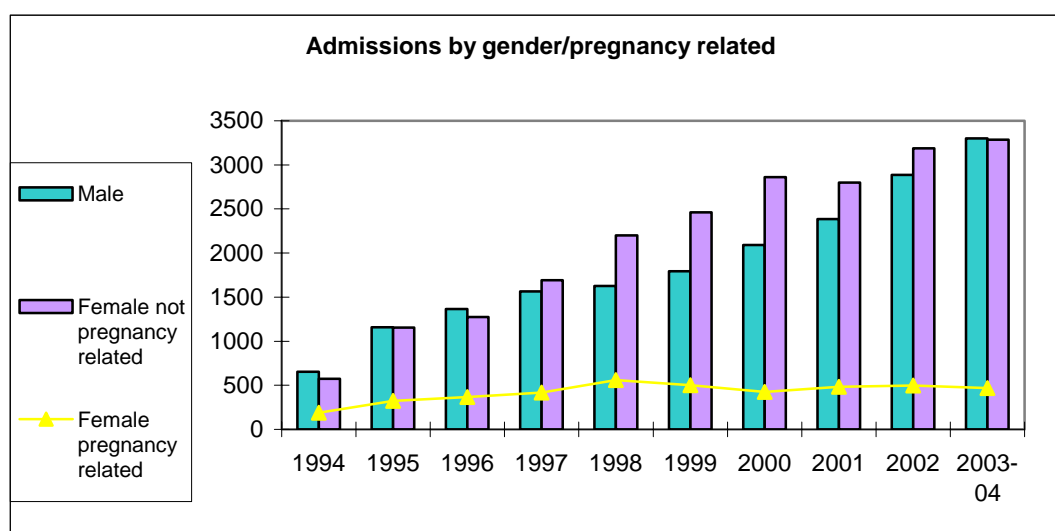
Source: KHLO data, 1994-2003/04.

Note: Excludes 168 patients in 2002 for whom gender was not reported, and small numbers in earlier years.

Excludes 287 patients in 2003/04 for whom gender was not reported.

High numbers of patients for whom gender was not reported in 2002 and 2003/04 are due to reports from Northern Hospital, which do not include gender.

Chart 5: Admissions by gender, 1994-2003/04

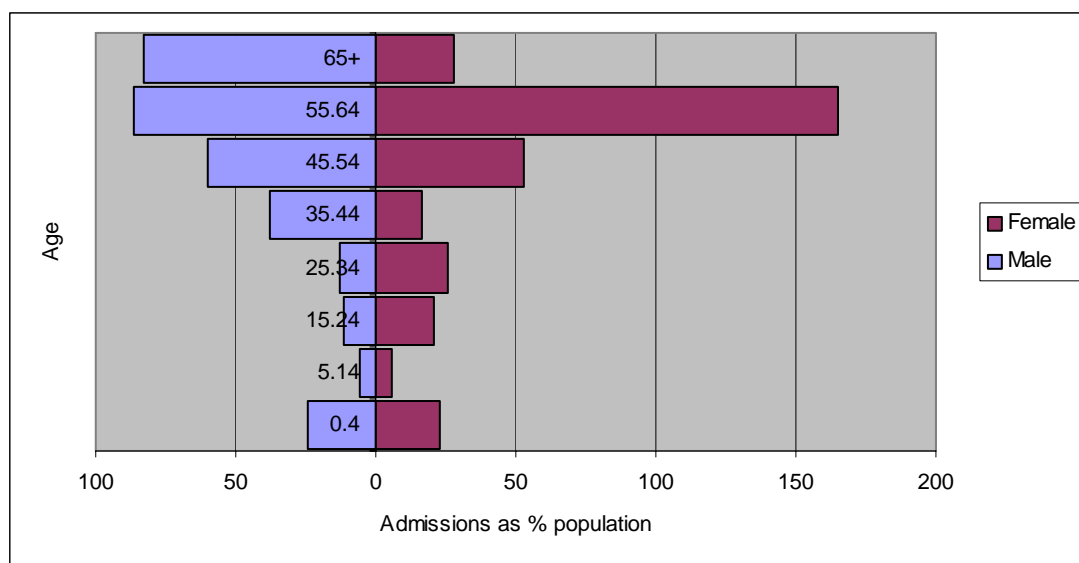


Source: KHLO data, 1994-2003/04.

4.3 Age of Aboriginal patients

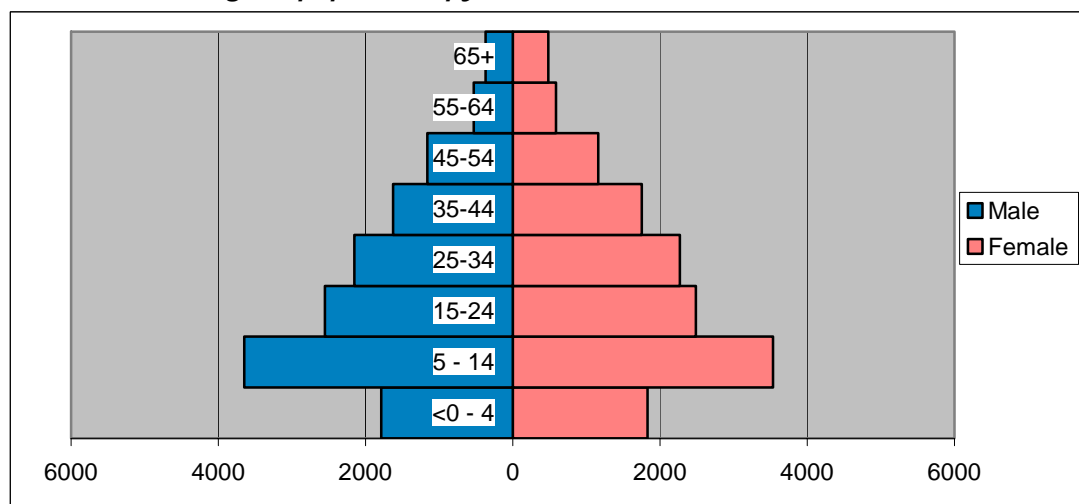
The Aboriginal population forms a pyramid, with most people in the younger age groups, and progressively fewer people in the older age groups. However, Aboriginal admissions to hospital do not match the number of people in each age group. The rate of admissions begins to increase by the age of 35 years, and falls again after 65 years.

Chart 6: Admission rate of Aboriginal males and females in different age-groups, 2003/04



Source: KHLO data, 2003-04.

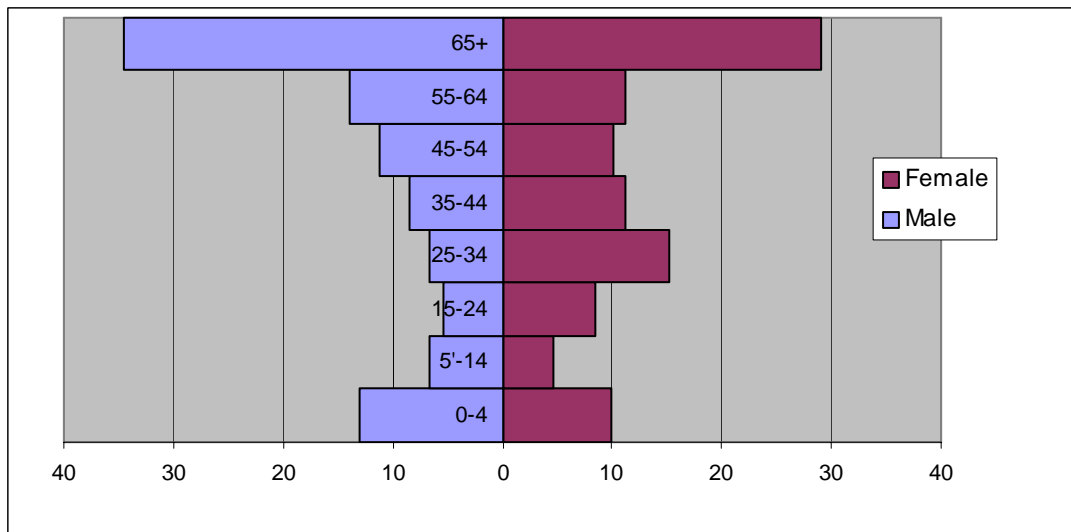
Chart 7: Aboriginal population pyramid



Source: ABS Census 2001.

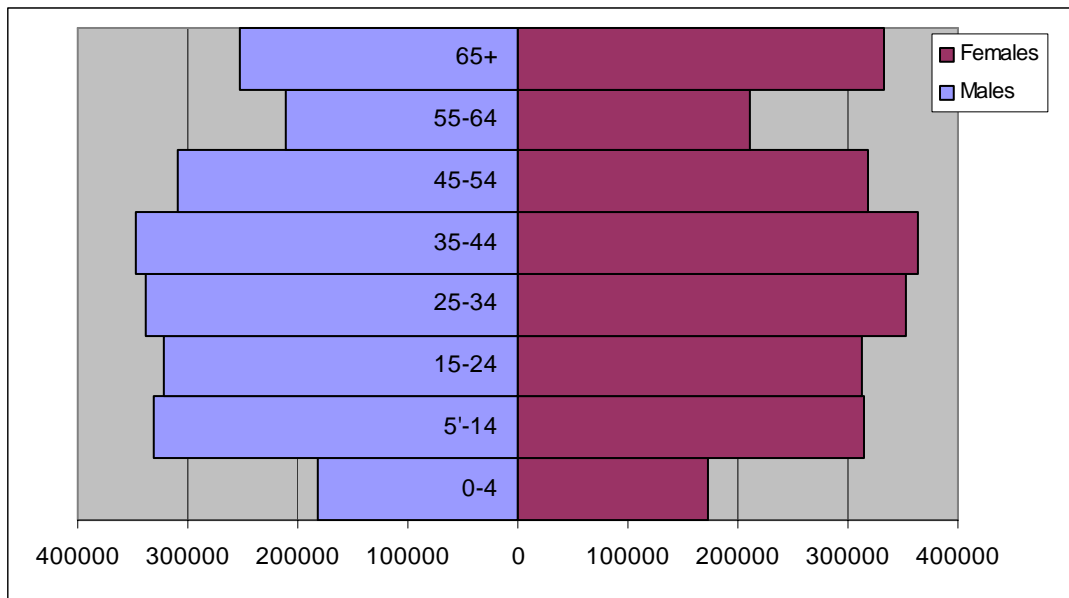
The non-Aboriginal population pyramid and non-Aboriginal rates of admissions by age are very different from the Aboriginal population. The non-Aboriginal rate of admission increases steadily as the population ages, with a marked increase from 65 years of age.

Chart 8: Admission rate of non-Aboriginal males and females in different age groups, 2003/04 – rate per 100 population



Source: VAED 2003-04

Chart 9: The Non-Aboriginal population pyramid in age groups

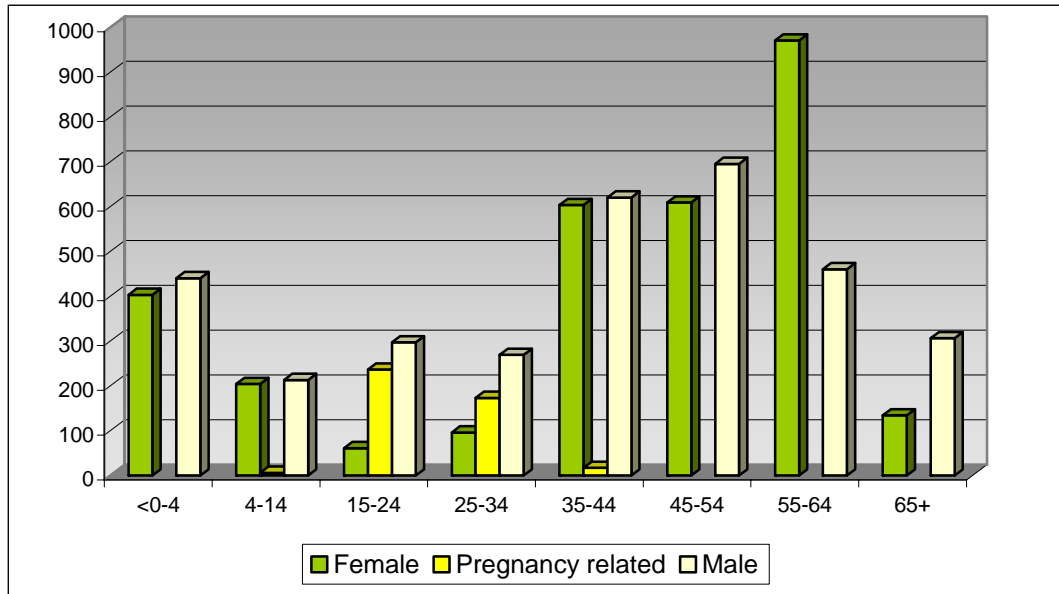


Source: Stat-site (ABS 2001)

4.3.1 Age of Aboriginal patients in 2003/04

Information was provided on the age of 7054 Aboriginal patients admitted to hospital during 2003/04 (96.1%). The decrease in the number of Aboriginal patients whose age was provided to the Koori Human Services Unit is partly due to the absence of a KHLO in some hospitals. The ages of 289 Aboriginal patients were unknown.

Chart 10: Admissions by age-group, 2003/04



Source: KHLO data, 2003/04.

Notes: Excludes admissions with unknown age or sex reported by KHLO.
0-4 admissions includes newborn babies.

Table 4: Admissions by age group, 2003/04

Age	Male	Female	Pregnancy related	Sex unknown	Total
0-4	440	407		30	877
5-14	213	206			419
15-24	297	278	245		820
25-34	269	410	178		857
35-44	620	266	17		903
45-54	695	611			1,306
55-64	460	972			1,432
65+	306	134			440
Unknown Age		2	30	257	289
Total	3,300	3,286	470	287	7,343

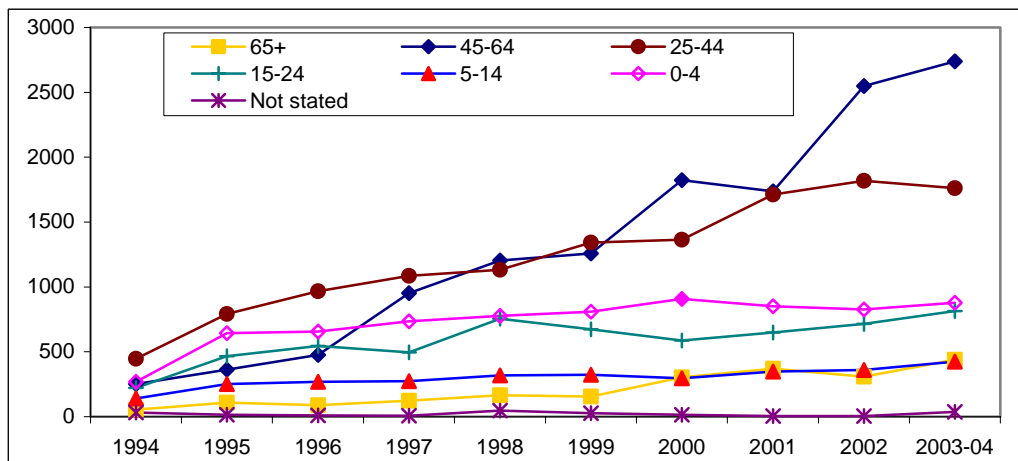
Source: KHLO data, 2003/04.

Note: Pregnancy related admissions of women below the age of 14 are included with women 15-24 years.

4.3.2 Admissions by age group, 1994-2003/04

Although admissions in all age groups have increased, there are marked increases in the number of admissions for patients aged 25-44 and 45-64 years. This can be due to better identification of Aboriginal patients creating an apparent bias in the increased rate of admissions for certain age groups.

Chart 11: Admissions by age group, 1994-2003/04



Source: KHLO data, 1994 – 2003/04.

4.4 Main reasons for Aboriginal admissions to hospital

Over the years the main reasons of admissions have remained constant, except for steady increases in the number of dialysis admissions. In 2003/04 Aboriginal patients were admitted to hospital for a wide range of causes; however, certain conditions predominate. Renal dialysis accounted for 38% of all admissions in 2003/04. Other major causes of admission were respiratory diseases (see Appendix 1), mental disorders including alcohol and drug related admissions, pregnancy related admissions and circulatory diseases.⁵

4.4.1 Causes of admission for Aboriginal people in different age-groups

Patients are more likely to be admitted to hospital for different causes at different ages. Although there is a bias created by the type of hospitals reporting admissions, it is still clear that some conditions predominate at certain ages.

⁵ In 2003/04 there was a slight decrease in the provision of data on the main reason for patients to be admitted to hospital – 7,085 (96.3%) out of 7,343 admissions. This was mainly due to reports from Northern Hospital, which do not include the patient's age.

A 'follow-up queries' form, introduced in 2003, has proven to be an effective mechanism in reducing the amount of missing information in the report provided to the Koori Human Services Unit. However this tool is only achievable if the Health Information Manager of the hospital and KHLO are working closely together in providing this vital information.

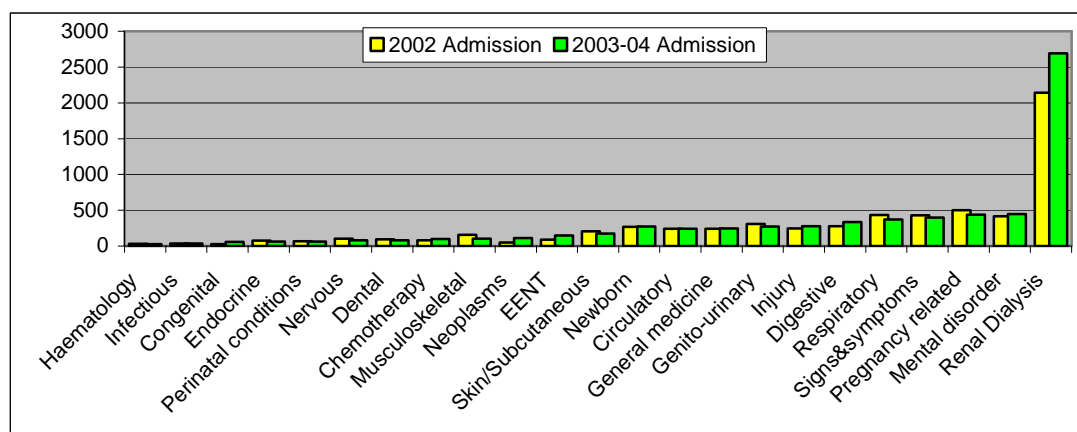
Table 5: Major causes of admissions, 2003/04

Age group	Major causes of admission	Admissions by cause, 2003/04	% of total admissions for age group	Total admissions 2003/04 by age group
Babies < 1 year	Respiratory diseases	99	16.0%	618
	Newborn requiring treatment (including congenital malformation)	97	16.4%	
Children 1-14 years of age	Respiratory diseases	85	12.4%	685
	Eye, ear, nose and Throat diseases	90	13.1%	
	Injuries	94	7.9%	
Men 15-44 years of age	Renal dialysis	431	36.3%	1186
	Mental disorders including alcohol/drug related admissions	189	15.9%	
	Injuries	91	7.6%	
	Diseases of the digestive system	118	9.9%	
Women 15-44 years of age	Pregnancy related admissions	470	33.1%	1418
	Diseases of reproductive system	118	8.5%	
	Mental Health including Drug and Alcohol related admission	147	10.5%	
	Renal Dialysis	148	10.6%	
	Injuries	43	3.0%	
	Diseases of the digestive system	59	4.2%	
Men & Women 45-64	Renal dialysis	1956	71.4%	2738
	Circulatory diseases	120	4.3%	
	Respiratory diseases	73	2.6%	
	Diseases of the digestive system not including dental	76	2.7%	
Men and women 65+	Renal dialysis	156	35.4%	440
	Respiratory diseases	39	8.8%	
	Circulatory diseases	38	8.6%	
	Diabetes/diabetes related admission	186	42.2%	
Total				7085

Source: KHLO data, 2003/04

Note: Only the major causes of admission for each age group are listed. Admissions for which cause of admission or age was not provided are not included (258).

Chart 12: Causes of admission, 2002-2003/04



Source: KHLO data 2002, 2003/04.

Table 6: Admissions by cause, 2002 and 2003/04

ICD 10 Group	2002	2003/04	2002 %	2003/04 %
Haematology	30	29	0.45	0.39
Infectious	37	35	0.55	0.48
Congenital	26	57	0.39	0.78
Endocrine	74	62	1.10	0.84
Perinatal conditions	65	64	0.96	0.87
Nervous	105	82	1.56	1.12
Dental	92	81	1.36	1.10
Chemotherapy	81	97	1.20	1.32
Musculoskeletal	156	105	2.31	1.43
Neoplasms	51	112	0.76	1.53
Eye, ear, nose, throat (EENT)	89	147	1.32	2.00
Skin/Subcutaneous	207	176	3.07	2.40
Newborn	274	310	4.07	4.22
Circulatory	243	242	3.61	3.30
General medicine	241	248	3.58	3.38
Genito-urinary	308	271	4.57	3.69
Injury	247	279	3.66	3.80
Digestive	276	337	4.09	4.59
Respiratory	432	369	6.41	5.03
Signs & symptoms	427	399	6.34	5.43
Pregnancy related	504	470	7.48	6.40
Mental disorder	418	446	6.20	6.07
Renal Dialysis	2,140	2,691	31.75	36.65
Not stated	217	234	3.22	3.19
Total	6,740	7,343	100.00%	100.00%

Source: KHLO data, 2002, 2003/04.

Notes: Diagnoses are classified and grouped into the International Classification of Disease code (ICD 10).

The increase in admissions for cause "not stated" was due to the commencement of reports from Northern Hospital.

The table above compares major causes of admissions over two years. For most causes of admission there were only minor variations. The largest increase in numbers was admissions for renal dialysis. Admissions for congenital illnesses, neoplasm conditions and eye, ear, nose and throat (EENT) illnesses doubled from last year while admissions for digestive illnesses also increased. Admissions for musculoskeletal conditions and respiratory illnesses decreased markedly.

Data in Table 7 (below) was extracted from the Victorian Admitted Episodes Dataset (VAED) and is coded in speciality codes rather than ICD chapters, so that it does not match the categories in Table 6. It is presented so that Aboriginal and non-Aboriginal admission rates per speciality can be compared.

The table below indicates that Aboriginal patients were admitted for dental, psychiatric, renal dialysis and endocrine diseases at more than 3 times the rate of non-Aboriginal patients. Aboriginal patients were admitted for neurology, neurosurgery, ENT, general medicine and surgery, obstetrics, neonatology and respiratory conditions at 2-3 times the rate of non-Aboriginal patients.

Table 7: Comparable admission rates for the 18 KHLO hospitals classified in speciality codes⁶

VAED				
Diagnosis Speciality Group	Aboriginal		Non - Aboriginal	
	Frequency	Rate per 1000 population	Frequency	Rate per 1000 population
01 Neurosurgery	46	1.65	3,342	0.72
03 Vascular	23	0.82	2,935	0.64
04 Orthopaedics	233	8.34	27,656	6.00
05 Neurology	191	6.84	14,934	3.24
06 Ophthalmology	37	1.32	6,950	1.51
07 ENT	225	8.06	14,228	3.08
08 Cardio-thoracic	24	0.86	2,058	0.45
09 Cardiology	264	9.45	27,608	5.99
10 Rehabilitation	13	0.47	4,361	0.95
11 Dental	114	4.08	4,350	0.95
12 Rheumatology	33	1.18	4,559	0.99
13 Plastics	86	3.08	8,563	1.86
14 General Medicine	407	14.57	28,783	6.24
15 Psychiatry	430	15.40	13,895	3.01
16 General Surgery	430	15.40	33,788	7.33
17 Nephrology	40	1.43	3,955	0.86
18 Renal Dialysis	2,689	96.28	71,802	15.57
19 Urology	100	3.58	14,715	3.19
20 Gynaecology	140	9.92	13,079	5.57
21 Obstetrics	560	39.69	33,824	14.4
22 Neonatology	341	12.21	24,031	5.21
23 Haematology	66	2.36	14,011	3.04
24 Respiratory	373	13.36	23,353	5.06
25 Oncology/ Radiology	111	3.97	23,855	5.17
26 Endocrinology	110	3.94	5,955	1.29
27 Gastroenterology	350	12.53	30,683	6.65
28 Total	7,436	266.26	457,273	99.15

Source: Victorian Admitted Episodes Data Set (VAED) 2003/04.

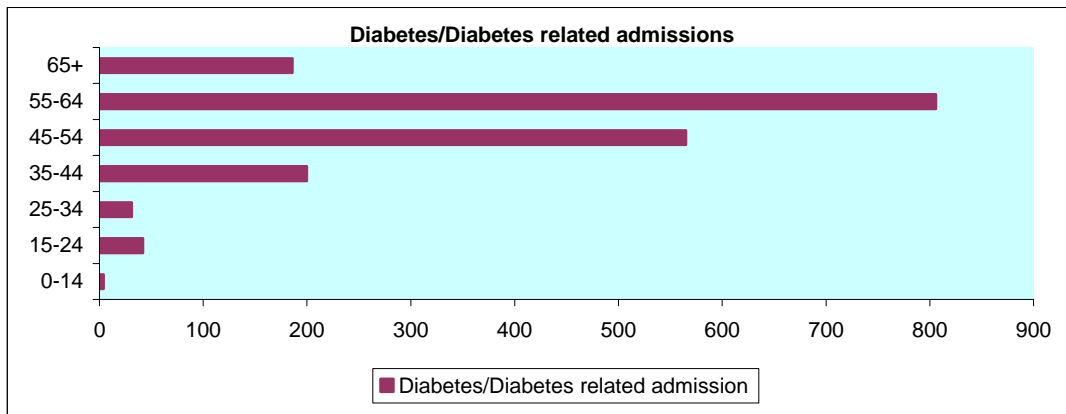
Notes: The rate per 1000 population is calculated on the total Aboriginal population (27,928) and the total non-Aboriginal population (4,612,097), with the exception of gynaecology and obstetrics, which are calculated using only the female population (14,109 Aboriginal; 2,348,591 non-Aboriginal). The rates are not age standardised.

⁶ Clinical Speciality mapped codes from W9VICDRG.(spec4)

4.4.2 Diabetes and diabetes-related admissions

Diabetes is a significant health problem for Aboriginal people, occurring at 2-4 times the rate of the non-Aboriginal population. It contributes to morbidity and mortality from cardiovascular disease and is associated with other vascular complications and renal failure. The true prevalence of diabetes in the Aboriginal community is not known, as many people with diabetes are not aware of it, or have not required hospital treatment.⁷

Chart 13: Number of diabetes-related admissions by age group, 2003/04



Source: KHLO data, 2003/04.

- 1,834 (26%) admissions were reported as having an underlying diabetes condition or admitted due to a diabetes related condition. The figure included 1,535 (57%) admissions out of 2,691 dialysis admissions.
- Patients aged 45-54 and 55-64 years have the highest number of diabetes-related admissions, which includes a high incidence of dialysis admissions.
- More males than females were admitted for diabetes-related conditions.
- There were large numbers of male admissions in all age groups from 35 years onwards.
- There were large numbers of admissions for females 45-64 years.

Table 8: Diabetes related admissions by age and sex, 2003/04

Age	Male	Female
0-14	0	4
15-24	19	23
25-34	16	15
35-44	177	23
45-54	345	220
55-65	324	482
65+	163	23
Total	1,044	790

⁷ KHLOs are asked to indicate for every admission whether a patient has diabetes, in order to capture the number of Aboriginal patients who may have an underlying diabetes condition so that the incidence of diabetes can be monitored and appropriate services are provided. Not all patients with diabetes are included, as this data item may not always be completed. The patient's reason for hospitalisation may not necessarily be due to diabetes.

What is diabetes?

Diabetes is a condition in which there is too much glucose, a type of sugar, in the blood. Our bodies rely on blood glucose for energy⁸. A hormone called insulin, which is made in the pancreas, controls blood glucose levels. When a person has diabetes the pancreas is either unable to make insulin, or it makes insufficient insulin which does not work properly. If the insulin cannot do its job, glucose builds up in the blood. Over time, high blood glucose levels can damage the body's organs.

Common complications⁹

The most common complications of diabetes include:

- Damage to the large blood vessels of the heart, brain and legs (macro vascular complications).
- Damage to the small blood vessels causing problems in the eyes, kidneys, feet and nerves (microvascular complications).

Diabetes and Kidney Failure

People with diabetes are at risk of developing kidney problems including narrowing of the arteries to the kidneys, called renal artery stenosis or renovascular disease.

Kidney failure as a serious complication

Unmanaged diabetes can result in kidney failure because high blood sugar levels damage the millions of tiny filtering units in each kidney. Aboriginal people are only two per cent of the Australian population, but they account for around nine per cent of all new patients with kidney failure - end stage renal disease (ESRD). Diabetes is an important factor in increased ESRD in Aboriginal people. A person with ESRD has no kidney function at all, and must rely on dialysis or have a kidney transplant operation.

Causes

The high rate of diabetes among Aboriginal Australians is thought to be caused by a number of factors working in combination including:

- Genetic susceptibility;
- Diet;
- Obesity;
- Lack of physical activity;
- Gestational diabetes;
- Low birth weight;
- Poor standard of living; and
- Reduced access to medical care.

Prevention and management at home¹⁰

Diabetes can be managed by making healthy lifestyle choices in diet, exercise, and other health habits. These will help to improve glycaemia (blood sugar) control and prevent or minimize complications of diabetes.

Diet: A healthy diet is the key to controlling blood sugar. Eating a consistent, well-balanced diet that is high in fibre, low in saturated fat, and low in concentrated sweets is essential.

Exercise: Regular exercise, in any form, can help reduce the risk of developing diabetes. Activity can also reduce the risk of developing complications of diabetes. As little as 20 minutes of walking 3 times a week has a proven beneficial effect. Any exercise is beneficial: no matter how light or how long, some exercise is better than no exercise.

Medical Treatment

The treatment of diabetes is highly individualised, depending on the type of diabetes, whether one has other active medical problems, diabetic complications, age and general health at time of diagnosis. Health care providers can set goals for lifestyle changes, blood sugar control, and treatment. Education about diabetes and its treatment is essential in all types of diabetes.

⁸ <http://www.betterhealth.vic.gov.au>

⁹ <http://www.betterhealth.vic.gov.au>

¹⁰ <http://www.emedicinehealth.com/diabetes>

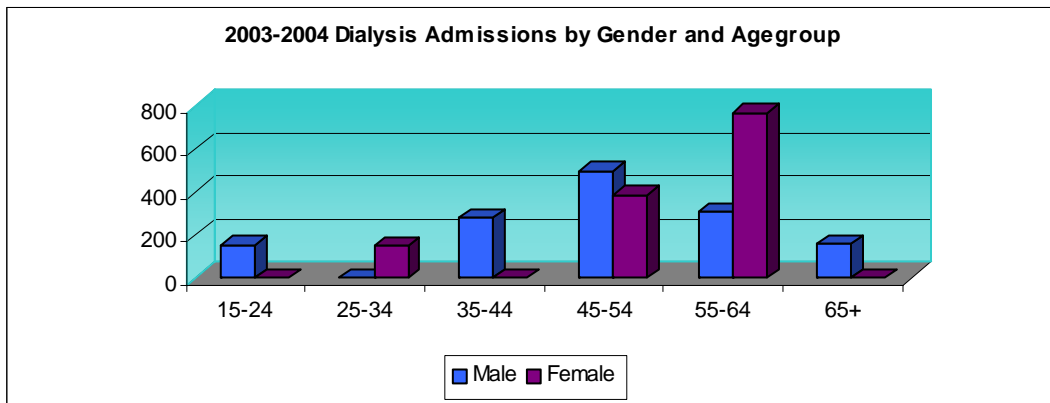
4.4.3 Renal dialysis admissions

Aboriginal people suffer very high rates of renal failure (6-8 times that of the non-Aboriginal population), and consequently high rates of admission for renal dialysis. Thirty-eight percent of all admissions in 2003/04 were for renal dialysis.

Renal dialysis is necessary for people who have total or near total and permanent damage to their kidneys. In this state the kidneys cannot perform their usual function of removing waste and extra water from the body and dialysis is required. Persons with acute kidney failure only require a few episodes of dialysis. Persons with chronic renal failure remain on dialysis for the rest of their lives, or until a kidney transplant is possible. Two leading causes of renal failure are diabetes and high blood pressure (Chart 18).

In 2003/04 admissions for dialysis were almost equally divided between men and women. However the large number of admissions only represents 22 persons requiring regular or occasional dialysis. (1 person usually requires 3 dialysis treatments each week = 156 admissions each year).

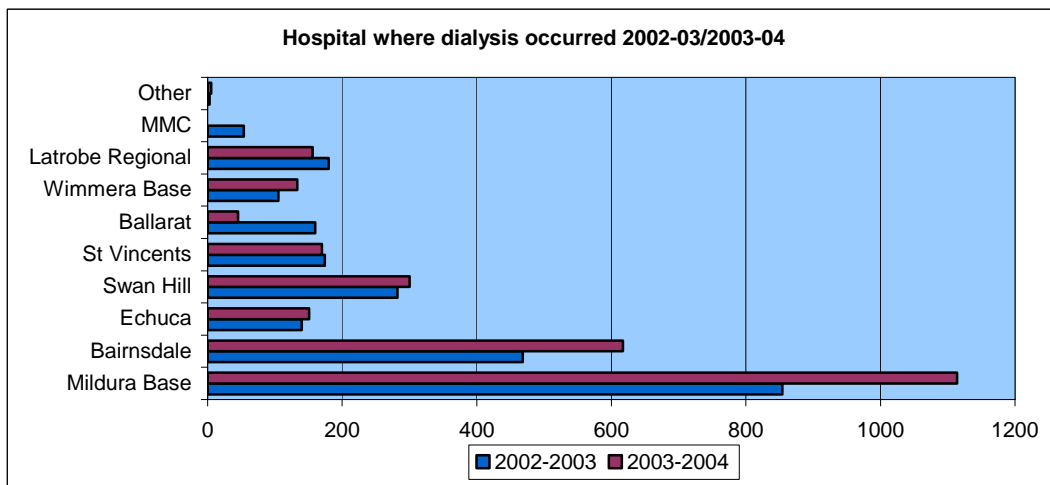
Chart 14: Admissions for renal dialysis by gender and age group, 2003/04



Source: KHLO data, 2003/04.

There are few patients aged less than 35 years. Numbers of male admissions increase after 35 years, and then decrease after 55 years, while the number of female admissions rises at 45 years and again at 55-64 years.

Chart 15: Hospitals where dialysis admissions occurred, 2002/03-2003/04



Source: KHLO data, 2002/03 and 2003/04.

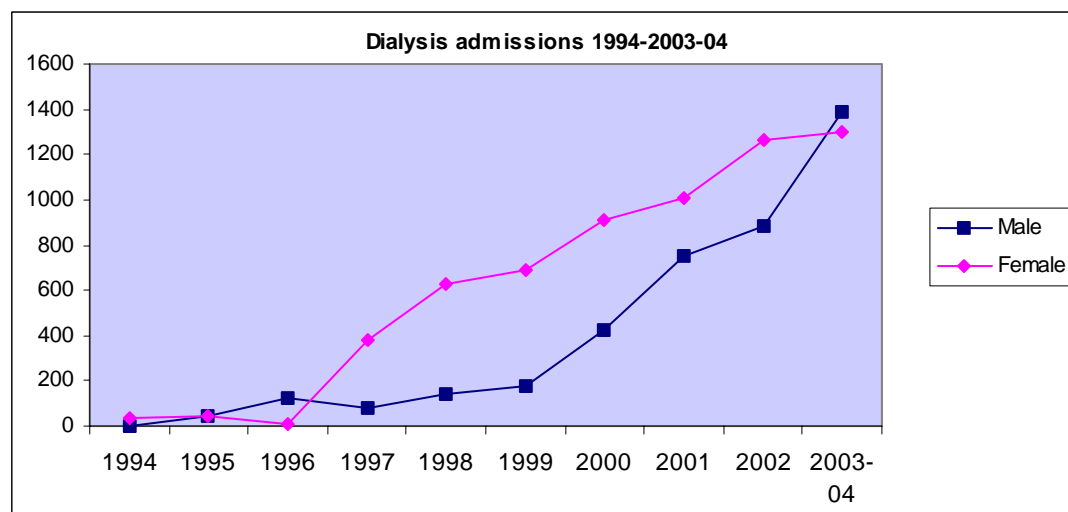
Mildura, Bairnsdale, Swan Hill, Echuca and St Vincent's hospitals have high numbers of renal dialysis admissions with Mildura and Bairnsdale showing large increases from 2002/03 to 2003/04.

Table 9: Dialysis admissions by hospital, 2002/03-2003/04

Hospital	2002/03		2003/04	
	Male	Female	Male	Female
St Vincent's	10	164	4	166
Ballarat Health	3	157	1	44
Mildura Base	697	157	959	155
Wimmera-Horsham	105	0	133	0
Bairnsdale	157	311	140	477
Echuca	139	1	151	0
Latrobe-Traralgon	0	180	0	156
Swan Hill	2	280	0	300
Goulburn Valley	3	0	2	1
Monash - Clayton	0	54	0	0
Other non KHLO hospitals	0	0	1	1
TOTAL	1116	1304	1391	1300

Source: KHLO data, 2002/03– 2003/04.

Chart 16: Dialysis admissions, 1994-2003/04

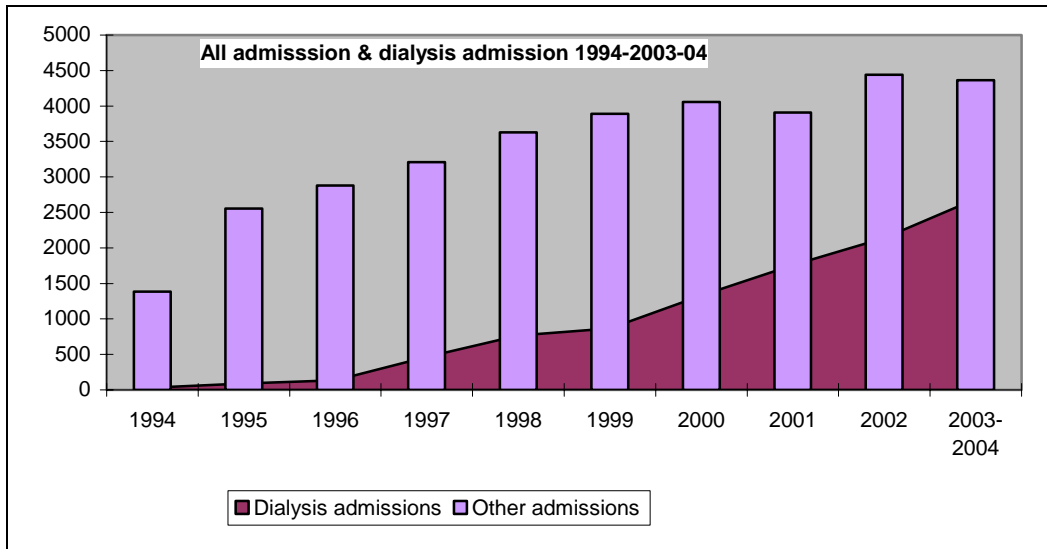


Source: KHLO data, 1994 – 2003/04.

The number of dialysis admissions has grown rapidly from 1997 onwards, due partly to increases in the number of patients requiring dialysis treatment and partly to better recording practices. From 1997 until 2002 the number of female dialysis admissions was greater than the number of male admissions, but in 2003/04 there were more male admissions.

The number of dialysis admissions is increasing more rapidly than the number of other admissions. Admissions for dialysis now comprise 38% of all admissions.

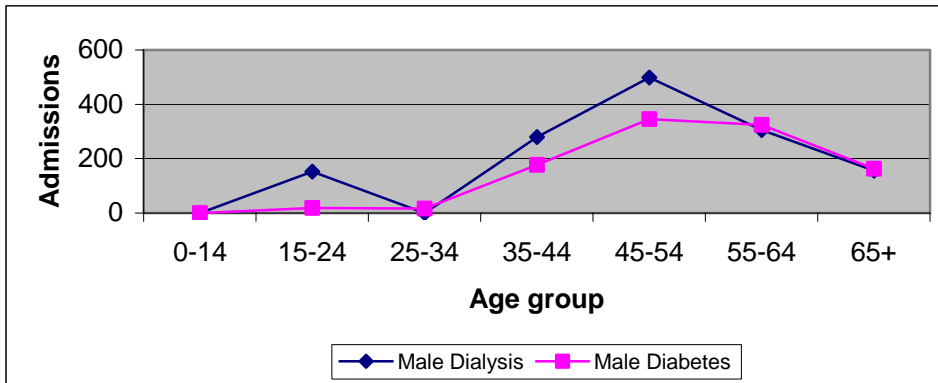
Chart 17: Admissions and Renal Dialysis, 2003/04



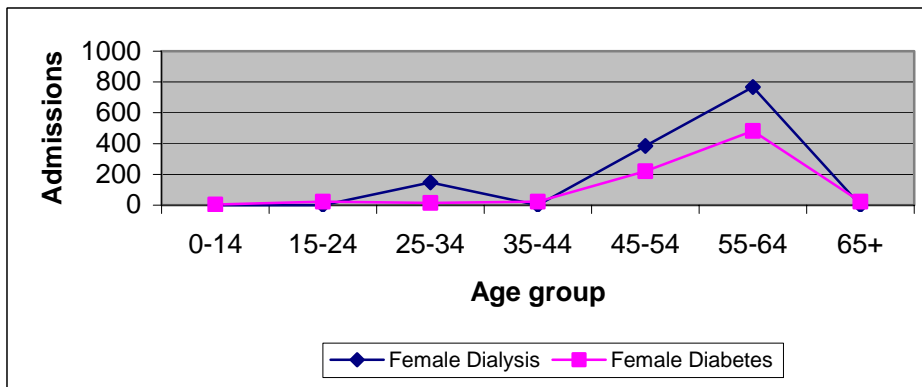
Source: KHLO data, 1994- 2003/04

As can be seen from the charts below, diabetes and dialysis admissions correlate closely. Diabetes is a major cause of renal failure.

Chart 18: Diabetes-related and dialysis admissions, 2003/04
Male



Female



Source: KHLO data, 2003/04.

5 Births of Aboriginal babies

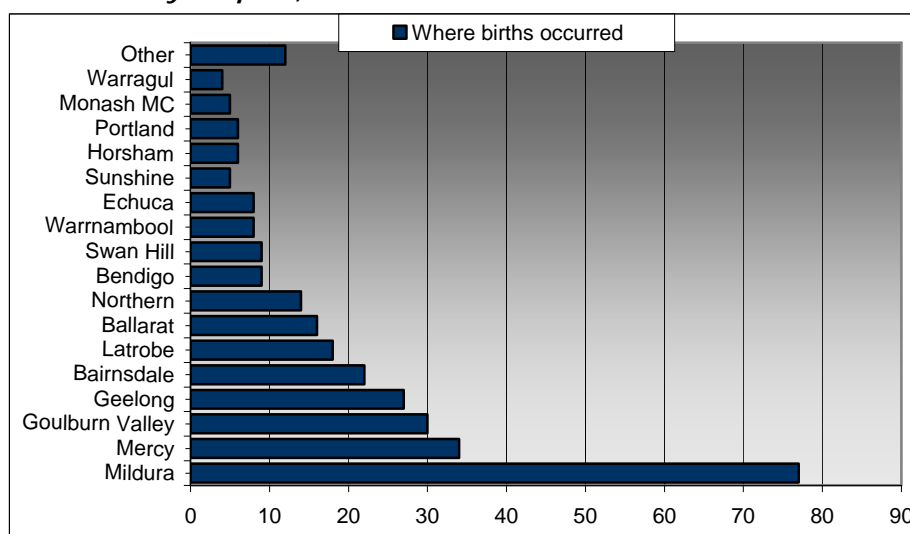
The number of Aboriginal babies born in hospitals with KHLOs does not vary very much from year to year. In 2003/04 310 babies were recorded. Between 1996 and 2003/04 the number of babies ranged from 261 to 363. KHLOs identify approximately half the estimated total number of Aboriginal babies born each year. Aboriginal babies are often born to younger than average mothers, have lower birth weights and are more likely to be premature.

Data on mothers and babies presented in this report are taken from data provided by Liaison Officers and the Perinatal Data Collection Unit (PDCU), which collects data from midwives. PDCU data is collected from all hospitals and presented on a statewide basis. Use of PDCU data in this report enables a comparison to be made with non-Aboriginal mothers and babies.¹¹

5.1 Aboriginal births 2003/04

In 2003/04 Mildura (including Robinvale), Mercy, Goulburn Valley, Geelong and Bairnsdale Hospitals recorded the highest numbers of Aboriginal babies.

Chart 19: Births by hospital, 2003/04



Source: KHLO data, 2003/04.

Note: Births at Orbost, Dandenong, Sale and home births are included in 'Other'.
9 Robinvale babies were included in Mildura, where the births occurred.

¹¹ Our continued attempt to improve the availability of information on Aboriginal mothers and babies has gradually produced good results, as evident from the birth weights (80.1%) and maternal ages (80.1%) provided by the KHLOs for all Aboriginal babies in the 2003/04 data. Other data items such as length of gestation, number of antenatal visits and neonatal morbidity are often not reported in the collection form and are still the subject of follow-up queries.

A remarkable improvement in the quality of some data items has been noted with the introduction of 'follow-up queries' in June 2003. However, some KHLOs are still experiencing difficulties when pursuing this additional information. A collaborative effort between the KHLOs and hospital staff is paramount in enhancing the quality and completeness of KHLO data.

5.2 Aboriginal births 1996 – 2003/04

Mildura, Mercy, Goulburn Valley, Geelong and Bairnsdale hospitals have always recorded high numbers of Aboriginal births.

Table 10: Births by hospital, 1996 – 2002

Hospital reporting	1996	1997	1998	1999	2000	2001	2002
Mildura Base	57	50	60	55	56	61	57
Mercy	21	5	33	34	34	46	36
Goulburn Valley Base	47	49	60	49	36	37	37
Geelong	15	13	19	23	38	28	34
Royal Women's	3	20	35	36	25	27	15
Bairnsdale	23	24	31	27	28	28	16
Ballarat	14	15	16	27	13	17	17
Bendigo Base	13	10	1	7	6	8	11
Swan Hill	18	18	13	18	16	13	14
Warrnambool	4	4	4	7	7	10	7
Echuca	18	17	24	12	10	17	14
Wimmera - Dimboola	2	6	6	5	0	9	6
Portland	3	9	6	4	3	9	3
Monash Clayton	3	10	11	1	1	9	6
Warragul	8	6	2	11	7	13	7
Latrobe Regional	2	0	12	16	11	15	8
Robinvale	1	1	0	1	0	0	0
Sub total	252	257	333	333	291	347	288
Other hospitals	9	14	11	20	12	16	11
Total	261	271	344	353	303	363	299

Table 10(cont): Births by hospital, 2002/03 – 2003/04

Hospital of birth	2002/03	2003/04
Mildura	56	77
Mercy Hospital for Women	34	34
Goulburn Valley	40	30
Geelong	32	27
Bairnsdale	26	22
Ballarat	13	16
Northern	5	14
Bendigo	11	9
Swan Hill	11	9
Warrnambool	4	8
Echuca	13	8
Sunshine Hospital	-	5
Wimmera-Horsham	8	6
Portland	6	6
Monash -Clayton	7	5
Warragul	6	4
Latrobe	2	18
Sub total	274	298
Other hospitals	13	12
Total all births	292	310

Source: KHLO data, 1994- Jan-Dec 2002, 2002/03-2003/04.

Note: MCHN at Sunshine Hospital is now reporting Koori births at Sunshine Hospital.

10 Robinvale babies were born at Mildura in 2002/03 and 9 in 2003/04.

Royal Women's Hospital ceased reporting in 2002. Northern Hospital commenced reporting in 2002. "Other hospitals" includes Orbost (3), Dandenong (4), Sale (2), RWH (1), Adelaide W&CH (1), home birth (1). Births do not include stillbirths.

5.3 Aboriginal mothers and fathers, 2003/04

Unlike other states and territories with larger Aboriginal populations, many Aboriginal babies in Victoria have an Aboriginal father and non-Aboriginal mother. Only 15% of Aboriginal babies in Victoria have two Aboriginal parents, whereas the Australian average is 31%, ranging from 7% in Tasmania to 48% in Western Australia. 40% of Victorian Aboriginal babies have only an Aboriginal father, while the Australian average is only 27%.¹²

The Aboriginal identification of babies with Aboriginal fathers and non-Aboriginal mothers is recorded by Liaison Officers but not by the VAED or PDCU, which ascribe the mother's identification to the baby. With the changes to the WIES supplement, whereby it has become more important for babies to be identified in their own right as Aboriginal, and national efforts to improve paternal identification in Perinatal collections, the collection of this data by Liaison Officers will become even more important.

Table 11: Babies with Aboriginal mothers and/or fathers, 2003/04

Data source	Aboriginal babies	Aboriginal mother	Aboriginal father	Aboriginal father-non-Aboriginal mother	Aboriginal mother – non-Aboriginal father or father's identification unknown	Both parents Aboriginal
KHLO 2003/04	310	280	126	30	184	96
PDCU 2003	362	362				
RBDM 2003	722	435	393	287	329	106
KHLO % parents	100%	90%	41%	10%	59%	31%

Source: KHLO data 2003/04; PDCU 2003; Registry of Births Deaths and Marriages (RBDM) 2003.

Notes: 184 babies recorded by KHLOs have an Aboriginal mother and either non-Aboriginal father (74) or the father's Aboriginality is unknown(110).
PDCU record only babies born to Aboriginal mothers.

5.4 Age of Aboriginal mothers

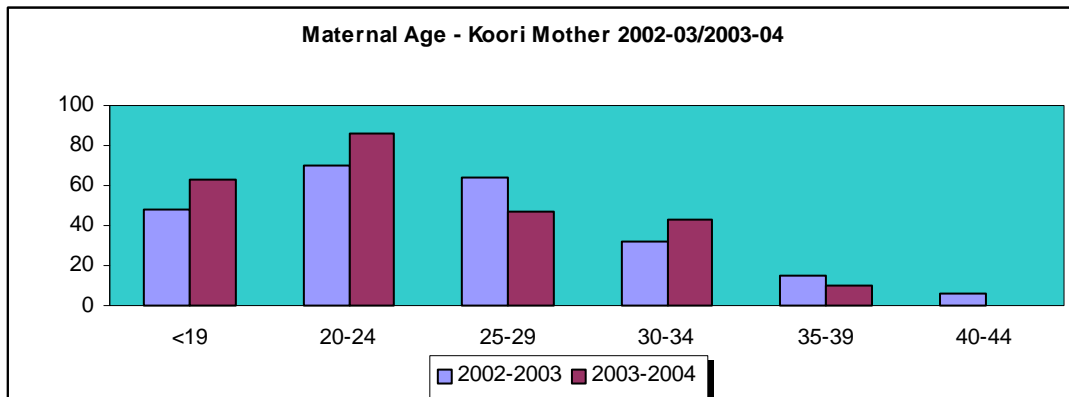
Between 2002/03 and 2003/04 there was an increase in the number of younger Aboriginal mothers aged <19 years, and between 20-24 years, and also those aged 30-34 years. There was a decrease in the number of mothers aged 25-29 years. This is merely indicative of Aboriginal maternal age, as data from one of the major birthing hospitals is not available for analysis.

In 2003 most Aboriginal mothers were younger than non-Aboriginal mothers. These comparative percentages have not changed in the past few years. It should be noted that, although there are some very young mothers, most mothers aged less than 20 years are aged 18-19 years.¹³

¹² Births Australia 2003.

¹³ PDCU 2003.

Chart 20: Maternal age - Aboriginal mothers, 2002/03-2003/04



Source: KHLO data, 2002/03 and 2003/04.
 Note: Excludes 5 of unknown age in 2002/03 KHLO data.
 Excludes 31 of unknown age in 2003/04 KHLO data.

Table 12: Maternal age, 2003

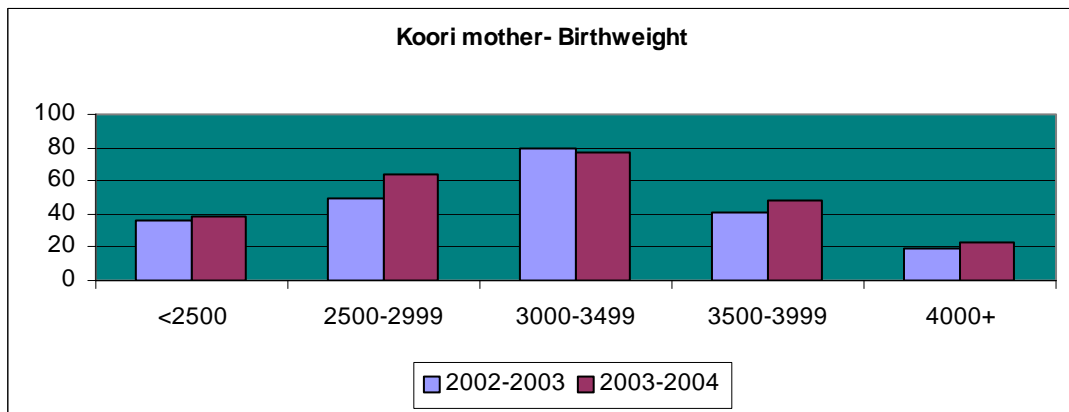
Age	% Aboriginal mothers	% Non-Aboriginal mothers
<20 years	22.0	2.8
20-24 years	33.1	11.8
25-29 years	19.8	26.6
30-34 years	19.5	37.7
35-39 years	4.8	17.7
40+ years	0.8	3.5
Total	100	100

Source: PDCU, 2003.

5.5 Birth weights of babies of Aboriginal mothers

The rate of low birth weight babies has remained constant at approximately 15% of all births to Aboriginal mothers. It is double the rate of low birth weight babies to non-Aboriginal mothers.

Chart 21: Aboriginal mothers and their babies' birth weights



Source: KHLO data, 2002/03- 2003/04.

Table 13: Aboriginal mothers and their babies' birth weights

Birthweight (grams)	2002-03		2003-04		PDCU 2003 Aboriginal mothers	PDCU 2003 non-Aboriginal mothers
<2500	36	15%	38	15%	13.8%	7.0%
2500-2999	50	21%	64	26%	85.9%	93.0%
3000-3499	79	33%	77	31%		
3500-3999	41	17%	48	19%		
4000+	19	8%	23	9%		
unknown	15	6%	0	0	0.3%	0
Total	240	100	250	100	362	63,187

Source: KHLO data 2002/03 and 2003/04, PDCU 2003.

Note: Excludes 60 babies in 2003/04 with unknown birth weights.

5.6 Gestation

Aboriginal mothers are more likely to have premature babies than non-Aboriginal mothers. This accounts for some but not all of the low birth weight babies.¹⁴

Because of the small number of babies with gestation of less than 32 weeks or more than 41 weeks, the percentages can vary from year to year.

Table 14: Babies by gestational age, January- June 2003 and 2003/04

Gestation (weeks)	6 months January - June 2003	12 months July 2003- June 2004
	Number of babies	Number of babies
<32	4	3
32-36	11	28
37-40	113	211
>=41	5	26
Total	133	268
Unknown gestational age	9	42
Total babies	142	310

Source: KHLO data 2003/04.

Table 15: Births to Aboriginal and non-Aboriginal mothers by gestation, 2003

Gestational Age	Aboriginal	%	Non Aboriginal	%	Total Births
20-27 wks	10	2.8	651	1.0	661
28-31 wks	2	0.6	460	0.7	462
32-36 wks	35	9.7	3899	6.2	3934
37-41 wks	309	85.4	57441	90.9	57750
> 41 wks	6	1.7	736	1.2	742
Total	362	100.0	63,187	100.0	63,549

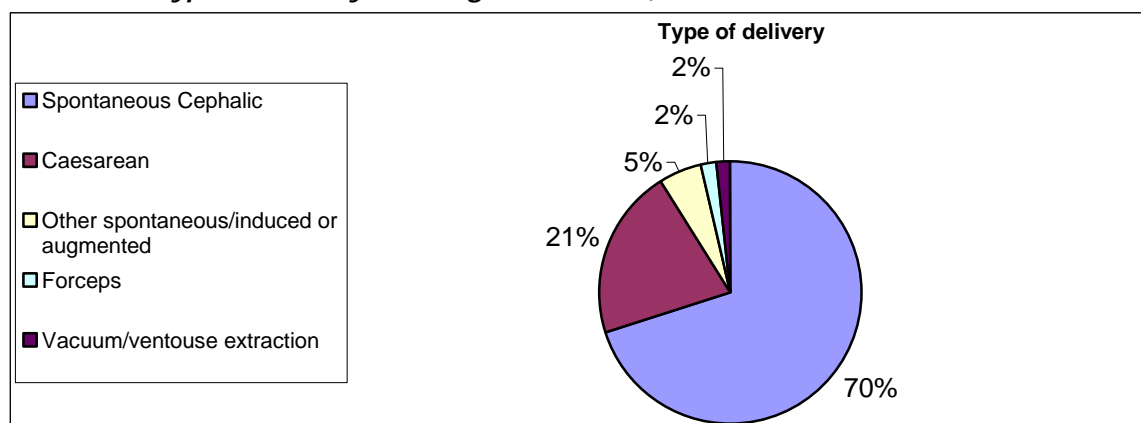
Source: PDCU 2003.

¹⁴The reporting of other data items such as gestation began in 2002, however due to poor data received on babies' gestational age we have not been able to include a full financial year report for 2002/03. Nevertheless the graph below shows the comparison between January-June 2003 and financial year July 2003-June 2004.

5.7 Type of delivery

Among Aboriginal mothers there was a high rate of spontaneous cephalic deliveries (70% compared to approximately 60% of non-Aboriginal mothers), and a low rate of caesarean sections (21% compared to 27% of non-Aboriginal mothers).

Chart 22: Type of delivery – Aboriginal mothers, 2003/04



Source: KHLO data 2003/04

Note: Excludes 1 unknown type of delivery (births to Aboriginal mothers only)

5.8 Additional information about mothers and babies

- Information on babies' gender was provided for 280 babies (90%).
- Plurality was provided for 280 (90%) babies - 274 singletons and 3 pairs of twin babies.
- Out of 280 Aboriginal mothers, 112 (40.0%) had obstetric complications and 138 (49.3%) were reported as not having any complications. No information was available on 30 mothers (10.7%).¹⁵

The contents of Table 16 below suggest a high level of under-reporting in some data items. Some KHLOs have good access to this information through the through the Medical Records system of the hospital and this is apparent in the completeness of the information they provide. Other KHLOs may have difficulty accessing this information and only report what has been disclosed to them by patients during their routine patient visits.

The follow-up queries form is sent to a KHLO whenever information is missing from the report. Information is then accessed via the Medical Records section of the hospital for completion of the form and resubmission to the KHSU. While this exercise is expected to encourage KHLOs to fill in as much detail on the collection form possible, the data team of KHSU may also need to review the questions asked in the collection tool in order to generate better reporting outcomes. It is hoped that this quality assurance tool will achieve completeness and accuracy of information for future analysis of KHLOs' mothers' and babies' data.

¹⁵ KHLOs are asked to report on obstetric details of Aboriginal mothers only, therefore non Aboriginal mothers' obstetric data are not available through the KHLOs Mother and Babies data collection.

Table 16: Other data items where quality of data provided could be improved

Data items	Yes	No	Not stated
Aboriginal mothers only (280)			
Has mother contacted MCHN	179	9	92
Mother received antenatal care	186	44	50
Discharge status (mother)	Home (240) Trans (9)	-	31
Discharge status (all Aboriginal babies)	Home (263) Trans (14)	-	33
Is this mother's first child	49	112	119
Gestation	242		38
All Aboriginal babies (310)			
Father identified as Aboriginal	126	74	140
Neonatal Morbidity	60	201	49
Congenital Anomaly	6	255	49
Is baby recorded as Aboriginal	291	6	13
Hospital of birth	310	0	0
Intended	193	10	107
Emergency	13	175	122

Incomplete or missing data items (as shown by the use of "not stated") not only compromise data quality but thereby make it difficult to develop good policies. A good example would be the accurate recording of antenatal visits, which may assist in determining causes of the high incidence of obstetric complications. In 2003/04 obstetric complications were reported for 40% of Aboriginal mothers. Some of these complications can be avoided if pregnancies are properly monitored during antenatal visits.

6 Deaths of Aboriginal people

Death within the Aboriginal community is a traumatic event. The loss of loved ones, often under tragic circumstances, is an enormous loss, not just for the immediate family but also for the extended family and community of which they were part. For many Aboriginal people, the passing of family members reinforces the ongoing experiences of loss and grief.

The notion of 'kin' within the Aboriginal community is interwoven in the fabric of Aboriginal society, defining behavior, relationships, social interactions, responsibilities and obligations throughout life. There is a Community expectation that those with connections to that family will make considerable efforts to attend the rites associated with death, mourning, funerals and burial. Death within the Community will generally mean the involvement of large numbers of people because it affects so many.

The Koori Human Services Unit acknowledges with regret that the information in this publication may result in renewed loss and grief for some members of the Aboriginal community.

6.1 Why is this information important and how is it used?

6.1.1 Information on stillbirths

The rate of stillbirths is an important indicator of the health of mothers and babies in any community. If mainstream sources of information have recorded that the baby is not Aboriginal, then a false impression would be given about the health of Aboriginal women and their babies. Information about the higher rate of stillbirths for the Aboriginal community in Victoria has already been used to obtain resources for alternate birthing services for Aboriginal women in Victoria.

6.1.2 Information on deaths in the Aboriginal community

Information about deaths in the community provides valuable information about patterns of illness in the community. This information can then be used for planning appropriate preventative health programs and for other health services and programs. The most common causes of death are not necessarily the most common causes of admissions to hospital.

Accurate information about deaths in the community is also needed to calculate the life expectancy of the community. Life expectancy is a way of summarising all the information about the number of deaths in the community for people of different ages. It shows the number of years that a person born now can expect to live. It is one of the important ways that the health of different communities can be compared.

At the present time mainstream sources of information on deaths in the Aboriginal community in Victoria are not accurate. The information provided by Liaison Officers is one of the steps being taken to improve the information available about Aboriginal deaths by providing a cross-check on other data sources.

The deaths reported by KHLOs are estimated to cover approximately one quarter of all deaths of Aboriginal people in Victoria. The Registry of Births, Deaths and Marriages records an average of 80 deaths of Aboriginal people each year. This is estimated to be 40% of all Aboriginal deaths. Deaths notified by the KHLOs are often found not to have been registered as Aboriginal by the Registry.

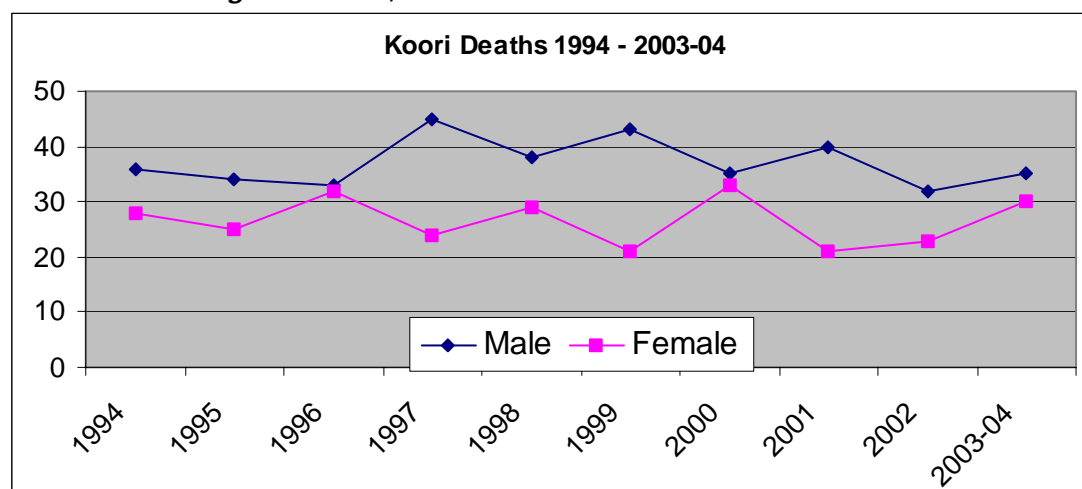
6.2 Information available about deaths in the Aboriginal community

6.2.1 Number of deaths reported

In 2003/04 Koori Hospital Liaison Officers reported 65 deaths in the Aboriginal community, of which 30 were female and 35 were male. In 2002/03 56 deaths were reported, of which 24 were female and 32 were male. Six (6) stillbirths were reported in 2003/04 and four (4) in 2002/03.

The number of deaths reported for males has always been higher than the number reported for females, especially for younger adults.

Chart 23: Aboriginal deaths, 1994-2003/04

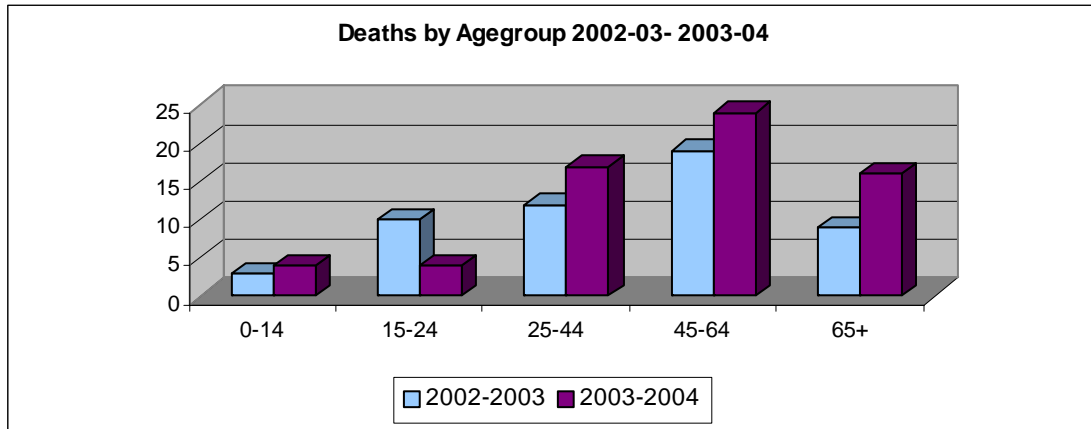


Source: KHLO data, 1994-2003/04.

6.3.2 Age at the time of death

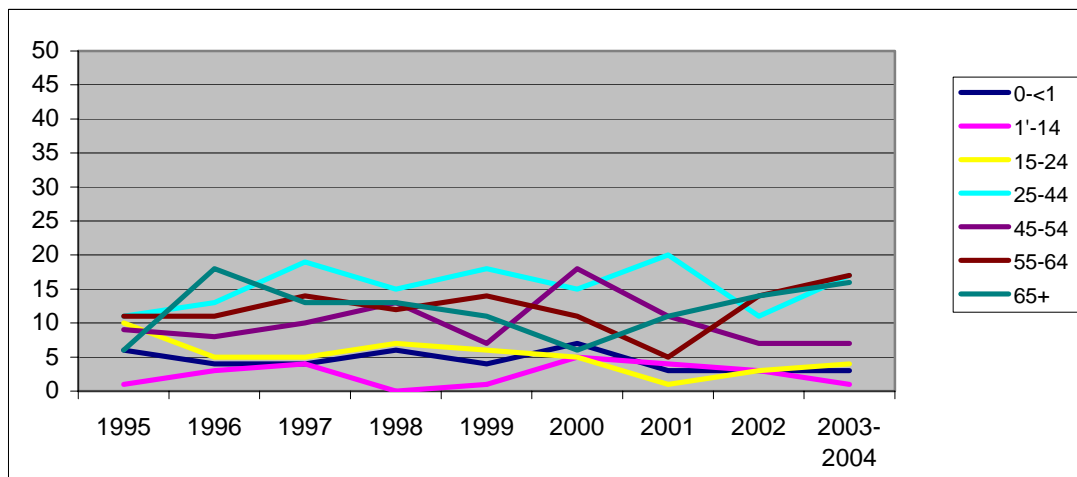
Life expectancy for Aboriginal people is markedly lower than the Victorian average. There are higher rates of infant and child deaths, and younger adults. Older adults (45-64) die of causes often associated with old age (65+). The median age of deaths of Aboriginal people reported by KHLOs in 2003 was 50 for males and 53 for females.

Chart 24: Aboriginal deaths by age group, 2002/03-2003/04



Source: KHLO data, 2002/03 and 2003/04

Chart 25: Aboriginal deaths by age group, 1995-2003/04



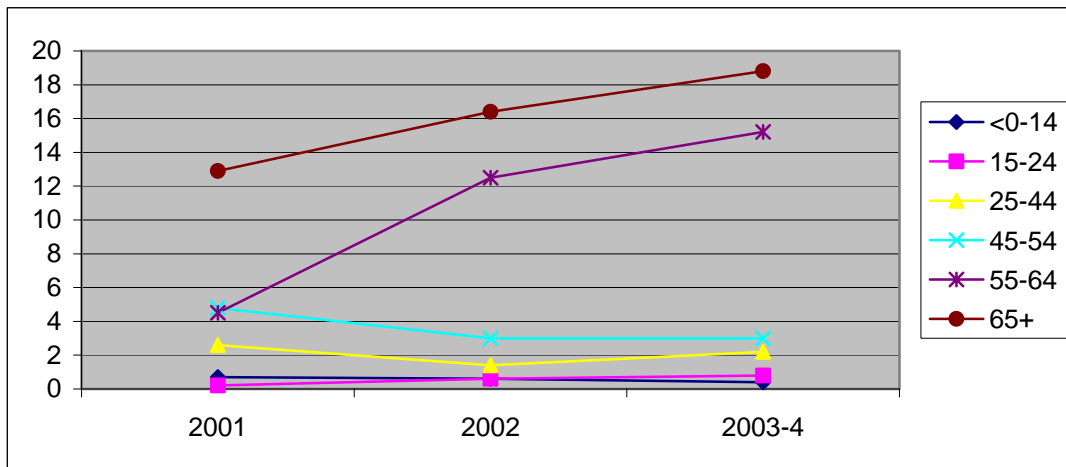
Source: KHLO data, 1995-2003/04.

Table 17: Aboriginal deaths by age-groups, 1995-2003/04

Age group	1995	1996	1997	1998	1999	2000	2001	2002	2003/04
0-<1	6	4	4	6	4	7	3	3	3
1-14	1	3	4	-	1	5	4	3	1
15-24	10	5	5	7	6	5	1	3	4
25-44	11	13	19	15	18	15	20	11	17
45-54	9	8	10	13	7	18	11	7	7
55-64	11	11	14	12	14	11	5	14	17
65+	6	18	13	13	11	6	11	14	16
Unknown age	2	3	-	1	3	1	6	-	-
Total	56	65	69	67	64	68	61	55	65

Source: KHLO data, 1995-2003/04.

Chart 26: Death rate per thousand by age, 2001 to June 2004



Source: KHLO data 2001-2003/04, ABS Census 2001.

Table 18: Death rate per thousand by age, 2001 to June 2004

Age group	2001	2002	2003-4
<0-14	0.7	0.6	0.4
15-24	0.2	0.6	0.8
25-44	2.6	1.4	2.2
45-54	4.8	3	3
55-64	4.5	12.5	15.2
65+	12.9	16.4	18.8
Total	2.2	2	2.3

6.2.3 Causes of deaths

For many deaths the cause was not stated. Where the cause was given, the main reasons for the deaths of Aboriginal people were heart disease, cancer, respiratory diseases including pneumonia, and renal failure, particularly when associated with diabetes. Accidents and injuries were seldom given as the cause of death.

6.3 Stillbirths

In 2003/04 Liaison Officers reported 6 stillbirths from 316 Aboriginal babies (19 per 1000). In 2002/03 4 stillbirths were reported from 286 Aboriginal babies.

Neonatal deaths are those of liveborn babies who die before 28 days. No neonatal deaths were reported by Liaison Officers in 2003/04. Midwives (PDCU) reported 8 stillbirths and 5 neonatal deaths to Aboriginal mothers in 2003.

Stillbirths and neonatal deaths are combined as perinatal deaths. The rate of perinatal mortality is much higher for babies of Aboriginal mothers than non-Aboriginal mothers.

Table 19: Births by baby discharge status, 2003

Discharge status	Aboriginal and Torres Strait Islander	Rate per 1000	Non Aboriginal & Torres Strait Islander	Rate per 1000	Total Births
Live birth, survived > 28 days	349	964	62,430	988	62,779
Stillborn	8	22	525	8	533
Neonatal death	5	14	232	4	237
Total	362	1000	63,187	1000	63,549
Perinatal mortality rate		35.9		11.98	

Source: PDCU, 2003.

The number and rate of stillbirths can vary greatly from year to year because of the small number of babies. However the rate of stillbirths for babies of Aboriginal mothers is higher than that of babies of non-Aboriginal mothers.

Table 20: Stillbirths, 1996-2003/04

	1996	1997	1998	1999	2000	2001	2002	2002/03	2003/04
Stillbirths	2	4	5	8	3	7	4	4	6
Births Including stillbirths	263	275	349	361	306	370	303	286	316
Rate per 1000 births	7.6	14.5	14.3	22.2	9.8	18.9	13.2	14.0	19.0

Source: KHLO data 1996-2003/04.

7 Conclusion

Because of the accuracy of Aboriginal identification by Liaison Officers, Koori Health Counts is a reliable source of information about serious illness in the Aboriginal community.

Koori Health Counts 2003/04 shows that there has been a steady increase in the number of Aboriginal admissions to hospitals, in line with both the increasing population and greater emphasis on accurate identification. The Aboriginal age-adjusted rate of admission to hospital is higher than the non-Aboriginal rate.

Over the years the reasons for admission to hospital have not changed, although renal dialysis admissions are becoming an increasingly high proportion of admissions. Young children are admitted for respiratory and ENT diseases, younger adults for mental illnesses, renal dialysis and injuries, older adults for renal dialysis, respiratory diseases and circulatory diseases.

Mortality rates, including stillbirths, fluctuate due to small numbers but are showing no long-term improvement. The rate of low birth weight babies to Aboriginal mothers remains twice as high as the rate to non-Aboriginal mothers.

8 Appendices

- Appendix 1 Feature article: Respiratory diseases**
- Appendix 2 Information provided by Liaison Officers**
- Appendix 3 KHLO data collection form**

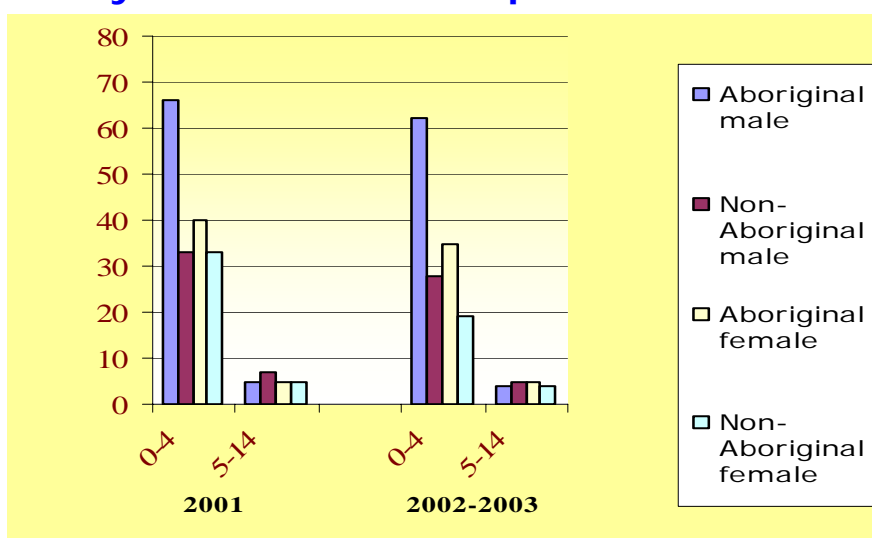
Appendix 1: Feature article

Diseases of the respiratory system

Respiratory disease is one of the major causes of admissions to hospitals for Aboriginal people recorded in the KHLO data and VAED data, especially among children 0-14 years old and older adults over 45 years old¹⁶.

Nationally Aboriginal people are admitted to hospital for respiratory conditions more than twice as often as the general population.

Respiratory Admissions Rate per 1000 in Victoria



The Respiratory System

The main function of the respiratory system is to supply oxygen to the blood system, which is done through breathing. Respiration is the uptake of oxygen and the removal of carbon dioxide. Anything that prevents the breathing process from functioning properly can result in death.

Respiratory Diseases

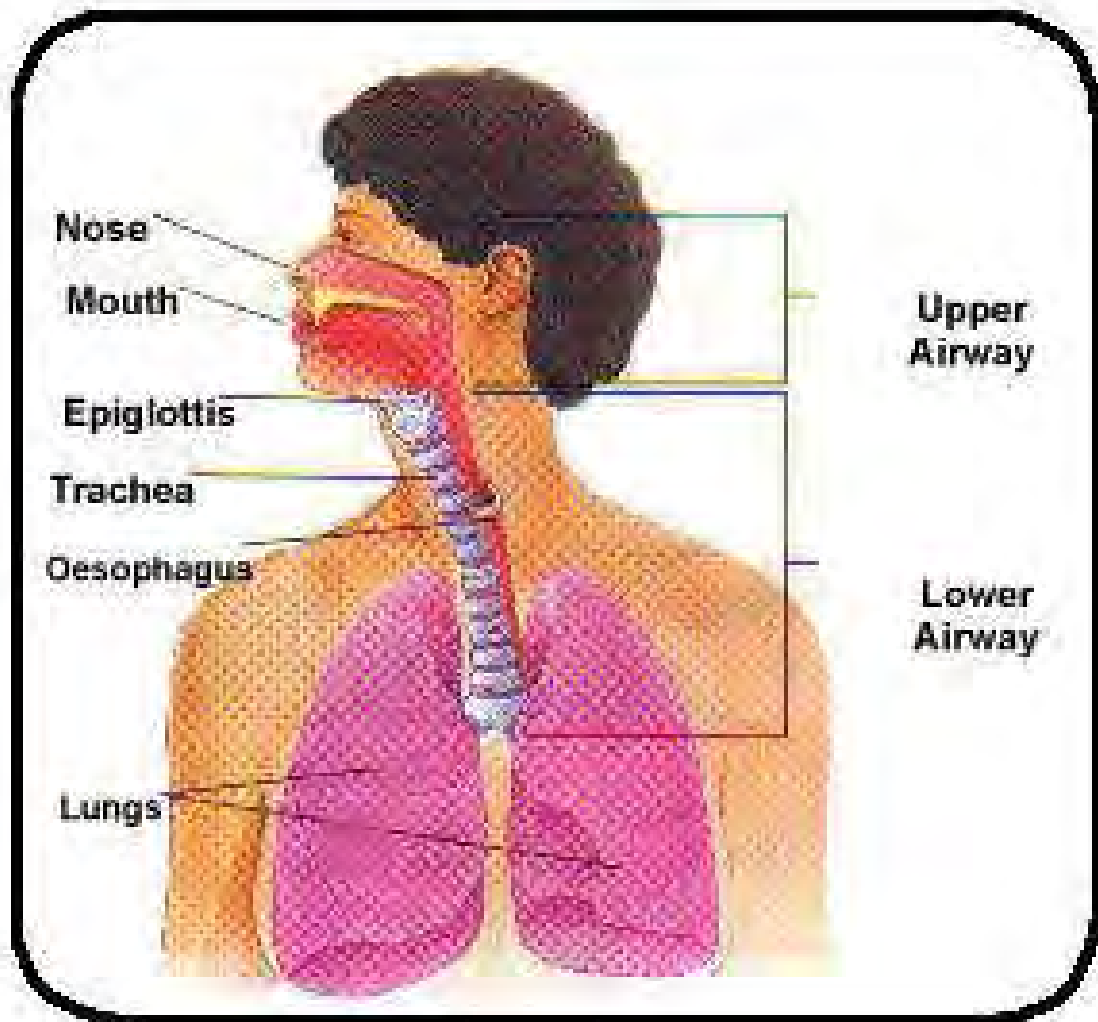
Respiratory conditions include diseases that affect the respiratory tract. They are usually divided into two: Upper Respiratory Tract Infections (URTI) affecting mouth and nose; and Lower Respiratory Tract Infections (LRTI) affecting the trachea and lungs. Respiratory Infections can be acute (ARI) or chronic (CRI).

Diseases that are grouped as respiratory diseases are influenza, pneumonia, asthma, bronchitis, croup, colds, chronic obstructive airways diseases (emphysema) and throat diseases such as tonsillitis.

¹⁶ Aboriginal services Plan Key Indicators Report June 2003.

Common problems of the respiratory system include¹⁷:

- **Asthma** - wheezing and breathlessness caused by a narrowing of the airways.
- **Bronchitis** - inflammation of the lung's mucous lining.
- **Emphysema** - disease of the alveoli.
- **Hay fever** - an allergic reaction to pollen, dust or other irritants.
- **Influenza** - caused by viruses.
- **Laryngitis** - inflammation of the vocal cords (larynx).
- **Pneumonia** - inflammation of the lung.



¹⁷ Better Health Channel www.betterhealth.vic.gov.au

¹⁸ Better Health Channel www.betterhealth.vic.gov.au

¹⁹ Aboriginal services Plan Key Indicators Report June 2003.

Causes

Respiratory conditions can include a variety of problems, including colds; flu, runny noses, and coughs. Upper respiratory conditions are also known as common cold. The differences between common cold and flu are:²⁰

Cold Symptoms	Flu Symptoms
Low or no fever	High fever
Sometimes a headache	Always a headache
Stuffy, runny nose	Clear nose or stuffy nose
Sneezing	Sometimes sneezing
Mild, hacking cough	Cough, often becoming severe
Slight aches and pains	Often severe aches and pains
Mild fatigue	Several weeks of fatigue
Sore throat	Sometimes a sore throat
Normal energy level	Extreme exhaustion

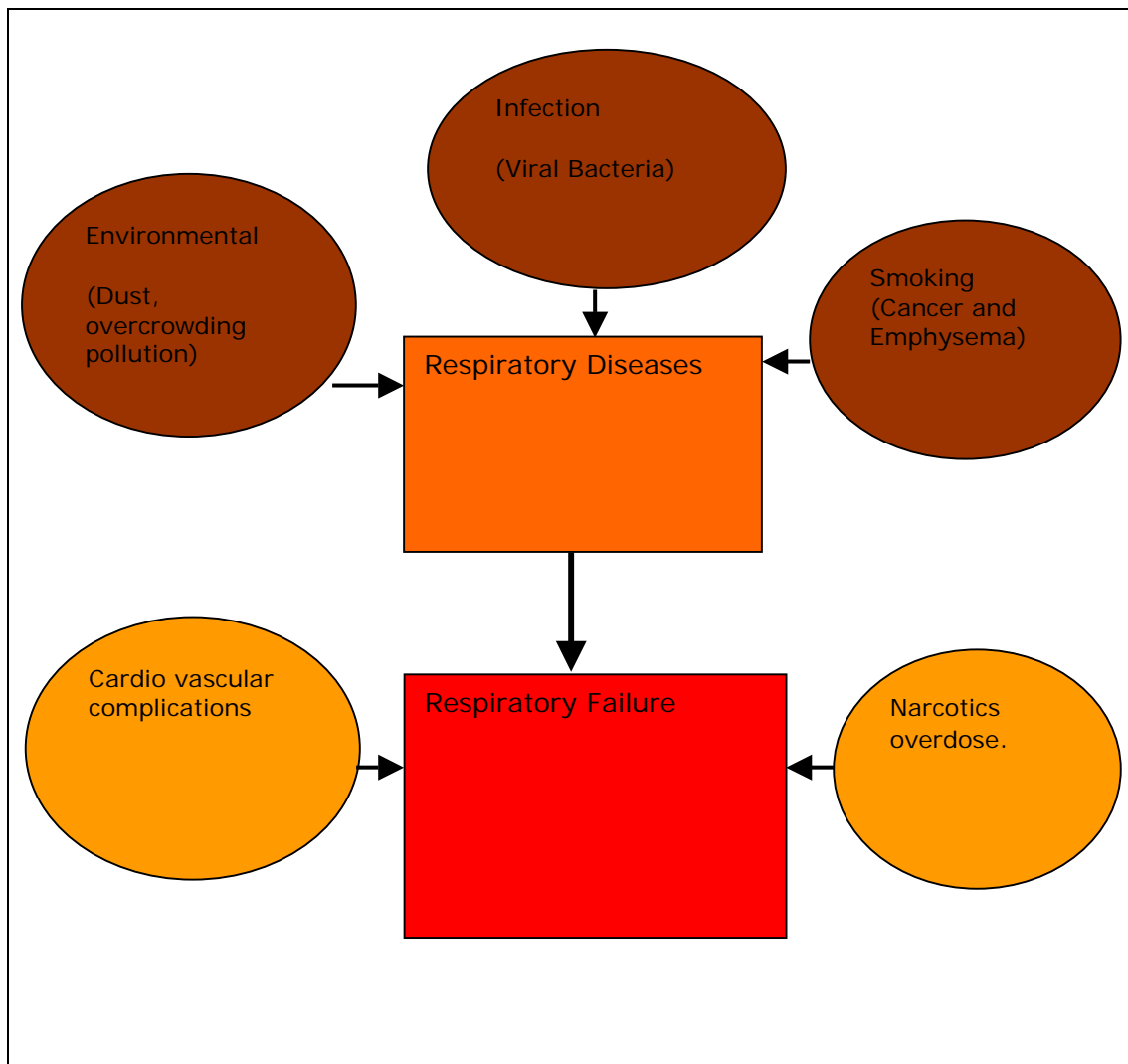
There over 200 different varieties of viruses, which can cause the symptoms of a cold. The most common virus is called the rhinovirus. Other viruses include the coronavirus, parainfluenza virus, adenovirus, enterovirus, and respiratory syncytial virus.

Risk Factors.

1. Respiratory infections are common in winter. Many cold viruses thrive in low humidity, making the nasal passages drier and more vulnerable to infection. The increased incidence of colds during the cold season may be attributed to the fact that people are indoors and close to each other.
2. An increased risk of respiratory infections is associated with a greater number of house occupants, poor quality housing, malnutrition, inadequate water supply, and exposure to environmental smoke and tobacco smoke.
3. These conditions may also contribute to incomplete resolution of lower respiratory tract infections. Indoor crowding aids transmission of infections person to person.
4. Under developed lungs due to premature birth or low birth weight can result in respiratory complications later in life due to reduced lung capacity.
5. Respiratory failure can be due to narcotics or drug overdose and this can be fatal.
6. Excess weight can cause poor respiration.
7. Children exposed to cigarette smoke are at a greater risk of developing asthma.
8. Cigarette smoking is a major risk factor for the development of lung cancer.
9. The younger a person starts smoking the greater the risk of developing lung cancer.
10. Smoking related respiratory conditions are cancer and emphysema.

²⁰ <http://www.health.uab.edu>

Some Risk factors for Respiratory diseases leading to Respiratory Failure



Signs and Symptoms of respiratory infections in²¹:

Infants:

- unable to sleep
- fussiness
- congestion in the nose
- sometimes vomiting and diarrhoea
- fever

²¹ www.health.uab.edu

Older people

- stuffy, runny nose
- scratchy, tickly throat
- watery eyes
- sneezing
- mild hacking cough
- congestion
- sore throat
- achy muscles and bones
- headaches
- low grade fever
- chills
- watery discharge from the nose that thickens and turns yellow or green
- mild fatigue

The symptoms above may be similar to symptoms of other medical conditions or illnesses. It is advisable to consult a doctor to confirm diagnosis.

- The signs and symptoms for **emphysema** are shortness of breath. There is no cure except change in life style, which might mean continuous administration of oxygen.
- **Chronic Obstructive pulmonary disease** (COAPD) is a combination of emphysema and bronchitis.
- Patients with **pneumonia** may show signs of confusion, headache, abdominal pain, nausea vomiting and diarrhoea.

Some words that may be used to describe respiratory signs and symptoms:

- Cough -Involuntary physiological reflex cough sneezing runny nose sometimes fever.
- Sputum- Excessive secretion of mucus can be clear or with blood.
- Wheezing on inspiration (breathing in) and on expiration (breathing out).
- Dyspnoea and breathlessness.
- Cyanosis-paleness of the skin from lack of enough blood supply and oxygen.
- Pleuritic pain - Chest pain.

Complications

- Poor respiration can lead to pulmonary hypertension due to lack of adequate oxygen circulating in the lungs.
- Lung cancer may develop due to smoking or occupational hazards such inhalation of asbestos and other dusts.

- Sinusitis, i.e. the inflammation of paranasal sinuses, often follows a cold.
- Inflammation of the middle ear called otitis media usually follows respiratory infections. This is common in young children. Otitis media damages the middle ear causing hearing loss. Otitis media is an ear infection and this happens when virus or bacteria from either colds or flu get into the middle ear. A child with hearing loss does not get the full benefit of language and learning experiences.

Treatments

Viruses or bacteria cause respiratory infections.

- Bacterial infections such as Pneumonia are treated by antibacterial medications.
- Viral infections can be treated symptomatically. Viruses cause most colds, which can be treated by taking lots of fluids, nasal decongestions and a good bed rest.

Management

Vaccines can prevent pneumococcal diseases and influenza.

Avoid activities that will expose others to infections and always practice hand washing before using common utilities.

Decongest the breathing system by blowing and clearing nostrils and respiratory tract.

For further information on respiratory disease management and support refer to:

- Australian Indigenous HealthInfoNet:
http://www.healthinfonet.ecu.edu.au/html/html_health/specific_aspects/chronic/respiratory/respiratory.htm
- The Australian Lung Foundation: <http://www.lungnet.org.au/>
- Huff and Puff Victoria: <http://home.vicnet.net.au/~huffpuff/>
- LungNet (free calls): 1800 654 301
- HealthInsite:
http://www.healthinsite.gov.au/topics/Respiratory_Tract_Diseases

Appendix 2: Information provided by Liaison Officers

1 What information is provided?

The Koori Human Services Unit collects information on hospital admissions, births, and deaths. A monthly KHLO report is provided to the Koori Human Services Unit. A data collection form is completed for every Koori admissions and Information on Mothers and Babies collection form for births. The following information is recorded in the data collection:

- the name of hospital;
- whether the person was recorded as Aboriginal in the hospital system;
- the person's gender;
- the person's age;
- the cause of admission to hospital;
- the dates of admission and discharge from the hospital;
- whether the Liaison Officer visited the person during his/her stay in hospital; and
- if the Liaison Officer did not visit the person during the time that he/she was in hospital, a brief note to explain why the person was not visited.

In 2001 a pilot project was undertaken to collect additional information on mothers' obstetric condition and babies' health at the time of birth. The "Information on Mothers and Babies" form was introduced for the purpose of collection and was officially implemented in January 2002. The additional information collected is now included in this publication of Koori Health Counts.

The Koori Human Services Unit uses the information to monitor health trends and assist DHS in planning Koori health services. The main objective of the revised data collection is to improve the quality of data provided to the community and to validate data reported to various divisions of DHS. The aggregated information is provided to hospitals and Koori community organisations to assist with their service planning.

1.1 Privacy and confidentiality issues

Reports provided by the Koori Hospital Liaison Officers contain de-identified information and personal details are limited to sex and age. The Health Records Act 2001 allows data to be collected by hospitals and disclosed to the Department of Human Services for informed decision making on policy development, service planning and monitoring purposes. Hospitals should inform every patient identifying as Aboriginal that information will be sent to Koori Human Services Unit. Hospitals have a responsibility to ensure that this information is accurate.

Data released from the Koori Human Services Unit or in any of our publications does not disclose the patient's identity and is in compliance with the Privacy Act.

1.2 Multiple admissions of same patient

Every admission is reported as a separate admission. The person's identity is not reported to the Koori Human Services Unit, which makes it difficult to ascertain the actual number of Koori people being admitted. The same patient may be admitted a number of times for various reasons. Patients requiring regular contact with a hospital for renal dialysis treatment, chemotherapy or obstetric

complications may have multiple admissions. Hospitals providing a dialysis service will show a high number of admissions as patients suffering from kidney failure often requires dialysis treatment three times a week.

1.3 Newborn admissions

All live born babies delivered in Victorian hospitals are reported as “admissions”; however stillbirths are not considered as “admissions” in Victorian hospital reporting system. Babies with an Aboriginal father and non-Aboriginal mother are recorded by KHLOs as Aboriginal babies.

2 Births

The Koori Human Services Unit asks Liaison Officers to provide information on mothers and babies. In 2002 the following additional information was requested on every baby born to an Aboriginal mother and/or father. This data is now supplied by all KHLOs:

- Date of the birth;
- Hospital where birth occurred;
- Whether the hospital of birth is the intended place of birth;
- Whether the baby’s mother is Koori;
- Whether the baby’s father is Koori;
- Sex of baby;
- Baby’s weight;
- Baby’s gestational age;
- Whether baby had any illness or neonatal morbidity;
- Whether baby had any apparent disabilities;
- Whether baby was transferred to other hospital due to baby’s medical condition.

If the mother is Koori the following information is also requested:

- Mother’s age;
- Type of delivery;
- Whether mother attended any antenatal visits;
- Mother’s existing medical conditions or any obstetric complications;
- Whether mother was transferred to other hospital due to complications;
- Whether mother had contacted Maternal and Child Health Nurse
- Previous children born to mother;

2.1 Privacy and confidentiality issues

Koori Hospital Liaison Officers do not provide information about the names of mothers and babies so it is not possible to identify any person in the reports. The only exception is if the baby was stillborn. The reasons that the Koori Human Services Unit asks Liaison Officers to provide some additional information at this time are explained on page 38 of this report.

3 Deaths

Koori Hospital Liaison Officers provide information on deaths in their community. This often difficult and sensitive task is provided by the KHLOs despite the fact that the person they are reporting about may be a close friend, relative or someone with whom they may have been working closely.

Upon awareness of a death in the Koori community in Victoria, KHLOs are asked to report about the information on:

- date of death;
- place of death;
- cause of death;
- age and sex of the person;
- name of the person;
- name or initials of the mother, if the death was of a child under the age of 10 years, or a stillborn baby.

3.1 Privacy and confidentiality issues

The information provided to the Koori Human Services Unit about deaths in the Koori community includes the name of the deceased person. This is important as this is used to validate information gathered by mainstream sources of information on births and deaths, to ensure that same death has not been recorded more than once and to check accuracy of registration of Aboriginality status in the Deaths registry.

If a Koori baby is stillborn, or if a child dies aged less than 10 years, Liaison Officers are asked to provide the mother's name or initials. This information is used to validate information recorded on Aboriginal identification collected by mainstream sources of information on perinatal, infant and children's deaths.

Appendix 3: KHLO data collection form

Koori Human Services Unit
 5th Floor 555 Collins Street
 Melbourne Vic 3000
 Phone 9616 7032
 Fax 9616 8899

Department of Human Services

KHLO ----- **Hospital** -----
Month ----- **Year** -----

This form is to be completed for each month and returned to the Koori Human Services Unit by the 10th of the following month, either by mail or by fax.

A copy of the report should be kept for the Koori Hospital Liaison Officer's own records and for discussions with the supervisor.

1. Services provided by KHLO this month

Type of Service	Number of services provided
1.1 Within the Hospital	
Visits to hospital in-patients	
Assisting with visits to hospital out-patient clinics	
Assisting with visits to Accident / Emergency Department	
Cross-cultural training /education sessions provided	
1.2 Outside of the Hospital	
Assisting with visits to community health and GP services	
Assisting with visits to other agencies and services	
Assisting with visits to specialists	
Cross-cultural training /education sessions provided	
Home visits	
1.3 Phone Contacts	
1.4 Transport to and from health services	

2. Other KHLO activities this month

Activity	Number of activities
Meetings attended	
Training/staff development sessions attended	

4 Information on Dialysis Treatment *(Please record only number of dialysis treatment for the whole month)*

Hospital where treatment occurred	Age	Sex	Main Reason for Admission/Diagnosis	Number of treatment for the month	Commencement/End date of dialysis treatment	Patient identified as Koori by Hospital Record System? (Yes/No)	Did KHLO visit the patient while in hospital?

5 Information on deaths in the Koori community

(Please provide any information you have on deaths in the Koori community, not just deaths in your own area)

Name	Age	Sex	Date of death	Cause of death	Town/area where death occurred	If the death was in a hospital, name of hospital where the death occurred

INFORMATION ON KOORI MOTHERS AND BABIES

1) KHLO HOSPITAL

A. MOTHER (*Koori mothers only*)

2) Is mother recorded as Koori by Hospital? yes no 3) Age

4) Admission Date:

5) Did the mother have ante natal care? yes no

6) Does mother have any obstetric complications/medical conditions? yes no
If yes, please tick/state complications or conditions

Premature rupture of membranes Pre-eclampsia Diabetes Cardiac Disease

Chronic Renal Disease Hypertension Other

7) Type of Delivery:

Spontaneous cephalic Forceps Emergency Caesarean

Elective Caesarean Other

8) Date of Discharge (Mother)

9) Discharge Status (Mother) Home

Transfer/Hospital Other

10) Has mother/liason officer contacted the Maternal and Child Health Nurse? yes no

11) Is this mother's first child? yes no

12) Previous Pregnancies: (excluding this pregnancy)

How many other children/births has mother had?

B. BABY (all babies with a Koori mother and/or father) (complete a separate form for each baby of a multiple birth)

13) Hospital of Birth Intended Emergency

14) Gestation (weeks) <32 32-36 37-40 Other

15) Date of Birth

16) Is mother Koori? yes no 17) Is father Koori? yes no

18) Did the hospital record the baby as Koori? yes no

19) Plurality Single Twins Other

20) Sex Male Female 21) Birthweight (grams)

22) Condition Liveborn Stillborn (if still born, write mother's initials)

23) Does the baby have any apparent disabilities or illness? yes no
(If yes, please state congenital anomalies/illness)

Congenital Anomalies

Neonatal Morbidity

24) Discharge Date

25) Discharge Status (baby) Home Transfer/Hospital Other