

# **The Crossroads Rural Health Studies**

## **HEALTH IN THE BENALLA COMMUNITY**



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Includes Crossroads Household Survey Parts 1 and 2, and the  
Crossroads Undiagnosed Disease Study

## INTRODUCTION

Health research has found that rural people tend to have poorer health than their metropolitan counterparts.<sup>1,2</sup> Poorer health in the rural population is evidenced by higher mortality and morbidity rates, resulting in a lower life expectancy.<sup>1,5</sup> Australia's rural population also has a higher hospitalisation rate for some causes of ill health,<sup>1,3</sup> such as accident and injury, road vehicle accidents, burns and scalds and diabetes.<sup>1</sup> There is, however, limited comprehensive information on the health status of rural Australians, making assessment of the populations health and their health service needs extremely difficult.<sup>2,4</sup>

Many factors contribute to poorer health of the rural population in Australia. Documented factors include geographic isolation, access to care, shortage of health care providers, lack of health services, socio-economic differences, a higher probability of accident and injury, poorer road quality and small populations spread over a greater distance.<sup>1</sup> These and most Australian rural health statistics are based on overall statistics collected from states and non-metropolitan regions. Little information exists at a local level that provides a detailed understanding of the health profile of specific rural communities and compares differences between rural communities.

The aim of the Crossroads Rural Health Studies were to collect detailed information about health, health behaviours, lifestyles and access to health services in communities across the Goulburn Murray region. The information will be used to identify the needs of consumers and the local community and thus contribute to health service planning and shaping rural health policy. The Crossroads Rural Health Studies are unique, as they provide the most detailed rural health information in Australian communities.

## THE TOWN OF BENALLA

Benalla is located 180 kilometres north-north-east of Melbourne, between the Broken and Goulburn Rivers. The township, now bypassed by the Hume Freeway, was a major town on the overland mail service between Melbourne and Sydney from the 1830's onwards.<sup>12</sup> Today Benalla is home to 8,614 people.<sup>14</sup>

Benalla is situated on the original location of a river crossing established in 1837, by pastoral overlanders forced to find a way across the Broken River. These pastoralists 'broke through' the swampy river giving it the name 'Broken River' and established a temporary bridge crossing. Benalla was originally known as 'Benalta' thought to be derived from the Aboriginal word meaning 'water holes'. It is believed that the town in its early years, became known as Benalla when a pastoral run's proprietor did not cross the 't' when filling in an application for the run's lease.<sup>12</sup>

The 1840's was an important decade for the town of Benalla as it saw the opening of the first hotel (1840), a post office (1844), a court of petty sessions (1846) and a timber bridge was built over the river (1847). The land surrounding Benalla was found to be suitable for wheat growing, orchards and vines as well as grazing. In 1873, the railway line was completed from Benalla to Wodonga, providing access to the north east gold fields. "Benalla also received traffic to and from Shepparton."<sup>12</sup> Consequently, Benalla flourished with lots of through traffic.

Benalla is a large regional centre with a well established retail industry,<sup>12</sup> a number of private schools and state schools and the State Guiding Centre. The picturesque Rose Gardens located on the west bank of Lake Benalla is home to the Weary Dunlop Memorial and the Regional Art Gallery. Health services in Benalla include a 53 bed acute hospital which offers surgical and obstetric/maternity services, nursing home care unit and domiciliary care service.<sup>13</sup> Benalla has 19.4 full time equivalent GP's.

## METHOD

The Crossroads Rural Health Studies are a collection of population health studies, involving residents of Shepparton and Mooroopna along with the 6 shire capitals in the region, namely Alexandra, Benalla, Cobram, Echuca, Euroa and Seymour. A total of 9,260 people participated in the studies with 1,455 undertaking a health check up.

A questionnaire was designed which included key questions used in many health studies throughout the world, so that comparisons between the Goulburn Murray and other areas could be made. In addition, some questions asked about specific local issues and respondents were given the opportunity to raise issues of concern to them. Residential addresses were randomly selected from household garbage collection/water lists. The household survey was undertaken in two parts with recruitment approaches differing between the first and second parts. All members of the household were invited to participate. Between September 2000 and December 2002 fieldworkers visited each house selected and interviewed each member of the household. For children under 16, interviews were completed by the parent/guardian. A total of 621 questionnaires were completed from residents of Benalla. All this information was entered into the computer database and statistically analysed. The household response rate for the studies were 67%.

Some residents were again asked to attend a free, 2-hour health clinic in their own community. At this clinic, the participants were tested for hearing, eye sight and a range of undiagnosed diseases, including diabetes, heart diseases, respiratory disease, blood pressure, liver function, and cholesterol levels. Participants received a health report with the test results. The response rate for the Undiagnosed Disease Study was 61%. This information was analysed anonymously and collectively to determine the health status of each community.

## FINDINGS

A total of 528 adults from Benalla completed the survey. Of these, 44% were male and 56% were female (see Table 1). Of the 528 respondents, 70% were either married or living in a de facto relationship and 38% of households had residents under the age of 18 living in the home. Nearly all (98%) spoke English at home. Length of residence ranged from less than a year to over 80 years, with an average of 23 years.

**Table 1: Characteristics of the Benalla samples (Part 1 & Part 2)**

<i>Characteristics</i>	<i>Benalla</i>	<i>All participants</i>
No. of Adults Surveyed	528	6,375
% Female	56%	57%
% Married/de facto	70%	67%
% Speak English at home	98%	97%
% Own their Dwelling	75%	70%
Average Length of Residence (mean)	23 years	21 years
% With Private Health Insurance	35%	43%
% Completed Secondary School	47%	47%
% Working Full-time in Paid Labour	32%	34%
% Working Part-time in Paid Labour	13%	17%
% Retired	32%	19%
Income (median)	\$495	\$580

Most respondents in Benalla (75%) owned their own house or unit and 19% were living in rental accommodation. The percent of people who were living in their own home was higher than the national average of 66%.<sup>6</sup> Slightly more than a third (35%) of the respondents had private health insurance, less than the Australian average (45%).<sup>7</sup>

Of the 528 adults in Benalla who completed a household survey:

- 11% had completed a University degree, higher than the national average of 9%<sup>6</sup>
- 47% had completed secondary school and/or trade certificate (including 11% with University degrees)
- 40% had completed year 9, but not year 12
- 14% left school before year 9

In Benalla, the employment status of respondents was:

- 32% worked full-time
- 13% worked part-time
- 32% were retired
- 3% were not working but not retired and
- 3% were unable to work due to illness

The average household weekly income varied in Benalla, with most earning between \$300 and \$999 per week before tax. The median was \$495. In addition, 61% had access to a computer at least weekly and 42% had access to the internet at least weekly.

## LIVING IN BENALLA

All 528 respondents were asked how sorry or pleased they would be to leave Benalla. A total of 79% of residents reported they would be very sorry or somewhat sorry to leave the town. 8% indicated that they would be very pleased or somewhat pleased to leave. Nearly two thirds (60%) of residents were members of a local community club, group or organisation, with some being involved in up to ten different groups.

Respondents were asked to indicate how concerned they were about a range of issues in their local area. Respondents were provided with a four-point scale from 'not at all concerned' to 'very concerned'. Table 2 presents the percent of respondents who indicated they were concerned or very concerned. Over half the respondents were concerned about crime and unemployment.

**Table 2: Concern about local issues in Benalla**

<i>Issue</i>	<i>Concerned</i>	<i>Very Concerned</i>
Crime	27%	49%
Unemployment	33%	43%
Future of farming	21%	26%
Quality of education	18%	22%
Quality of health care	18%	17%

Respondents were also asked to rate their satisfaction with local services and facilities (see Table 3). At least 6 in 10 were satisfied with the local hospital and local schools.

**Table 3: Satisfaction with local services in Benalla**

<i>Issue</i>	<i>Dissatisfied<sup>1</sup></i>	<i>Satisfied<sup>2</sup></i>
Local hospital	4%	89%
Local schools	6%	68%
Access to exercise facilities	24%	49%
Public transport	22%	44%
Local government	27%	33%
Local entertainment	41%	31%

<sup>1</sup> This includes respondents rating the item as 'dissatisfied' and 'very dissatisfied'

<sup>2</sup> This includes respondents rating the item as 'satisfied' and 'very satisfied'

## HEALTH

Self reported health status is a commonly used measure of an individual's health.<sup>8</sup> The proportion of respondents in Benalla who rated their health as excellent, very good and good (78%) was similar to the Victorian average (82%).<sup>8</sup> When asked to rate their own health, respondents rated their own health in the following ways.

- 14% as excellent
- 34% as very good
- 36% as good
- 13% as fair
- 3% as poor

As an indicator of quality of life, respondents were asked to rate their happiness:

- very happy 26%
- happy 39%
- somewhat happy 12%
- mixed, about equally happy and unhappy 17%

A further 3% described themselves as somewhat unhappy, another 2% as unhappy and 1% as very unhappy.

When asked about health checks in the past two years, residents in Benalla reported generally having more checks than the Victorian average.<sup>8</sup>

- 90% had their blood pressure checked, higher than the state average of 79%.
- 60% of women had a pap smear test, slightly less than the state average of 62%.
- 59% had their cholesterol measured, higher than the state average of 46%.
- 57% were tested for diabetes or high blood sugar, higher than the state average of 45%.
- 63% of women over the age of 50 had a mammogram, lower than the state average of 73%.
- 37% had a skin examination (for lesions or cancers), more than the state average of 25%.
- 54% of men over the age of 50 had a prostate check, similar to the state average of 53%.
- 24% had a bowel examination, higher than the state average of 15%.<sup>8</sup>

Respondents were also asked if they had a range of medical conditions (see Table 4). Eye problems (which included wearing glasses), high blood pressure, arthritis, allergies and asthma were the most common conditions. This is similar to the Australian average.<sup>9</sup> In addition, 10% also indicated an injury had prevented respondents from attending work or school.

**Table 4: Reported medical conditions for adults in Benalla**

<i>Medical Conditions</i>	<i>Percent</i>
Eye problems	37%
High blood pressure	27%
Arthritis	22%
Allergies	17%
Asthma or Chronic Obstructive Pulmonary Disease	15%
Hearing loss	14%
Skin conditions	14%
Depression	13%
Heart disease	11%
Digestive problems	11%
Cancer	11%
Other chronic health problems	10%
Respiratory problems	8%
High blood fats	8%
Diabetes	7%
Major infections	6%

Further, 85% had been immunised for childhood diseases, 67% had a tetanus booster in the past 10 years, 24% had a pneumonia vaccine in the past 5 years and 38% had a flu vaccine in the past 12 months. Most respondents (89%) had never donated blood.

## **USING HEALTH SERVICES**

In the past twelve months respondents reported consulting a GP up to 104 times but the average number of GP visits was 7. Most respondents (98%) consulted a GP in Benalla.

Respondents waited anywhere up to 24 days for an appointment, however 44% waited one day or less, 18% waited 1-2 days, 14% waited 2-4 days, 11% waited 4-7 days and 3% waited 1-2 weeks. Most people reported being satisfied with their GP, 51% were very satisfied and 37% were satisfied.

Among the survey participants, 16% had been hospitalised in the past twelve months. Of these, 70% had been hospitalised just once. 57% were admitted to the Benalla and District Memorial Hospital and 22% travelled to Wangaratta.

In the past 12 months, 16% of respondents had visited an Emergency Department. Three quarters of these visited the Benalla and District Memorial Hospital. 7 in 10 waited under an hour for their consultation, 22% waited 1-3 hours and 5% waited over 3 hours.

Participants were asked if they had visited a Medical Specialist in the past 12 months. In Benalla, 41% of respondents had seen a Medical Specialist. Of these, 34% travelled to Wangaratta, 32% utilised the specialist services in Benalla and 17% travelled to Melbourne.

In addition to questions about visits to medical professionals, respondents were also asked about consultations with a wide variety of other health professionals. Listed below are the percent of those respondents who visited an:

➤ Optician or Optometrist	27%
➤ Pharmacist for advice	19%
➤ Hospital outpatients	16%
➤ Hospital day surgery	11%
➤ Chiropractor or Osteopath	12%
➤ Physiotherapist	9%
➤ Used an Ambulance	7%
➤ Acupuncturist or Naturopath	5%
➤ Audiologist or Audiometrist	4%
➤ Psychologist or Psychiatrist	4%
➤ Nurse or Midwife	4%

In the past year, 37% of respondents had consulted a Dentist/Dental professional. For 40% it was 2 or more years since they had consulted a Dentist/Dental professional. The major reasons why respondents did not consult a Dentist were: “no need”, “cost” and “fear”.

A series of open ended questions were asked to determine what Benalla residents thought were the key issues in obtaining health care in their local community. The first question asked about concerns with the medical care provided in the community. 496 people answered the question, giving 580 responses (some respondents gave more than one answer). From these 580 responses, 248 indicated there were ‘no problems’ with the local medical service and 91 responded with positive comments. Of the 241 remaining responses, the most common concerns were:

- Lack of Doctors, Nurses and Medical Specialists (56)
- The number of days required to wait for an appointment with a GP (28)
- Respondents concern of the quality and competency of Doctors (21)



Another question asked about concerns with the local Emergency Department. 589 people answered the question, giving 510 responses (some respondents gave more than one answer). From these 510 responses, 295 indicated there were 'no problems' with the Emergency Department and 92 responded with positive comments. Of the 123 remaining responses, the most common concerns were:

- Long waiting times in the Emergency Department waiting room and/or Doctors Surgery (22)
- The absence of a Doctor at the Emergency Department 24 hours a day (18)
- The Doctor would not attend and the patient was treated by a nurse (15)

The Crossroads Rural Health Studies asked local residents what they perceived to be the issues in accessing health care, or the "barriers to care." Participants were asked what they thought were the issues around accessing health care. 468 people answered the question, giving 516 responses (some respondents gave more than one answer). From these 516 responses, 285 indicated there were 'no problems' with accessing medical services and 36 responded with positive comments. Of the 195 remaining responses, the most common concerns were:

- Lack of Doctors, Nurses and Medical Specialists (39)
- The number of days required to wait for an appointment with a GP (26)
- The high cost of health care (24)
- The distance required to travel to appointments (specialists) (20)

## LIFESTYLE

Lifestyle is related to health, so respondents were asked about their health behaviours, including diet. Table 5 presents how often respondents in Benalla ate takeaway food as a main meal.

**Table 5: Takeaway food as a main meal in Benalla**

<i>How Often?</i>	<i>Percent</i>
Never	10%
Less than once a month	35%
2 to 3 days a month	30%
1 to 3 days a week	24%
4 to 6 days a week	1%

Respondents were asked how many serves of fruit, vegetables and dairy products they consumed each day (see Table 6). 29% of respondents were consuming the recommended serves of vegetables, 55% ate the recommended serves or more of fruit and 62% had eaten the recommended serves of dairy products. On the other hand, 71% were not eating the recommended serves of vegetables, 45% were not eating the recommended amount of fruit and 38% were not consuming the recommended amount of dairy products.

**Table 6: Consumption of fruit, vegetables and dairy products for adults in Benalla**

	<i>Recommended serve</i>	<i>Number of serves eaten</i>	
Vegetables	5 serves <sup>10</sup>	1-3 serves	70%
		4-5 serves	24%
		6 and more serves	5%
		Don't eat veggies	1%
Fruit	2 serves <sup>10</sup>	1 serve or less	41%
		2-3 serves	45%
		4 and more serves	10%
		Don't eat fruit	4%
Dairy	2-5 serves <sup>10</sup>	1 serve or less	36%
		2-5 serves	61%
		6 and more serves	1%
		Don't eat dairy	2%

Respondents had approximately 4 drinks of alcohol in an 'average' week. The most common alcoholic drinks were wine (29%), heavy beer (25%) and light beer (23%).

Of those surveyed, 23% did not currently smoke cigarettes cigars or pipes and 59% had never smoked. The remaining 18% smoked between 1 and 50 cigarettes per day. This is less than the Victorian average of 25% identifying themselves as current daily smokers.<sup>8</sup>

A total of 70% of respondents participated in physical activity and on average 4½ days per week. The average length of each exercise session was just over an hour. The most popular form of exercise was walking (40%).

When asked how often respondents deliberately took protective measures when out in the sun, a third 'always' took protective measures, an additional third 'usually' took protective measures while 6% never took protective measures. A total of 72% wore a hat as a protective measure against the sun, 62% wore sunglasses and 59% put on sunscreen.

## CHILDREN

In Benalla, parents or guardians completed a survey on behalf of 93 children. A survey was completed for all children living in the home aged between 1 and 15 years inclusive. Of these, half were male and half were female. From the children's surveys, 79% had access to a computer at least weekly and 54% had access to the internet at least weekly. Immunisation rates were high in Benalla with 99% of the children being immunised for childhood diseases.

Of national concern are the eating patterns of children. In Benalla, 88% of children are not eating the recommended intake of vegetables, 29% are not eating the recommended intake of fruit, while most children are eating the recommended serves of dairy products (see Table 7).

**Table 7: Consumption of fruit ,vegetables and dairy products for children in Benalla**

	<i>Recommended serve</i>	<i>Number of serves eaten</i>	
Vegetables	5 serves <sup>10</sup>	1-3 serves	88%
		4-5 serves	12%
		6 and more serves	0%
Fruit	2 serves <sup>10</sup>	1 serve or less	29%
		2-3 serves	52%
		4 and more serves	17%
		Don't eat fruit	2%
Dairy	3-4 serves <sup>11</sup>	1 serve or less	4%
		2-5 serves	86%
		6 and more serves	10%

Parents and guardians were asked to indicate if their children had any medical conditions. Asthma (22%) was the most common medical condition for children, which is comparable with other towns in the studies. Skin conditions (14%), allergies (11%) and eye problems (6%) were the other most common reported conditions.

In the past 12 months, 5% of the children had been hospitalised. Of these, 58% travelled to Wangaratta and 29% were hospitalised at the Benalla and District Memorial Hospital. In addition, 17% had been to an Emergency Department in the past 12 months. Of these, 9 in 10 visited the Emergency Department at the Benalla and District Memorial Hospital. Approximately 70% waited less than an hour to see a Doctor, 22% waited 1-3 hours and 5% waited over 3 hours.

## UNDIAGNOSED DISEASE STUDY

As part of the Crossroads Rural Health Studies, 1,455 randomly selected adults (aged 25 years and over) also attended the Undiagnosed Disease Study held in each town. The Benalla clinics were held at the Benalla Town Hall, the Members Room at the Benalla race track and the Function Room at the Benalla Bowls club. 118 residents from Benalla attended these clinics.

- Benalla residents had lower rates of chronic obstructive pulmonary disease and other lung diseases (defined as reduced spirometry measures: 14%). This is comparable to the other 7 towns of the study. Also, Benalla respondents had lower rates of hearing loss (11%, further 5% with a hearing aid) in comparison to the other towns in the study. The vision impairment or vision requiring correction rates were the highest amongst the study communities (21%).
- The rate of high blood pressure for Benalla residents was 15% (with or without diagnosed hypertension, defined as blood pressure of 160+ mm Hg systolic and/or 100+ mm Hg diastolic), this was higher than the Australian average of 10%, but was mid range compared to the other study communities.
- 28% of the study population in Benalla was categorised as obese (defined as body mass index of 30 kgm<sup>-2</sup> or more). This was lower than several other towns in the study, but greater than the national average (17%)<sup>9</sup> and greater than that found in the Australian Diabetes, Obesity and Lifestyle Study (21%).<sup>15</sup>
- Likely mild inflammation of the liver for Benalla residents, as indicated by serum liver enzymes, was more common than most other study towns (13%).
- Renal impairment (as assessed by serum creatinine concentration above the reference range for age, sex and weight, (those with diabetes excluded)) was more common than in any other study communities (15%).
- Anaemia was more common in Benalla than in most other study towns (3%).

*Note: This is based on preliminary data.*

## CONCLUSION

In Benalla, more women than men completed the survey. Benalla had a higher level of home ownership and lower numbers of people renting than the average in Australia.<sup>6</sup> Benalla residents had a higher proportion of people with a University degree than the Australian average<sup>6</sup> and nearly half the participants had completed secondary school or a trade certificate. The Crossroads Rural Health Studies found that the majority of respondents were happy to be living in Benalla and nearly two thirds of respondents were members of local community clubs, groups or organisations. Being actively involved in the community seems to be very important to a large portion of the respondents and leads to better health.<sup>16</sup>

Benalla respondents were particularly satisfied with local hospitals and local schools in the area, but were less satisfied with local entertainment, however, most respondents were satisfied with the services provided by the local hospital.

Happiness is an indicator of quality of life and in Benalla two thirds of participants rated themselves as happy or very happy. In addition, self reported health status is a commonly used measure of an individuals health.<sup>8</sup> The majority of respondents in Benalla rated their health as good or better, which is similar to the Australian average.<sup>9</sup> Benalla residents had similar long term medical conditions as the Australian average, most commonly eye problems, high blood pressure, arthritis and allergies.<sup>9</sup> Benalla respondents tended to have more health checks than the Victorian average.<sup>8</sup> These checks included blood pressure, blood sugar, prostate checks, skin examinations and bowel checks. Although rural health research indicates that rural people tend to have poorer health than their metropolitan counterparts,<sup>1,2</sup> the Crossroads Rural Health Studies illustrates that residents in Benalla had more health checks and that their health is on a par with the majority of Australians, rural or metropolitan.

Waiting to see a Doctor in the Emergency Department and Doctors surgery was a concern for a large number of respondents. The number of days required to wait for an appointment with their GP was also a key issue. However, when asked specifically about waiting times, consumers did not usually wait for any great length of time. A further concern was the lack of Specialist Medical Practitioners, Doctors and Nurses in the area. Overall, respondents in Benalla did not have any major issues with local health services in Benalla as the majority of people responded with 'no problems.'

Our lifestyle is related to our health, hence the Crossroads Rural Health Studies included questions about our diet, alcohol/cigarette consumption and physical activity. The number of Benalla residents that smoke was in the same proportion as the state average.<sup>8</sup> Most respondents (both adults and children) did not eat the recommended serves of vegetables in a day. Children in particular were not eating adequate fruit and vegetables according to the recommendations by the Dieticians Association of Australia.

In conclusion, it appears that health status among Benalla residents, along with the other towns in the studies (Alexandra, Cobram, Echuca, Euroa, Mooroopna, Seymour and Shepparton), is not markedly different to the Victorian average, despite previous health research indicating that rural people have poorer health than their metropolitan counterparts. However, when rural people become unwell, access to medical care may become a problem. We believe that the results of the Crossroads Rural Health Studies will provide information that is both useful and meaningful to the people of Benalla and that benefits will come from it.

**The Crossroads Team would like to Thank all those who completed a Household Survey and everyone who came along to the Undiagnosed Disease Study.**

*Thank You!*

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