

Population and Health Profile

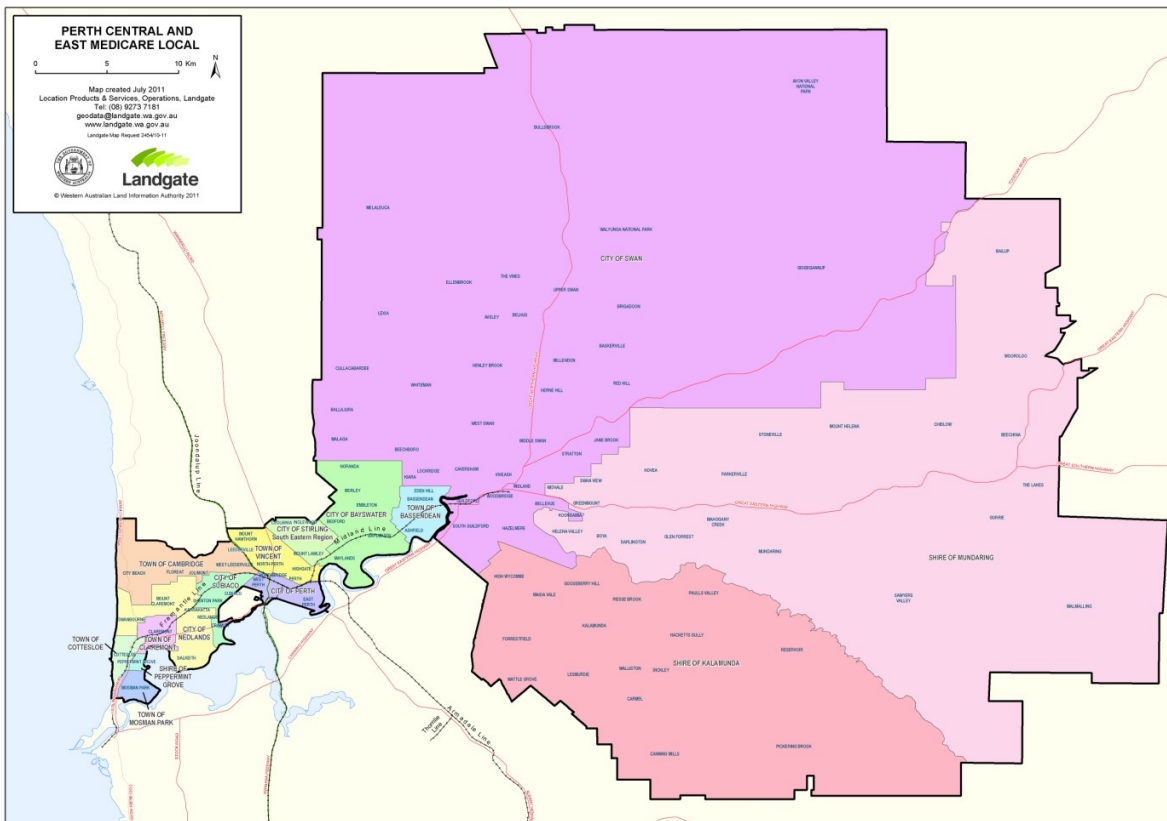
Perth Primary Care Network

1 July 2011

The catchment area comprises the following Statistical Local Areas (SLAs):

SLA Codes	SLA Name	SLA Codes	SLA Name
50350	Bassendean (T)	56580	Nedlands (C)
50420	Bayswater (C)	56930	Peppermint Grove (S)
51310	Cambridge (T)	57081, 57082	Perth (C) – Inner & Remainder
51750	Claremont (T)	57980	Subiaco (C)
52170	Cottesloe (T)	57916	Stirling (C) - SE
54200	Kalamunda (S)	58050	Swan (C)
55740	Mosman Park (T)	58570	Vincent (T)
56090	Mundaring (S)		

Boundary Map – Perth Primary Care Network



This catchment area covers approximately 2,148 km² and has an overall population density (at 30 June 2009) of 105 persons per km², ranging from 2,711.5 persons per km² in the Town of Vincent to 59.5 persons per km² in the Shire of Mundaring. The Estimated Resident Population (ERP) as at 30 June 2009 is 440,084 persons equating to 26.52% of all persons in metropolitan Perth or 19.60% of all persons in Western Australia.

All SLAs within the catchment area have experienced strong population growth over the past 5 years, with the average population growth rate between July 2004 and June 2009 at 4.1%. This population growth rate exceeds the average Western Australia growth rate of 2.5% between July 2004 and June 2009, and 3.1% between July 2008 and June 2009.

Several satellite communities are part of the catchment – including significant new residential developments in Ellenbrook, Aveley, and the foothills in early stage development. These developments will treble in size by 2015, with newer residential developments coming online in late 2012. Health infrastructure in these areas is currently considered to be very poor, with significant access challenges for local people.

Most age groups across the catchment area are consistent with broader Perth metropolitan data, but the overall population is younger than the total Australian population.

The largest populations of Aboriginal people within the North Metropolitan Health Service reside in the PPCN catchment area. These populations are predominantly focussed in the Swan and Hills sub-regions and the Town of Bassendean.

The area is wholly within the boundaries of North Metropolitan Area Health Service.

Three key service and public transport hubs exist within the catchment – Perth CBD, Morley and Midland.

Perth CBD, like all capital cities, has a daytime population base that surges as people attend work. It also acts as a focus for travellers and tourism, and as a transition point for disadvantaged and marginalised populations who are attracted to the CBD. The resident population is slowly increasing over time as older buildings are transformed into mixed commercial / residential developments, with a high proportion of very mobile overseas residents owning CBD properties – which creates an underrepresentation of overall resident numbers. High concentrations of Culturally and Linguistically Diverse (CALD) populations live in the immediate inner city, especially established Chinese and Vietnamese populations.

Morley is the main centre for the City of Bayswater and is a transport and commercial centre for surrounding suburbs. The City of Bayswater is culturally very diverse, with a wide range of CALD populations resident, including recent Afghan, African and Sri Lankan immigrants.

Midland acts as a regional centre for communities in the Perth Hills as well as the inner western Wheatbelt – towns such as York, Toodyay and Northam – and is currently undergoing long term economic and infrastructure redevelopment under the direction of the Midland Redevelopment Authority. Health infrastructure in the eastern corridor is predominantly public, with no significant public health facilities beyond Midland.

Aboriginal health is a key priority for the region, especially in the Swan catchment where there has been considerable community fragmentation and lack of primary health care infrastructure. No Aboriginal medical service operates in this area (the nearest is East Perth), and the area has the highest Aboriginal population within the North Metropolitan Area Health Service.

The City of Swan, Town of Bassendean and City of Bayswater have higher rates of jobless families with children compared to the metropolitan average with corresponding poorer health status in a range of disease groupings.

Key challenges for the region are meeting the primary health care needs of the Aboriginal community and pockets of lower socio-economic populations, as well as access to health services in outer urban and rural / semi-rural areas. Priorities for the PPCN catchment include ensuring that the following health services / initiatives are available and easily accessible, especially within the SLAs which are more disadvantaged:

- **Indigenous youth services** – family planning / parenting services, drug and alcohol counselling, child health services;
- **Services for single parent families** – childcare services, parent support groups and counselling / support services;
- **Multilingual health services** so that families with English as a second language can easily access the necessary services;
- **Aged care health services**, especially within the Swan Hills sub-region – veterans' services, Home and Community Care (HACC) services, residential aged care facilities and ageing specific health services;
- **Public health services**, such as physical activity initiatives / programs, programs to help individuals quit smoking and initiatives which promote low alcohol consumption, especially within the Swan and Hills sub-region.

The following summary includes data on workforce, housing and health status as a base profile of the catchment area. Statistical Local Areas within the PPCN catchment has been grouped into three sub-regions. Individual health profiles will be developed for each sub-region in the future. Therefore the data provided below are presented as statistics for each Statistical Local Area (SLA), and grouped into the overall statistic for each sub-region.

Demographic Profile

The population catchment area for PPCN as at 30 June 2009 comprises 440,084 persons, equating to 26.52% of all persons in metropolitan Perth, or 19.60% of all persons in Western Australia. The City of Swan is the largest Local Government Area within the catchment in terms of geographic size and population.

Number and percentage of persons by SLA compared to metropolitan Perth and Western Australia at 30 June 2009.

PPCN Sub-regions	PPCN SLAs	Number of persons	% of persons in Metro Perth	% of persons in WA
Swan and Hills	Swan	110,051	6.6	4.9
	Kalamunda	54,729	3.3	2.4
	Mundaring	38,264	2.3	1.7
Sub-total		203,044	12.2	9.0
Inner North East	Bassendean	14,508	0.9	0.7
	Bayswater	61,264	3.7	2.7
	Stirling - SE	17,336	1.0	0.8
Sub-total		93,108	5.6	4.2
City and West	Perth - Inner	1,685	0.1	0.1
	Perth - Remainder	15,408	1.0	0.7
	Subiaco	18,625	1.1	0.8
	Cambridge	26,622	1.6	1.2
	Claremont	9,822	0.6	0.4
	Cottesloe	8,152	0.5	0.4
	Mosman Park	9,392	0.6	0.4
	Nedlands	22,404	1.4	1.0
	Peppermint Grove	1,741	0.1	0.1
	Vincent	30,870	1.8	1.3
Sub-total		143,932	8.7	6.4
Total		440,084	26.5	19.6

Source: Australian Bureau of Statistics, Estimated Resident Population 2009.

The table above indicates that the majority of the population within PPCN resides within the Swan and Hills sub-region, which constitutes to 12.24% of persons in metropolitan Perth. The City of Swan is the SLA with the highest number of persons within the Perth Central and East Medicare Local catchment, equalling 110,051 people.

All SLAs within the catchment area have experienced population growth over the past 5 years, with the average population growth rate between July 2004 and June 2009 at 4.06%. The population growth rate increased between July 2008 and June 2009 to an average of 4.69% across the area, ranging from 1.1% (Town of Vincent) to 13.8% (City of Perth). On a 'number of persons' basis, the highest growth is in the City of Swan and the lowest growth in the City of Perth. This population growth rate exceeds the average Western Australia growth rate of 2.5% between July 2004 and June 2009, and 3.1% between July 2008 and June 2009.

Number and percentage of persons by sex compared to metropolitan Perth and Western Australia at 30 June 2009

Characteristic: Sex	Number of persons	%of persons in Metro Perth	%of persons in WA
Male	222,021	13.4	9.9
Female	218,063	12.6	9.3
TOTAL	440,084	26.0	19.2

Source: Australian Bureau of Statistics, Estimated Resident Population 2009.

The proportional mix of males and females in the population is consistent with Perth Metropolitan and Western Australian ratios:

- SLA region: Females / Males – 48.5% / 51.5%;
- Western Australia: Females / Males – 49.3% / 50.7%;
- Metropolitan Perth: Females / Males – 49.8% / 50.2%; and
- Australia: Females / Males – 50.2% / 49.8%.

Number and percentage of persons by age compared to metropolitan Perth and Western Australia at 30 June 2009

Characteristic: Age	Number of persons	% of persons in Metro Perth	% of persons in WA
0 - 4	26,752	1.6	1.2
5 - 9	25,593	1.5	1.1
10 - 14	26,994	1.6	1.2
15 - 19	30,648	1.8	1.4
20 - 24	35,261	2.1	1.6
25 - 29	34,521	2.1	1.5
30 - 34	31,075	1.9	1.4
35 - 39	32,598	2.0	1.5
40 - 44	32,445	2.0	1.4
45 - 49	32,403	2.0	1.4
50 - 54	29,279	1.8	1.3
55 - 59	26,274	1.6	1.2
60 - 64	22,741	1.4	1.0
65 - 69	16,160	1.0	0.7
70 - 74	12,396	0.7	0.6
75 - 79	9,554	0.6	0.4
80 - 84	7,707	0.5	0.3
85+	7,683	0.5	0.3
Totals	440,084	26.5	19.5

Source: Australian Bureau of Statistics, Estimated Resident Population 2009.

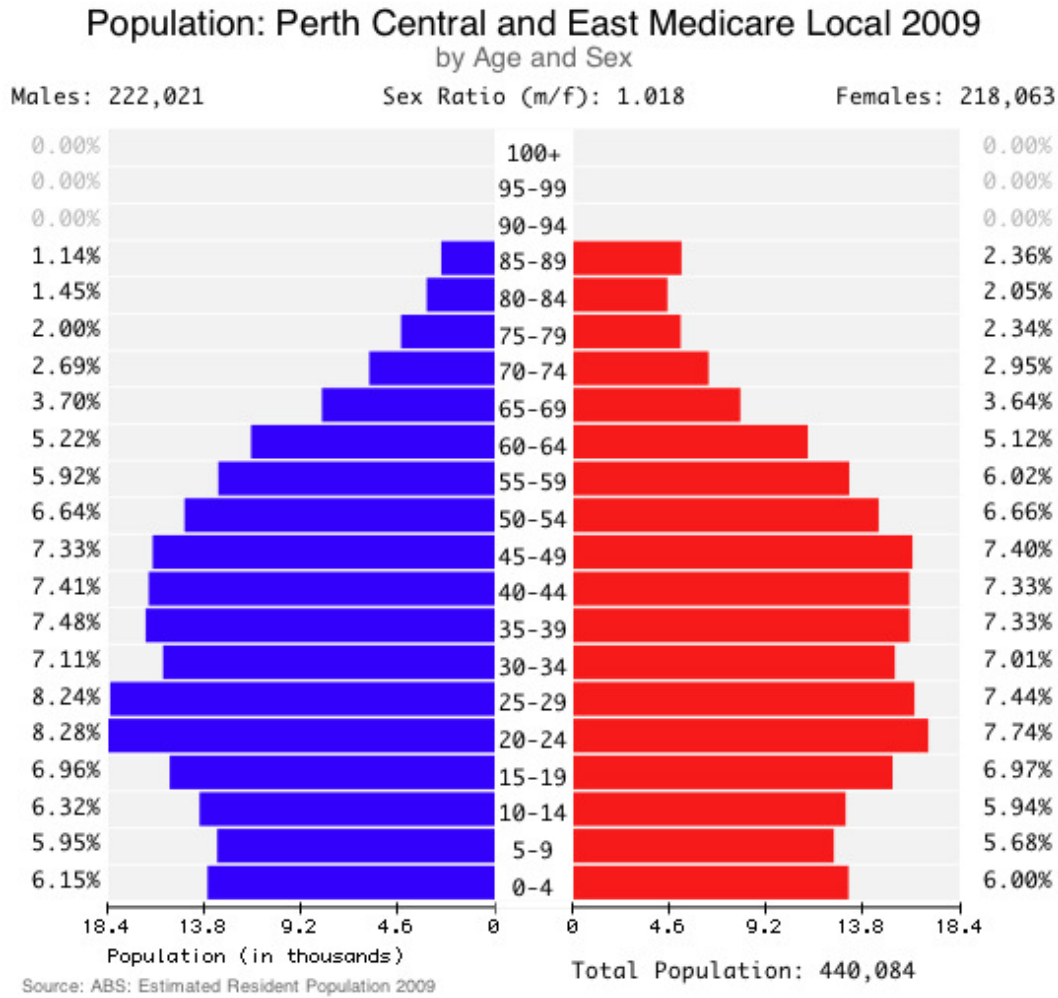
Number and percentage of persons over 65 years of age by SLA as at 30 June 2009

PPCN Sub-regions	PPCN SLAs	Number of people over 65+ years
Swan and Hills	Swan	9,843
	Kalamunda	6,871
	Mundaring	4,454
Sub-total		21,168
Inner North East	Bassendean	2,045
	Bayswater	8,640
	Stirling - SE	2,517
Sub-total		13,202
City and West	Cambridge	4,017
	Claremont	1,973
	Cottlesloe	1,231
	Mosman Park	1,268
	Nedlands	3,259
	Peppermint Grove	243
	Perth - Inner	104
	Perth - Remainder	1,423
	Subiaco	2,266
	Vincent	3,346
Sub-total		19,130

Source: Australian Bureau of Statistics, Estimated Resident Population 2009.

As highlighted by the table above, the Swan and Hills sub-region has the largest number of people over 65 years of age (21,168), with the associated need for easily accessible aged care services. This statistic is also reflected in **Error! Reference source not found.**, where the data shows that the Swan Hills sub-region also has the highest number of aged pensioners within the catchment.

Population pyramid, PPCN, by age and sex, at 30 June 2009



The median age of the PPCN population is 25 to 29 years of age with:

- 11.08% of the population 9 years of age or less;
- 14.73% of the population between 40 and 49 years of age; and,
- 12.15% of the population 65+ years of age.

Most age groups across the catchment area are consistent with broader Perth metropolitan data, with the overall catchment population younger on average than the total Australian population.

Persons from non-English speaking backgrounds

The catchment contains a culturally diverse population, with overall population figures consistent when comparing to metropolitan Perth aggregated figures. On a SLA basis, the City of Perth – Remainder has the highest percent of people born in non-English speaking countries (30.1%).

Table Error! No text of specified style in document.-1: PPCN SLAs – Number and proportion of persons born in non-English speaking countries, and resident in Australia less than 5 years, 2006

PPCN Sub-regions	PPCN SLAs	Total pop	Born in non-English speaking countries	% born in non-English speaking countries	Resident in Australia for less than five years	Resident % in Australia for less than five years
Swan and Hills	Swan	93,279	13,158	14.1	1,422	1.5
	Kalamunda	49,535	4,125	8.3	373	0.8
	Mundaring	35,095	2,467	7.0	139	0.4
Sub-total		177,909	19,750	9.8	1,934	0.9
Inner North East	Bassendean	13,463	1,765	13.1	135	1.0
	Bayswater	55,801	12,166	21.8	1,461	2.6
	Stirling - SE	15,696	2,197	14.0	350	2.2
Sub-total		84,960	16,128	16.3	1,946	1.9
City and West	Cambridge	23,753	2,625	11.1	437	1.8
	Claremont	8,942	992	11.1	351	3.9
	Cottesloe	7,256	449	6.2	86	1.2
	Mosman Park	8,252	1,091	13.2	367	4.4
	Nedlands	20,334	2,862	14.1	534	2.6
	Peppermint Grove	1,581	129	8.2	36	2.3
	Perth - Inner	1,079	285	26.4	136	12.6
	Perth - Remainder	10,492	3,163	30.1	1,351	12.9
	Subiaco	16,379	2,910	17.8	1,222	7.5
	Vincent	26,879	5,433	20.2	892	3.3
Sub-total		124,947	19,939	15.84	5,412	5.25
TOTAL		371,437	55,817	41.94	9,292	8.08

Source: Australian Bureau of Statistics, Census 2006.

The Swan and Hills sub-region has the highest population of people (19,750 out of 55,817) born in non-English speaking countries compared to the other sub-regions within PPCN. This indicates that there may be a need for services to be delivered in a multilingual manner to ensure that the needs these individuals are met. On average 16.3% of the population in the Inner North East sub-region were born in non-English speaking countries, in comparison to 9.8% and 15.84% in the Swan Hills and City and West sub-regions respectively.

Aboriginal population

PPCN is located predominantly in Whadjuk land, which is centrally located within the Noongar nation. Based on the 2006 Census data, there are an estimated 5,839 Aboriginal persons in the catchment area with the following age profile:

Number and percentage of Aboriginal persons by age in PPCN catchment compared to metropolitan Perth, 2006

Characteristic: Age	Number of persons	% of total persons	Comparative % in WA metro
0 - 4	690	11.8	12.3
5 - 14	1426	24.4	25.0
15 - 24	1153	19.7	20.3
25 - 44	1696	29.0	27.1
45 - 64	760	13.0	13.0
65+	114	2.0	2.2
Total	5,839	100.0	100.0

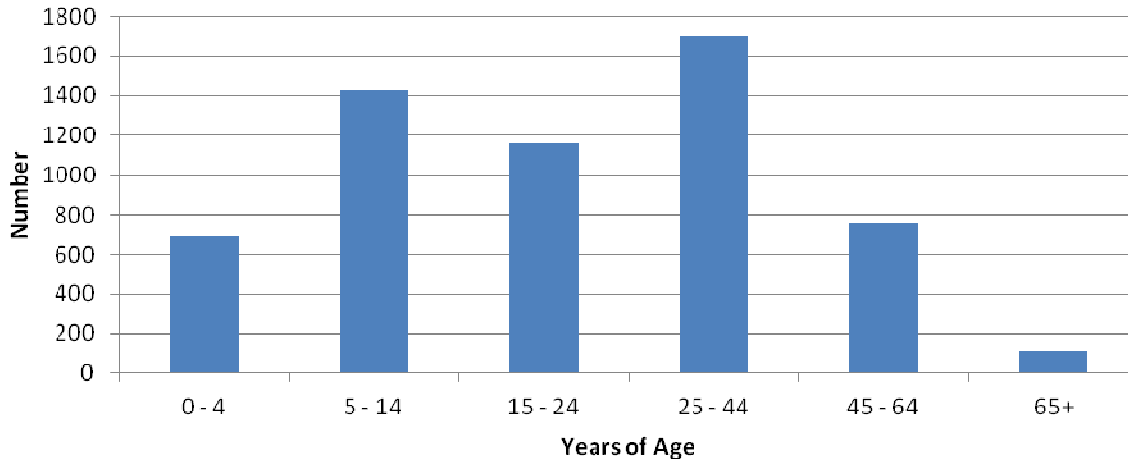
Source: Australian Bureau of Statistics, Census 2006.

The table above shows that the Indigenous population within the PPCN catchment is a fairly young population, with 73.2% of the Indigenous population being between the ages 5–44 years. This highlights the need to have **Indigenous youth specific services** available within the catchment, such as family planning services, drug and alcohol counselling services and child health services.

The following table is an excerpt from the *North Metropolitan Area Health Service Aboriginal Health Profile: Epidemiology to guide the Strategic Direction and Operational Planning of the NMAHS Public Health Unit (2010)*. The table outlines Aboriginal population by North Metropolitan Area Health Service subregions. PPCN catchment areas have been marked with an asterisk.

Aboriginal persons by age grouping, PPCN 2006

Aboriginal Persons by Age Grouping, 2006 Perth Central and East Medicare Local



Source: Australian Bureau of Statistics, Census 2006

Percentage of NMAHS Aboriginal Population in Each Health Region and Percentage of Total Population 2006

NMAHS Health District (HD)	Aboriginal population			% of total NMAHS Aboriginal popn residing in each Health District
	% of total HD pop	Total Aboriginal pop	Total Health district pop	
Bayswater-Bassendean*	1.9	1,418	72,757	12.0
Joondalup	0.5	731	157,368	6.0
Kalamunda*	1.6	811	51,861	5.5
Oceanic**	0.5	693	133,222	6.0
Stirling Coastal	0.8	511	66,142	4.0
Stirling SEC**	1.7	2,089	120,470	17.5
Valley and Hills*	2.6	3,494	133,988	29.0
Wanneroo	1.8	2,238	115,513	19.0
NMAHS Total	1.4	11,985	851,321	100.0
Notes: *	Wholly within the catchment		**	Partially within the catchment

Source: Australian Bureau of Statistics, Census 2006

The largest populations of Aboriginal people within North Metropolitan Area Health Service reside in the PPCN catchment area. These populations are predominantly based in the Swan and Hills sub-region and the Town of Bassendean.

Aboriginal persons by age grouping, PPCN 2006

Source: Australian Bureau of Statistics, Census 2006

General population relative Socio-economic Advantage and Disadvantage, Employment and Housing

Table Error! No text of specified style in document.-2: SLA Index of Relative Socio-economic Advantage and Disadvantage, PPCN SLAs 2006

PPCN Sub-region	PPCN SLAs	Min score	Max score	Score	Aust Rank	WA Rank
Swan and Hills	Swan	808	1163	993	812	117
	Kalamunda	891	1196	1032	971	132
	Mundaring	854	1143	1037	993	134
Inner North East	Bassendean	912	1045	985	768	112
	Bayswater	807	1202	1009	871	121
	Stirling - SE	924	1192	1094	1220	146
City and West	Cambridge	987	1247	1158	1357	152
	Claremont	1031	1222	1132	1316	151
	Cottesloe	1075	1231	1180	1379	154
	Mosman Park	928	1238	1104	1257	147
	Nedlands	1016	1236	1167	1370	153
	Peppermint Grove	1165	1224	1191	1387	155
	Perth - Inner	1013	1191	1071	1132	138
	Perth - Remainder	846	1196	1108	1263	148
	Subiaco	745	1224	1123	1300	150
	Vincent	910	1144	1079	1164	139

Source: Australian Bureau of Statistics, Census 2006

SLAs within the catchment area are relatively advantaged when compared to Western Australian and Australian overall rankings. When compared to other Perth metropolitan SLAs, three PPCN SLAs are within the 10 most disadvantaged and one is within the ten most advantaged. Of particular note with relation to disadvantage are the Town of Bassendean, the City of Swan and the City of Bayswater.

Table Error! No text of specified style in document.-3: Single parent families with children aged less than 15 years, PPCN SLAs, 2006

PPCN Sub-region	PPCN SLAs	Single parent families with children under 15	Total families	% single parent families
Swan and Hills	Swan	2,487	24,832	10.0
	Kalamunda	1,046	14,028	7.5
	Mundaring	667	9,628	6.9
Sub-total		4,200	48,488	8.1
Inner North East	Bassendean	389	3,657	10.6
	Bayswater	1,230	14,667	8.4
	Stirling - SE	197	3,725	5.3
Sub-total		1816	22,049	8.1
City and West	Cambridge	282	6,065	4.6
	Claremont	133	2,135	6.2
	Cottesloe	70	1,726	4.1
	Mosman Park	134	1,880	7.1
	Nedlands	241	5,054	4.8
	Peppermint Grove	13	361	3.6
	Perth - Inner	4	126	3.2
	Perth - Remainder	61	1,883	3.2
	Subiaco	194	3,643	5.3
	Vincent	347	6,166	5.6
Sub-total		1479	29,039	4.8
TOTAL		7495	99,576	7.5
Perth Metropolitan		31,428	381,643	8.2

Source: Australian Bureau of Statistics, Census 2006

These data compare with the Perth metropolitan data, which show an overall rate of 8.2% for the Perth metropolitan area. The Town of Bassendean (10.6%), City of Swan (10.0%), and City of Bayswater (8.4%) reveal higher rates of single parent families compared with the metropolitan average. This indicates that there may be a need for services which aid single parent families, such as childcare services, parent support groups and counselling / support services.

Table Error! No text of specified style in document.-4: Percent estimated unemployed and percent estimated workforce participation, eligible aged pensioners, disability support pensioners and female sole parent pensioners, PPCN SLAs, September 2008

PPCN Sub-region	PPCN SLAs	% Estimated un-employed	% Estimated labour participate	% Age pensioners	% Disability support pensioners	% Female sole parent pensioners
Swan and Hills	Swan	3.0	66.3	77.5	4.3	6.1
	Kalamunda	1.7	71.1	73.7	3.2	1.3
	Mundaring	2.4	68.7	68.5	3.7	5.4
Sub-total		2.36	68.7	73.2	3.73	4.3
Inner North East	Bassendean	3.3	67.6	75.9	6.8	7.5
	Bayswater	2.9	67.0	76.3	4.8	4.7
	Stirling - SE	2.2	70.2	59.8	3.4	1.9
Sub-total		2.8	68.3	70.7	5	4.7
City and West	Cambridge	1.9	71.3	41.8	2.2	1.3
	Claremont	1.8	62.3	31.0	3.2	1.3
	Cottesloe	1.0	66.1	29.0	1.1	0.0
	Mosman Park	3.9	63.8	49.6	4.1	1.7
	Nedlands	1.4	67.2	33.7	1.8	0.8
	Peppermint Grove	1.0	59.9	30.9	1.2	0.0
	Perth - Inner	9.9	40.5	100.0	4.9	0.00
	Perth - Remainder	5.7	49.3	47.8	3.1	0.94
	Subiaco	2.3	69.8	46.0	3.4	1.1
	Vincent	5.1	72.7	71.2	4.3	1.96
Sub-total		3.4	62.3	48.1	2.9	0.9
AVERAGE		3.09	64.6	57.0	3.7	2.3
Metropolitan Perth		3.0	68.4	68.2	3.9	4.8

Source: Australian Bureau of Statistics, September 2008

These data compare with Perth metropolitan data, which show overall rates for percentage of age pensioners of 68.2%, percentage of disability support pensioners of 3.9% and percentage of female sole parent pensioners of 4.8%. The Swan and Hills sub-region had the highest percentage of aged pensions (72.2%) compared to the other sub-regions, which indicates there might be a **need for age care / veterans services such as aged care homes, retirement homes and ageing specific health services**. There may also be the need to introduce increased pensioner bulk billing schemes within the sub-region.

Additionally the catchment has a higher level of income support compared to metropolitan Perth, with the City of Swan, Town of Bassendean and City of Bayswater at higher than average rates.

Jobless families with children aged less than 15 years, Children aged less than 15 years in jobless families by PPCN SLAs, 2006

PPCN Sub-region	PPCN SLAs	Jobless families with children under 15	Total families with children under 15	% Jobless families	Children under 15 years in jobless families	Total children under 15	% Children in jobless families
Swan and Hills	Swan	1,486	11,623	12.8	2,858	20,817	13.7
	Kalamunda	490	5,275	9.3	907	9,339	9.7
	Mundaring	362	3,812	9.5	649	6,971	9.3
Sub-total		2,338	20,710	10.5	4,414	37,127	10.9
Inner North East	Bassendean	197	1,360	14.5	338	2,278	14.8
	Bayswater	709	5,081	14.0	1,178	8,321	14.2
	Stirling - SE	80	1,477	5.4	109	2,517	4.3
Sub-total		986	7,918	11.3	1625	13,116	11.1
City and West	Cambridge	115	2,468	4.7	184	4,515	4.1
	Claremont	57	669	8.5	88	1,139	7.7
	Cottesloe	35	594	5.9	47	1,059	4.4
	Mosman Park	66	712	9.3	111	1,225	9.1
	Nedlands	119	2,054	5.8	180	3,762	4.8
	Peppermint Grove	8	135	5.9	22	259	8.5
	Perth - Inner	3	19	15.8	0	19	0.0
	Perth - Remainder	29	260	11.2	34	330	10.3
	Subiaco	74	1,153	6.4	107	1,851	5.8
	Vincent	165	2,040	8.1	233	3,207	7.3

PPCN Sub-region	PPCN SLAs	Jobless families with children under 15	Total families with children under 15	% Jobless families	Children under 15 years in jobless families	Total children under 15	% Children in jobless families
Sub-total		671	10,104	8.2	1006	17,366	6.2
TOTAL		3995	38,732	10	7045	67,609	9.4
Metropolitan Perth				11.8			12.1

Source: Australian Bureau of Statistics, Census 2006

These data compare with the Perth metropolitan data, which show overall rates of 11.8% and 12.1% respectively for the percentage of jobless families and percentage of children in jobless families. The City of Swan, Town of Bassendean and City of Bayswater reveal higher rates of jobless families with children compared with the metropolitan average.

Population health

Chronic disease risk factors

With relation to early intervention and prevention for chronic disease, overall data for chronic disease risk factors are slightly lower when compared with metropolitan Perth (with the exception of overweight males).

Synthetic predictions – Smoking (male, female and all current smokers), Alcohol (consumption at levels considered to be a high risk to health for persons aged 18 years and over), and Physical Inactivity (persons aged 15+), rate per 100 persons, by PPCN SLAs, 2007-08

PPCN Sub-region	PPCN SLAs	Smokers Males 18+ Rate per 100	Smokers Females 18+ Rate per 100	All smokers 18+ Rate per 100	High alcohol: Ages 18+ Rate per 100	Physical inactivity: Ages 15+ Rate per 100
Swan and Hills	Swan	24.2	17.6	20.8	5.6	33.1
	Kalamunda	21.6	15.8	18.7	6.0	29.7
	Mundaring	22.4	15.5	19.0	5.9	29.5
Sub-total		22.7	16.3	19.5	5.8	30.8
Inner North East	Bassendean	23.8	17.4	20.5	6.0	31.6
	Bayswater	22.2	15.5	18.9	5.6	31.9
	Stirling - SE	17.8	12.8	15.3	5.3	27.6
Sub-total		21.3	15.9	19.0	5.7	30.6
City and West	Cambridge	14.2	10.5	12.3	5.1	24.9
	Claremont	14.4	10.1	12.2	5.3	24.4
	Cottesloe	15.4	10.5	13.0	5.5	23.8
	Mosman Park	17.8	12.1	15.0	5.3	26.8
	Nedlands	12.3	8.5	10.4	4.5	25.4
	Peppermint Grove	10.9	7.6	9.1	4.6	22.9
	Perth - Inner	24.7	15.3	20.9	5.6	34.2
	Perth - Remainder	23.3	14.0	19.3	5.4	32.0
	Subiaco	16.9	12.0	14.5	5.2	25.2
	Vincent	20.6	14.6	17.8	5.6	29.0

PPCN Sub-region	PPCN SLAs	Smokers	Smokers	All smokers	High alcohol:	Physical inactivity:
		Males 18+ Rate per 100	Females 18+ Rate per 100	18+ Rate per 100	Ages 18+ Rate per 100	Ages 15+ Rate per 100
Sub-total		17.1	13.4	16.5	5.4	28.5
AVERAGE		18.9	13.1	16.1	5.4	28.3
Metropolitan Perth		21.9	15.7	18.8	5.6	30.7

Source: 2007-08 National Health Survey (NHS), ABS (unpublished); and ABS Estimated Resident Population, average of 30 June 2007 and 2008

This table shows that the Swan and Hills sub-region has the highest number of smokers per 100 people, at 22.73%, which is higher than the average for the catchment area (18.9%) and the metropolitan average (21.9%). Additionally, the Swan and Hills sub-region also has the highest rate of high alcohol consumption per 100 people (5.8% compared to the metropolitan average of (5.6%), and the highest rate of physical inactivity (30.8% compared to 30.7%). These statistics indicate in which areas lifestyle intervention services should be greatest, although chronic disease prevention will be a priority throughout the entire catchment area.

Overweight (not obese) males and females and obese males and females (synthetic prediction), 18 years and over, rate per 100 persons, by PPCN SLAs, 2007-08

PPCN Sub-region	PPCN SLAs	Male overweight Rate per 100	Male obese Rate per 100	Female overweight Rate per 100	Female obese Rate per 100
Swan and Hills	Swan	36.1	15.7	22.9	17.0
	Kalamunda	37.6	15.6	23.7	13.8
	Mundaring	37.2	16.0	23.8	13.8
Sub-total		37.0	15.8	23.5	14.9
Inner North	Bassendean	36.3	19.0	23.0	16.8
	Bayswater	35.5	14.7	22.5	16.1
	Stirling - SE	37.3	13.9	22.5	12.8
Sub-total		36.7	15.8	23.1	15.0
City and West	Cambridge	39.2	13.6	23.1	12.5
	Claremont	38.2	12.9	22.2	11.9
	Cottesloe	38.2	14.1	22.8	12.5
	Mosman Park	36.8	13.7	22.2	12.4
	Nedlands	38.2	12.7	22.8	11.7

PPCN Sub-region	PPCN SLAs	Male overweight Rate per 100	Male obese Rate per 100	Female overweight Rate per 100	Female obese Rate per 100
	Peppermint Grove	40.1	12.6	20.4	11.1
	Perth - Inner	33.2	16.3	17.0	19.0
	Perth - Remainder	33.8	14.4	18.6	12.0
	Subiaco	36.2	13.4	21.3	12.3
	Vincent	35.9	14.5	21.9	13.3
Sub-total		36.9	14.7	22.1	13.8
AVERAGE		36.9	14.6	21.9	13.7
Metropolitan Perth		36.5	15.7	22.9	15.1

Source: 2007-08 National Health Survey (NHS), ABS (unpublished); and ABS Estimated Resident Population, average of 30 June 2007 and 2008

The rates of obesity and the rate of over-weight individuals are comparative between the catchment and the Perth metropolitan area, with no significant outliers. As noted above, lifestyle intervention services will be a priority throughout the PPCN catchment.

Chronic disease rates

Overall chronic disease rates compare strongly with Perth Metropolitan data, with all rates except male mental health problems being lower than the Perth Metropolitan data.

Chronic diseases rates per 100 persons (synthetic prediction), rate per 100 persons, by PPCN and Metropolitan Perth, 2007-08

Chronic disease	PPCN Rate per 100	Metro Perth Rate per 100
Type 2 Diabetes	3.2	3.3
High Cholesterol	5.2	5.3
Mental / Behavioural problems – males / females	9.4 / 11.3	9.3 / 11.4
Mood problems – males / females	5.5 / 7.8	5.5 / 7.8
Circulatory system disease	13.7	14.3
Hypertensive disease	8.0	8.3
Respiratory disease	28.9	29.1
Asthma	8.8	9.0
COPD	2.1	2.2
Musculoskeletal disease	28.5	28.9
Arthritis	13.4	14.0
Rheumatoid Arthritis	2.6	2.4
Osteoarthritis	6.0	6.1

Source: 2007-08 National Health Survey (NHS), ABS (unpublished); and ABS Estimated Resident Population, average of 30 June 2007 and 2008

Mental health and psychological distress

Analysis by SLA indicates a slightly higher level of psychological distress within the catchment compared with metropolitan Perth, with higher levels in inner Perth, Town of Bassendean, City of Bayswater, City of Swan and Town of Vincent. This is in line with the evidence that the Town of Bassendean, City of Bayswater and City of Swan are also associated with low SEIFA scores, in comparative to the other SLAs within the catchment. This highlights that there may be **a need for additional mental health, counselling and psychological services** within these SLAs.

High or very high psychological distress levels (K-10) (synthetic prediction), persons aged 18 years and over, rate per 100 persons, by PPCN SLAs, 2007-08

PPCN Sub-region	PPCN SLAs	Rate per 100
Swan and Hills	Swan	10.5
	Kalamunda	8.9
	Mundaring	9.0
Sub-total		9.5
Inner North East	Bassendean	11.0
	Bayswater	10.5
	Stirling - SE	9.1
Sub-total		10.2
City and West	Cambridge	7.4
	Claremont	8.2
	Cottesloe	7.4
	Mosman Park	9.4
	Nedlands	7.3
	Peppermint Grove	6.4
	Perth – Inner	13.7
	Perth – Remainder	11.7
	Subiaco	9.0
	Vincent	10.5
Sub-total		9.1
AVERAGE		9.4
Metropolitan Perth		9.9

Source: 2007-08 National Health Survey (NHS), ABS (unpublished); and ABS Estimated Resident Population, average of 30 June 2007 and 2008

Premature mortality

Premature mortality by selected cause, rate per 100,000 persons, by PPCN SLAs, 2003-07

Cause of premature mortality	PPCN	Perth Metro	PPCN	Perth Metro
	Persons 15 - 64 years Rate per 100,000	Persons 15 - 64 years Rate per 100,000	Persons 0 - 74 years Rate per 100,000	Persons 0 - 74 years Rate per 100,000
All Cancers	65.0	70.9	90.1	98.5
Colorectal cancer	-	-	9.8	10.0
Lung cancer	-	-	20.1	20.6
Circulatory diseases	23.3	29.5	41.3	46.7
Ischaemic heart disease	-	-	25.7	28.7
Cerebrovascular disease	-	-	7.1	7.7
Respiratory diseases	6.0	5.7	11.9	12.1
COPD	-	-	16.3	16.3
Road traffic injuries	-	-	6.9	6.7
Self harm and suicide	-	-	9.8	10.7
External causes	29.9	33.1	24.7	27.6
Other causes	29.1	29.6	43.9	44.7
All preventable conditions			89.6	90.4

Source: Compiled by PHIDU from deaths data supplied by ABS on behalf of State and Territory Registrars of deaths for 2003 to 2007; and ABS Estimated Resident Population, 30 June 2003 to 2007

Premature mortality data for those aged 0-74 years (rate per 100) reveal the only area with higher rates of premature mortality in the PPCN catchment compared with metropolitan Perth are for road traffic injuries.