



Distribution of Needles & Syringes in Western Australia from 1987 - 2005

A total of 36,590,189 sterile needles and syringes (N&S) were distributed from March 1987 to December 2005, of which 20,977,106 (57.3%) were sold through retail pharmacies and 13,047,487 (35.7%) were distributed through needle and syringe exchange programs. Based on data over a five year period, from 2001 to 2005, it was estimated there was a mean annual State rate of 19,019 N&S distributed per 10,000 population and a mean annual metropolitan rate of 21,766 N&S per 10,000 population.

A ranking of metropolitan and non metropolitan localities based on the mean annual rate of distribution of N&S, found rates more than double the State rate (19,019 N&S per 10,000 population) for the localities of Bicton-Fremantle, Mount Lawley-Maylands and Leederville-Tuart Hill. Rates higher than the mean annual State rate were also found for the localities of Victoria Park-Redcliffe (1.62 times higher), Carnarvon (1.43 times higher), Bunbury-Eaton (1.40 times higher), Karratha (1.30 times higher) and Mandurah-Secret Harbour (1.21 times higher).

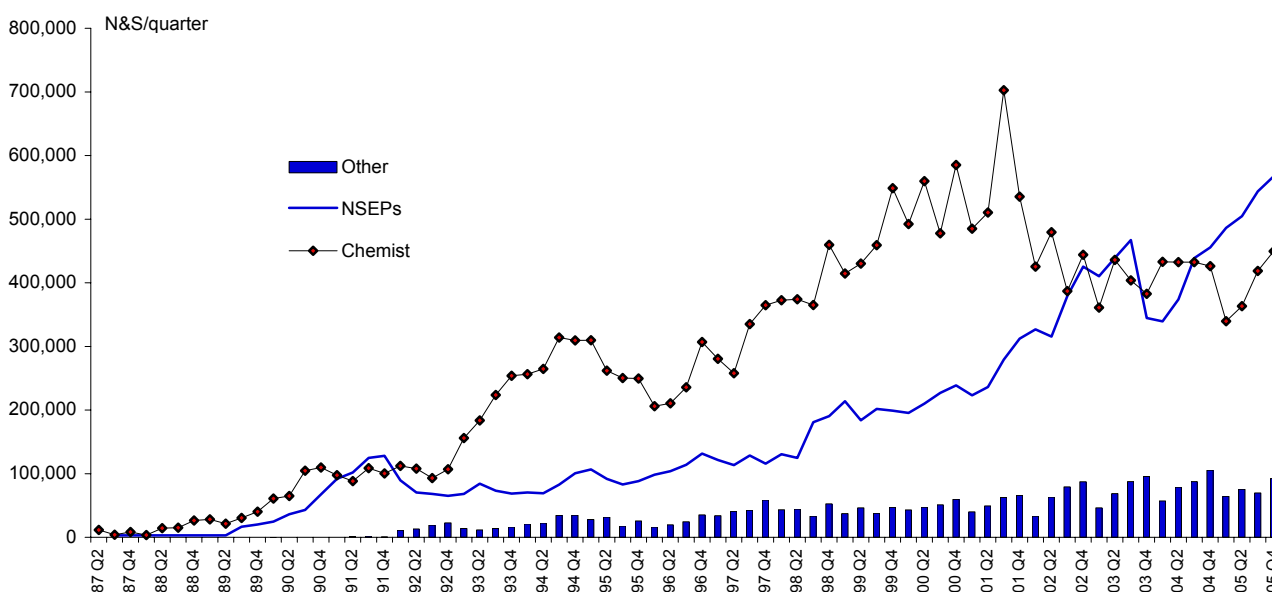
Summary

In Western Australia (WA) needles and syringes (N&S) that are sold to injecting drug users (IDUs) through retail pharmacies are in packs such as Fitpacks, SharpzKitz and Sterafit packs, which incorporate self locking mechanisms for the retention of used N&S for safe disposal. Injecting equipment distributed to IDUs through needle & syringe

exchange programs (NSEPs) is provided on a cost recovery basis and includes the exchange of used injecting equipment for new, ie sterile N&S and the provision of educational materials.

Table 1 (page 3) shows that a total of 36,590,189 sterile N&S were distributed in WA from March 1987 to December 2005, with nearly six out of ten (57.3%) distributed through retail pharmacies and just over one third (35.7%) distributed through mobile and fixed NSEPs.

Figure 1
Quarterly totals of needles and syringes distributed by type of outlet, WA, 1987 - 2005



Written by Greg Swensen (January 2007)

From 1988 (the first full year of operation) up to the present there was a steady growth in the annual number of N&S distributed, with a total of 3,974,960 in 2005 - an increase from a mean of 196 per day in 1988 to a mean of 10,890 per day in 2005.

Of the 13,047,487 N&S distributed through mobile and fixed NSEPs, 58.7% were distributed through mobile NSEPs and 41.3% through NSEPs operating at fixed sites (Table 1, page 3).

In relation to the remaining N&S distributed through other outlets, 1,208,668 (3.3%) were distributed through hospitals, 582,171 (1.6%) were through vending machines and 774,757 (2.1%) were through other outlets such as community health centres, nursing posts, community based organisations (eg Magenta formerly known as Phoenix) and public health units (PHUs).

Figure 1 (page 1) shows that from the March quarter 1987 to the end of 1992 similar numbers of N&S were distributed through both chemists and NSEPs. From 1993 there

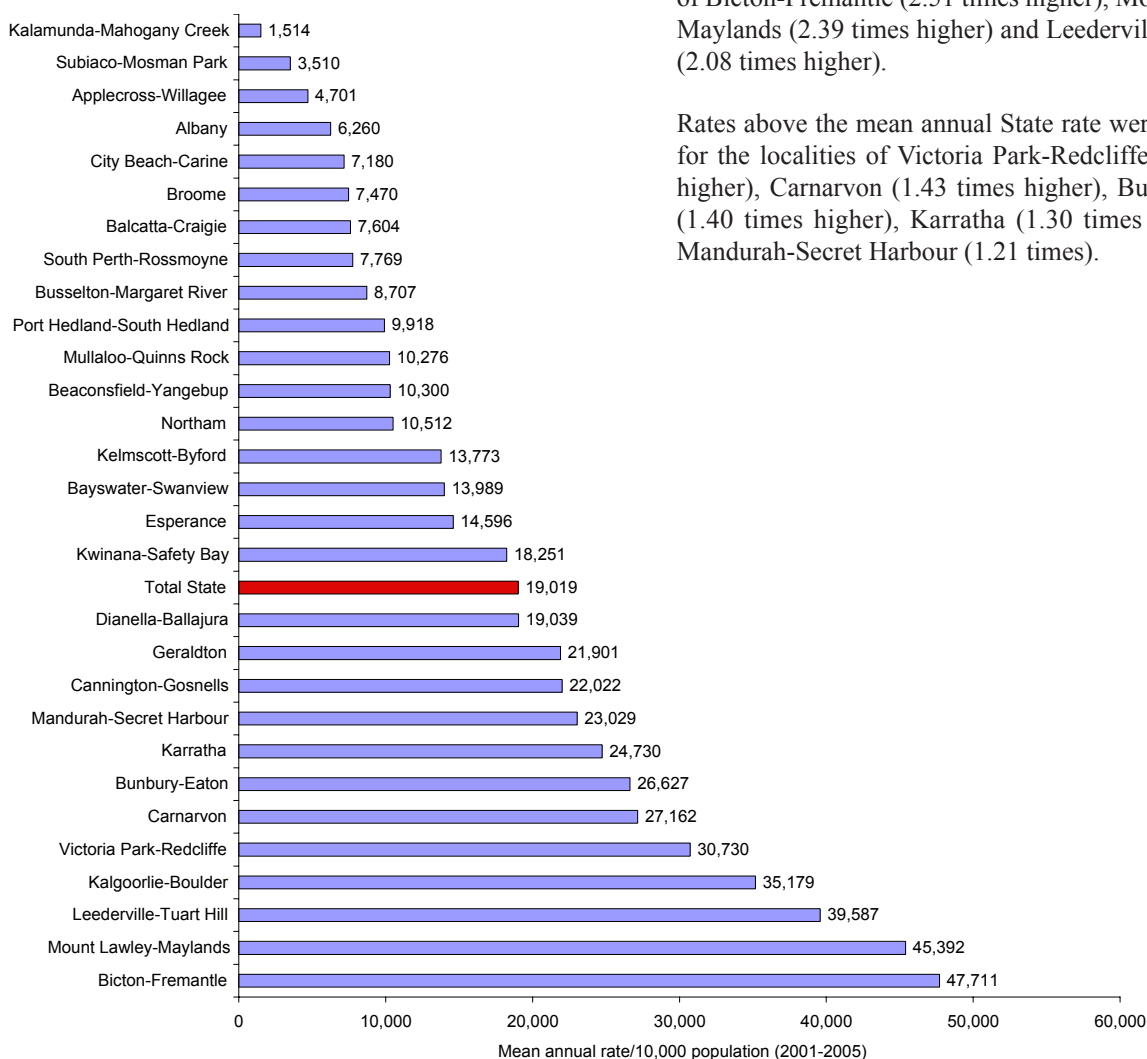
was an expansion in the chemist based N&S program. N&S distributed through this program reached 702,553 in the September quarter 2001 and then declined to 339,595 in the March quarter 2005, with a moderate increase occurring in the latter part of 2005.

The number of N&S distributed through NSEPs gradually increased from the beginning of 1993 to the September quarter 2003 (467,255), declined to the March quarter 2004 (339,496) and has since steadily grown up to the end of 2005. Since mid 2004 more N&S have been distributed each quarter through NSEPs than through chemists. See Figure 1, page 1.

It is to be noted that the NSEPs run by the WA AIDS Council (WAAC) and the WA Substance Users' Association (WASUA) generally achieve rates of 95% or more for return of used injection equipment.

A ranking of the mean annual rate of distribution for 29 localities throughout the State (consisting of 18 metropolitan localities - excluding the Perth inner city locality and 11 selected non metropolitan areas), is presented in Figure 2.

Figure 2
Mean annual rate of distribution of needles & syringes, metropolitan localities & regional centres, 2001 - 2005



Rates more than double the mean annual State rate (19,019 N&S per 10,000 population) occurred for the localities of Bicton-Fremantle (2.51 times higher), Mount Lawley-Maylands (2.39 times higher) and Leederville-Tuart Hill (2.08 times higher).

Rates above the mean annual State rate were also found for the localities of Victoria Park-Redcliffe (1.62 times higher), Carnarvon (1.43 times higher), Bunbury-Eaton (1.40 times higher), Karratha (1.30 times higher) and Mandurah-Secret Harbour (1.21 times).

Metropolitan Area

A breakdown of N&S in the Perth metropolitan area by aggregating data for contiguous postcode areas to form 19 localities for the five year period from 2001 to 2005 identifies variations within the metropolitan area on the distribution of N&S between localities. (This data has been averaged over a five year period rather than a one year period to avoid short term fluctuations in distribution.)

There were three localities in the Perth metropolitan area which had a mean of more than 200,000 N&S distributed per year - Dianella-Ballajura (278,028), Cannington-Gosnells (230,231) and Victoria Park-Redcliffe (202,281). *(The Perth inner city area has been excluded as within this locality there are a number of NSEP sites which distribute high volumes of N&S.)*

There were three localities which had a mean of between 150,000 and up to 200,000 N&S distributed per year - Kwinana-Safety Bay (162,611), Bayswater-Swan View (161,432), Mount Lawley-Maylands (157,253).

There were five localities which had a mean of between 100,000 and 150,000 N&S distributed per year - Bicton-Fremantle (139,417), Mandurah-Secret Harbour (135,746), Mullaloo-Quinns Rock (115,920) and Leederville-Tuart Hill (115,431).

It was found the overall annual mean Perth metropolitan rate was 21,766 N&S distributed per 10,000 population. Excluding the Perth inner city area, the highest annual mean rate in the metropolitan area was in the Bicton-Fremantle area (47,711), followed by Mount Lawley-Maylands (45,392) and Leederville-Tuart Hill (39,587).

A ranking of mean annual rates of the 18 localities presented in Figure 2 (page 2) shows rates well above the mean metropolitan rate were reported for the localities of Mount Lawley-Maylands (2.43 times higher), Bicton-Fremantle (2.1 times higher), Leederville-Tuart Hill (2.08 times higher) and Victoria Park-Redcliffe (1.49 times higher).

Table 1
Annual totals of needles and syringes distributed by type of outlet, WA, 1987 - 2005

	Chemist	NSEPs		Hospital	Vending machine	Other	Total
		Mobile	Fixed site				
1987	23,990	6,000	-	-	-	-	29,990
1988	59,380	12,000	-	-	-	-	71,380
1989	120,260	42,648	-	-	-	-	162,908
1990	340,355	171,031	-	-	-	250	511,636
1991	394,820	444,225	-	2,560	2,385	1,200	845,190
1992	420,200	293,236	-	7,400	58,490	-	779,326
1993	817,025	294,423	-	3,570	50,491	1,280	1,166,789
1994	1,144,710	322,983	-	39,985	63,535	9,105	1,580,318
1995	1,071,570	369,671	-	35,940	61,030	5,770	1,543,981
1996	959,105	442,365	-	40,275	45,960	9,020	1,502,110
1997	1,238,540	466,903	1,801	80,180	83,340	12,225	1,893,593
1998	1,571,586	455,046	164,565	82,460	70,960	19,815	2,371,703
1999	1,852,518	472,018	320,820	96,465	37,590	34,225	2,819,254
2000	2,114,994	350,610	519,489	147,145	-	53,830	3,186,068
2001	2,233,492	426,795	608,424	119,235	24,035	74,555	3,502,138
2002	1,735,980	608,732	793,632	107,525	23,680	131,725	3,445,808
2003	1,583,466	691,307	900,259	129,665	24,155	144,016	3,542,432
2004	1,723,959	649,037	885,599	167,583	21,215	139,950	3,660,605
2005	1,571,156	905,733	1,196,295	148,680	15,305	137,791	3,974,960
Total	20,977,106	7,656,603	5,390,884	1,208,668	582,171	774,757	36,590,189

Note: 'Other' includes community health centres, nursing posts, community based organisations (eg Magenta formerly known as Phoenix) & public health units (PHU). 'Mobile NSEP' includes Derbyl Yerrigan which operated a mobile NSEP from 1996 to 1998 and since 2001 includes the service provided by WASUA in Bunbury (no other mobile NSEPs operated in 2000). 'Vending machine' refers to vending machine which operated in East Perth up to 1999 and then a new service commenced in Kalgoorlie in 2001. Recent increases in 'other outlet' reflects increased distribution of Fitpacks by PHUs to hospitals within their regions.

Source: All this data has been provided by the Sexual Health and Blood Borne Virus Program, Communicable Disease Control Directorate, Department of Health.

Regional Centres

The annual mean non metropolitan rate (based on the period from 2001 to 2005) was 18,642 N&S distributed per 10,000 population, which was 0.98 of the mean State rate. The highest annual mean rate was for Kalgoorlie-Boulder (35,179), followed by Carnarvon (27,162), Bunbury-Eaton (26,627) and Karratha (24,730).

Mean annual distribution of N&S, based on the five year period from 2001 to 2005, found the highest mean annual number of N&S distributed was in Bunbury-Eaton (104,816) closely followed by Kalgoorlie-Boulder (103,985). The third highest mean annual rate of 65,063 was in Geraldton.

It should be noted that the breakdown of N&S distribution figures by regional centres may overestimate distribution attributable to some centres, as in some regions such as the Kimberley, includes distribution to other outlets located outside of the centre due to the centralisation of ordering of supplies by PHUs.

A ranking of mean annual rates of N&S distributed per 10,000 population for the 11 regional centres over the five year period shown in Figure 2 (page 2) shows rates above the mean State rate for Kalgoorlie-Boulder (1.85 times higher), Carnarvon (1.43 times higher), Bunbury-Eaton (1.40 times higher), Karratha (1.30 times higher) and Geraldton (1.15 times higher).

There have been different patterns of the number of N&S distributed per year in the 11 selected country localities. Whereas some localities have distributed relatively large numbers of N&S per year, such as Kalgoorlie-Boulder, other regions such as Bunbury-Eaton and Karratha have

experienced more recent increases due to the expansion of access to sterile injection equipment. However, whereas in a number of regions such as Broome and Carnarvon the annual number of N&S has declined in recent years, there has been growth in other regions such as Esperance and Busselton-Margaret River.

An example of the importance of additional services outside of pharmacies is illustrated by trends for Bunbury-Eaton, when a mobile NSEP operated by WASUA commenced in 2001, such that by 2003 just over half of all N&S in Bunbury were provided by WASUA. Also, since 2002 N&S have been provided on an after hours basis from the Bunbury Regional Hospital.

In Kalgoorlie-Boulder access to sterile injection equipment was expanded in 2001 with the commencement of a N&S vending machine on an after hours basis at the Kalgoorlie Regional Hospital. In conjunction with the reduced role of the hospital as a source of N&S, demand has grown for N&S provided at no cost through the Public Health Unit during the day.

Another example of increased access to sterile injection equipment in recent years can be seen in Geraldton, when the Midwest PHU commenced distribution of N&S in the March quarter 1999. The Geraldton Regional Hospital also commenced distribution of N&S in the June quarter 2003.

To view or download detailed data tables and figures and a description of the methodology associated with this report go to the Drug and Alcohol Office website [here](#).

Distribution of Needles & Syringes, WA: 1987 - 2005

Data Tables & Figures: Whole State

Table A-1

**Quarterly totals of needles & syringes distributed by type of outlet
1987 - 1995**

		NSEPs	Chemist	Other	Total
1987	Qtr 2	-	11,670	-	11,670
	Qtr 3	3,000	4,080	-	7,080
	Qtr 4	3,000	8,240	-	11,240
1988	Qtr 1	3,000	3,430	-	6,430
	Qtr 2	3,000	14,220	-	17,220
	Qtr 3	3,000	15,190	-	18,190
	Qtr 4	3,000	26,540	-	29,540
1989	Qtr 1	3,000	28,210	-	31,210
	Qtr 2	3,000	21,370	-	24,370
	Qtr 3	16,587	30,500	-	47,087
	Qtr 4	20,061	40,180	-	60,241
1990	Qtr 1	24,610	60,975	250	85,835
	Qtr 2	36,117	64,930	-	101,047
	Qtr 3	42,894	104,700	-	147,594
	Qtr 4	67,410	109,750	-	177,160
1991	Qtr 1	91,945	97,530	-	189,475
	Qtr 2	101,970	88,210	1,400	191,580
	Qtr 3	124,677	108,780	1,960	235,417
	Qtr 4	128,018	100,300	400	228,718
1992	Qtr 1	89,581	112,165	11,148	212,894
	Qtr 2	70,363	108,000	13,107	191,470
	Qtr 3	68,152	93,150	19,077	180,379
	Qtr 4	65,140	106,885	22,558	194,583
1993	Qtr 1	68,244	155,945	13,766	237,955
	Qtr 2	84,187	183,705	11,655	279,547
	Qtr 3	73,271	223,545	13,915	310,731
	Qtr 4	68,721	253,830	16,005	338,556
1994	Qtr 1	70,553	256,340	20,905	347,798
	Qtr 2	69,149	264,760	22,395	356,304
	Qtr 3	82,686	314,070	34,485	431,241
	Qtr 4	100,595	309,540	34,840	444,975
1995	Qtr 1	106,594	309,575	27,820	443,989
	Qtr 2	91,863	261,920	31,630	385,413
	Qtr 3	82,999	250,440	17,555	350,994
	Qtr 4	88,215	249,635	25,735	363,585

Note: 'Other' includes community health centres, nursing posts, community based organisations (eg Magenta formerly known as Phoenix) & public health units (PHUs). NSEPs refers to both mobile and fixed needle and syringe exchange programs.

Table A-2
Quarterly totals of needles & syringes distributed by type of outlet
WA, 1996 - 2005

		NSEPs	Chemist	Other	Total
1996	Qtr 1	98,318	206,065	16,010	320,393
	Qtr 2	104,007	210,560	19,590	334,157
	Qtr 3	113,875	235,675	24,355	373,885
	Qtr 4	131,550	306,805	35,320	473,675
1997	Qtr 1	121,613	280,590	33,995	436,198
	Qtr 2	113,381	257,875	40,800	412,056
	Qtr 3	128,640	335,200	42,390	506,230
	Qtr 4	115,674	364,875	58,560	539,109
1998	Qtr 1	130,668	372,565	43,365	546,598
	Qtr 2	124,868	374,145	44,310	543,323
	Qtr 3	180,986	365,140	33,105	579,231
	Qtr 4	190,360	459,736	52,455	702,551
1999	Qtr 1	213,810	414,690	37,200	665,700
	Qtr 2	183,874	430,154	46,175	660,203
	Qtr 3	201,826	459,040	37,755	698,621
	Qtr 4	198,946	548,634	47,150	794,730
2000	Qtr 1	195,440	492,302	43,100	730,842
	Qtr 2	209,998	559,689	47,180	815,867
	Qtr 3	226,985	477,760	51,035	755,780
	Qtr 4	238,676	585,243	59,660	883,579
2001	Qtr 1	223,120	484,971	39,895	747,986
	Qtr 2	236,293	510,516	49,375	796,184
	Qtr 3	279,264	702,553	62,700	1,044,517
	Qtr 4	312,144	535,452	65,855	913,451
2002	Qtr 1	326,891	425,423	33,200	785,514
	Qtr 2	315,491	479,414	63,074	857,979
	Qtr 3	379,053	387,005	79,249	845,307
	Qtr 4	425,463	444,138	87,407	957,008
2003	Qtr 1	410,232	360,998	46,331	817,561
	Qtr 2	438,876	435,979	68,732	943,587
	Qtr 3	467,255	403,956	87,153	958,364
	Qtr 4	344,767	382,533	95,620	822,920
2004	Qtr 1	339,496	432,885	57,187	829,568
	Qtr 2	373,848	432,448	78,678	884,974
	Qtr 3	438,864	432,470	87,527	958,861
	Qtr 4	455,690	426,156	105,356	987,202
2005	Qtr 1	486,357	339,595	64,317	890,269
	Qtr 2	504,638	363,242	75,558	943,438
	Qtr 3	543,727	418,691	69,570	1,031,988
	Qtr 4	567,306	449,628	92,331	1,109,265

Note: 'Other' includes community health centres, nursing posts, community based organisations (eg Magenta formerly known as Phoenix) & public health units (PHUs). NSEPs refers to both mobile and fixed needle and syringe exchange programs.

Data Tables & Figures - Metropolitan Area

Table A-3

Distribution of needles & syringes by postcode locality, Perth metropolitan area, 2001 - 2005

Locality	Postcodes	Population data (ERP 2001)	Annual number of N&S					Annual mean rate (2001-2005)
			2001	2002	2003	2004	2005	
Perth inner city	6000, 6003-6005	14,344	762,593	891,297	986,445	945,745	1,274,384	677,700
Mount Lawley-Maylands	6050-6052	34,643	237,437	164,720	131,658	139,602	112,848	45,392
Bicton-Fremantle	6157-6161	29,221	112,795	118,325	142,186	145,870	177,907	47,711
Leederville-Tuart Hill	6006-6007, 6016-6017, 6060	29,159	143,247	128,464	120,478	104,670	80,296	39,587
Victoria Park-Redcliffe	6100-6106	65,826	217,317	202,992	183,148	206,303	201,646	30,730
Cannington-Gosnells	6107-6110, 6147	104,544	223,407	228,642	205,218	237,973	255,915	22,022
Mandurah-Secret Harbour	6173-6176, 6210	58,947	121,885	143,967	140,226	120,204	152,450	23,029
Dianella-Ballajura	6059, 6061-6064, 6066-6068, 6090	146,029	324,922	275,709	253,669	275,091	260,747	19,039
Kwinana-Safety Bay	6167-6172	89,098	138,993	129,277	168,274	184,299	192,210	18,251
Kelmscott-Byford	6111-6112, 6201, 6121-6126	64,352	94,584	89,376	80,169	86,286	92,751	13,773
Bayswater-Swanview	6053-6058, 6069, 6084	115,399	140,523	149,795	170,584	163,087	183,170	13,989
Beaconsfield-Yangebup	6162-6166	93,458	102,441	91,382	90,068	104,933	92,488	10,300
Mullaloo-Quinns Rock	6027-6028, 6030-6031, 6032-6035, 6037, 6041-6044, 6065	112,811	117,055	116,911	114,584	112,148	118,902	10,276
Balcatta-Craigie	6021-6026	108,304	127,301	84,583	69,955	70,155	59,786	7,604
South Perth-Rossmoyne	6148, 6151-6152	54,186	46,100	49,028	43,978	37,298	34,087	7,769
City Beach-Carine	6015, 6018-6020, 6029	78,689	79,280	62,240	50,448	47,537	42,979	7,180
Applecross-Willagee	6149-6150, 6153-6156	109,357	64,001	54,779	46,608	43,604	48,064	4,701
Subiaco-Mosman Park	6008-6012, 6014	81,148	37,056	30,844	26,153	26,153	22,189	3,510
Kalamunda-Mahogany Creek	6070-6074, 6076, 6081-6083	45,298	10,623	7,555	6,228	5,474	4,404	1,514
Total		1,906,114	3,101,560	3,019,886	3,030,077	3,056,432	3,407,223	19,019

Note: Population data is based on the 2001 Census of estimated resident population by postcode.
Rate per 10,000 population.

Data Tables & Figures - Regional Centres

Table A-4

Annual totals of needles and syringes distributed by selected country localities, WA, 1993 - 1998

	1993	1994	1995	1996	1997	1998
Kalgoorlie-Boulder	32,375	77,590	59,310	64,710	108,415	104,630
Geraldton	21,830	30,330	18,745	19,635	18,220	23,498
Busselton-Margaret River	4,555	10,270	8,820	10,020	15,025	22,920
Bunbury-Eaton	7,085	25,610	18,855	21,450	31,840	45,220
Carnarvon	3,700	5,500	2,940	6,080	7,020	11,006
Broome	3,270	4,560	3,545	3,740	4,220	6,400
Esperance	2,955	3,280	4,950	5,010	6,865	10,915
Albany	4,625	7,085	3,900	3,120	2,930	4,719
Karratha	1,680	3,140	3,510	4,130	2,110	3,780
Port Hedland-South Hedland	2,360	4,970	13,615	12,525	13,105	17,375
Northam	305	1,515	2,590	1,925	1,620	3,975

Table A-5

Annual totals of needles and syringes distributed by selected country localities, WA, 1999 - 2005

	1999	2000	2001	2002	2003	2004	2005
Kalgoorlie-Boulder	102,109	118,256	117,750	108,737	114,782	98,592	80,065
Geraldton	35,625	52,254	56,190	58,592	63,712	72,603	74,220
Busselton-Margaret River	23,229	17,518	20,447	25,231	18,958	30,513	40,185
Bunbury-Eaton	61,769	42,604	23,634	56,679	136,797	157,462	149,508
Carnarvon	11,139	8,945	14,372	18,650	15,100	26,650	15,950
Broome	10,540	11,715	17,000	6,785	3,580	3,400	3,260
Esperance	10,298	14,922	15,727	15,812	11,501	23,218	31,830
Albany	7,700	24,019	22,301	13,605	15,692	22,982	21,300
Karratha	7,864	25,210	21,174	24,880	22,820	34,472	27,750
Port Hedland-South Hedland	15,800	5,775	6,370	6,225	8,150	6,318	35,800
Northam	5,430	6,510	9,325	7,335	6,697	9,969	9,711

Table A-6

Distribution of needles & syringes by selected country localities, 2001 - 2005

Locality	Postcodes	Population data (ERP 2001)	Annual mean rate (2001-2005)
Kalgoorlie-Boulder	6430-6432	29,559	103,985
Carnarvon	6701	6,680	18,144
Karratha	6714	10,602	26,219
Bunbury-Eaton	6230-6232	39,365	104,816
Geraldton	6530	29,708	65,063
Esperance	6450	13,440	19,618
Northam	6401	8,188	8,607
Broome	6725	9,110	6,805
Busselton-Margaret River	6280-6285	31,085	27,067
Albany	6330	30,635	19,176
Port Hedland-South Hedland	6721-6722	12,677	12,573
Total		221,049	515,471

Figure A-1
Annual needles and syringes, Bunbury-Eaton
postcode areas, 1993 - 2005

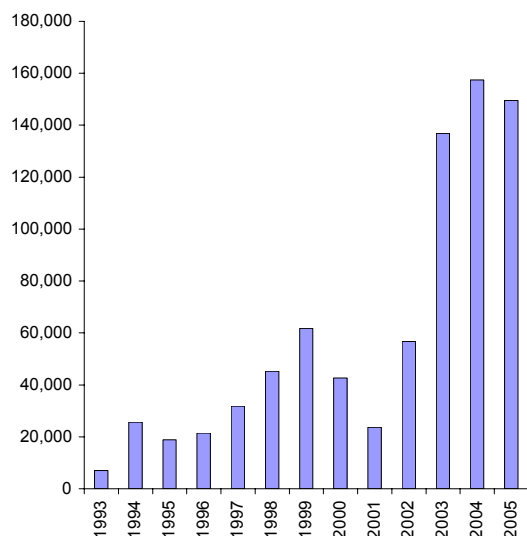


Figure A-3
Annual needles and syringes, Busselton-Mar-
garet River postcode areas, 1993 - 2005

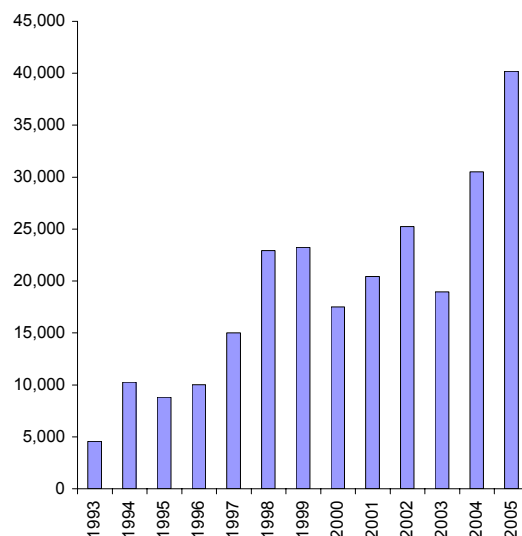


Figure A-2
Annual needles and syringes, Albany postcode
area, 1993 - 2005

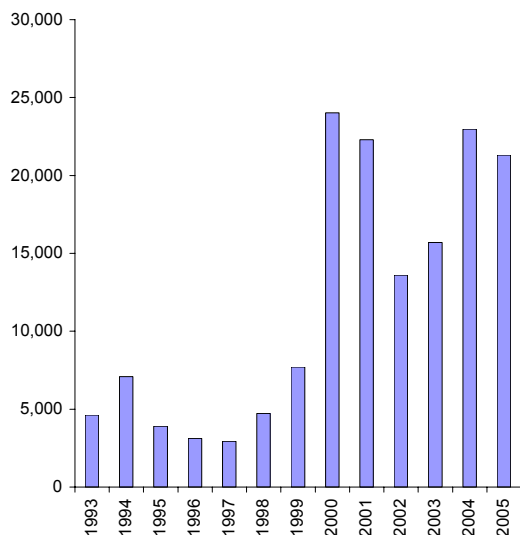


Figure A-4
Annual needles and syringes, Kalgoorlie-Boul-
der postcode areas, 1993 - 2005

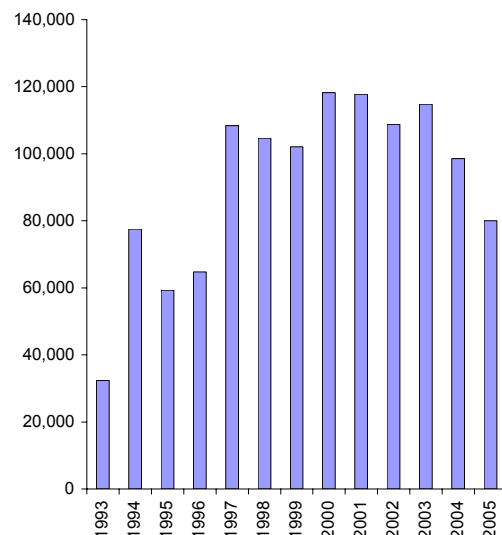


Figure A-5
Annual needles and syringes, Geraldton post-code area, 1993 - 2005

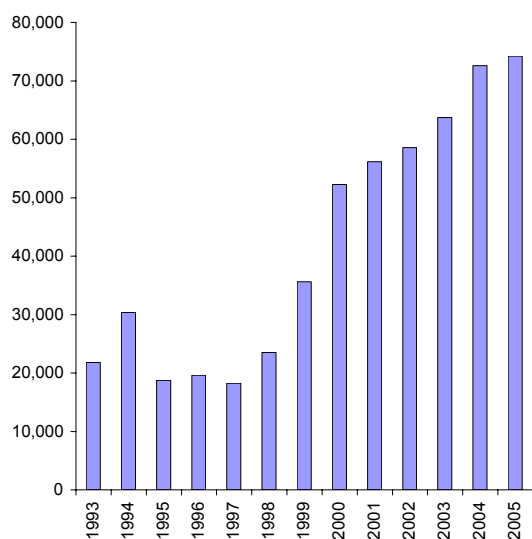


Figure A-7
Annual needles and syringes, Carnarvon post-code area, 1993 - 2005

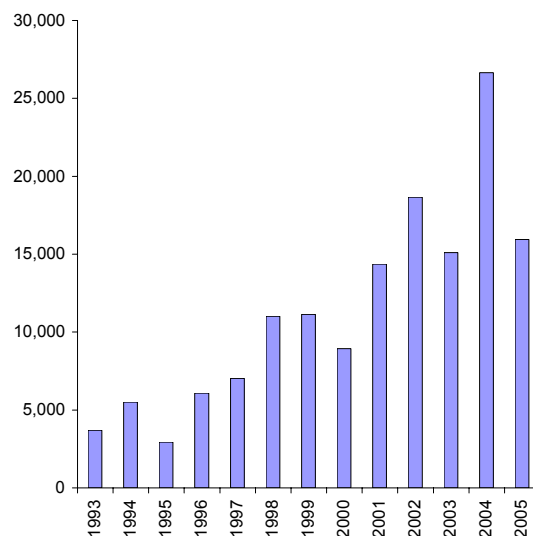


Figure A-6
Annual needles and syringes, Esperance post-code area, 1993 - 2005

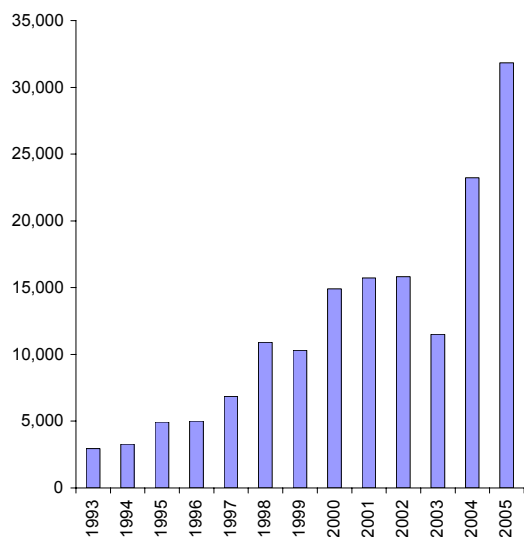


Figure A-8
Annual needles and syringes, Port Hedland postcode area, 1993 - 2005

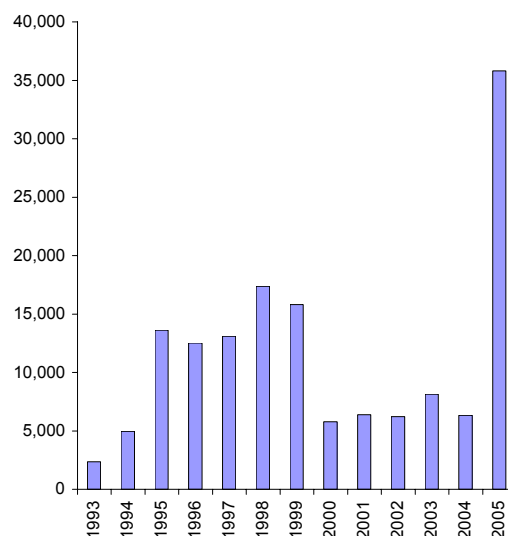


Figure A-9
Annual needles and syringes, Karratha post-code area, 1993 - 2005

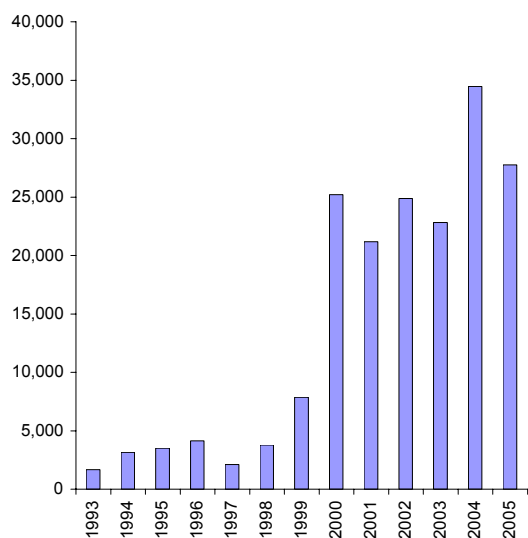


Figure A-11
Annual needles and syringes, Broome post-code area, 1993 - 2005

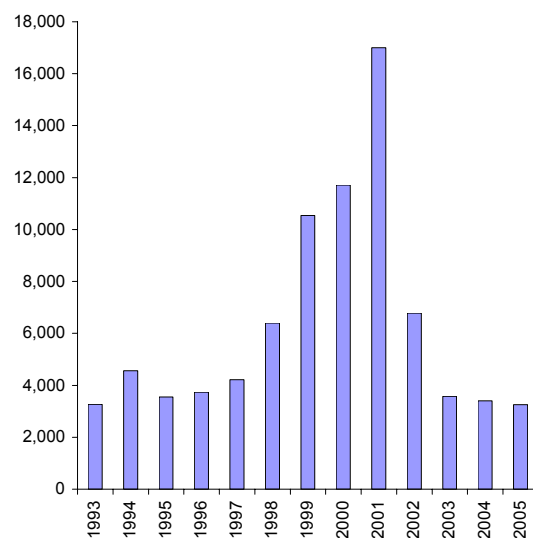
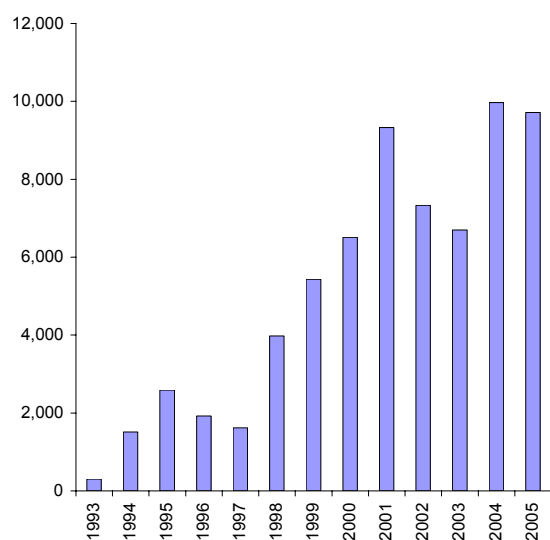


Figure A-10
Annual needles and syringes, Northam post-code area, 1993 - 2005



Metropolitan Postcode Localities

Perth inner city: 6000, 6003-6005

Perth CBD, Northbridge, East Perth, West Perth

Mount Lawley-Maylands: 6050-6052

Mount Lawley, Menora, Coolbinia, Maylands, Inglewood, Bedford

Bicton-Fremantle: 6157-6161

Bicton, Palmyra, East Fremantle, North Fremantle, Fremantle, Rottnest Island

Leederville-Tuart Hill: 6006-6007, 6016-6017, 6060

Leederville, North Perth, Glendalough, Mount Hawthorn, Osborne Park, Tuart Hill, Joondanna, Yokine

Victoria Park-Redcliffe: 6100-6106

Victoria Park, East Victoria Park, Carlisle, Bentley, Rivervale, Belmont, Redcliffe, Cloverdale, Welshpool, Kewdale, St James

Mandurah-Secret Harbour: 6173-6176, 6210

Secret Harbour, Karnup, Golden Bay, Singleton, Madora, Falcon, Mandurah

Cannington-Gosnells: 6107-6110, 6147

Wilson, Cannington, East Cannington, Kenwick, Wattle Grove, Beckenham, Queens Park, Thornlie, Maddington, Gosnells, Huntingdale, Langford, Lynwood

Dianella-Ballajura: 6059, 6061-6064, 6066-6068, 6090

Dianella, Nollamara, Mirrabooka, Balga, Westminster, Morley, Embleton, Noranda, Malaga, Beechboro, Girrawheen, Koondoola, Alexander Heights, Marangaroo, Ballajura, Whiteman, Cullacabardee

Kwinana-Safety Bay: 6167-6172

Kwinana, Orelia, Parmelia, Calista, Rockingham, Safety Bay, Waikiki, Warnbro, Port Kennedy, Wellard, Leda, Baldivis

Kelmscott-Byford: 6111-6112, 6121-6126, 6201

Kelmscott, Armadale, Forrestdale, Oakford, Byford, Westfield, Roleystone, Bedfordale, Karragullen, Wungong

Bayswater-Swan View: 6053-6058, 6069, 6084

Bayswater, Bassendean, Lockridge, Ashfield, Guildford, Henley Brook, West Swan, Middle Swan, Midland, Midvale, Stratton, Maida Vale, High Wycombe, Forrestfield, Greenmount, Swan View, Herne Hill, Helena Valley, Boya, Ellenbrook, Jane Brook, Bullsbrook

Beaconsfield-Yangebup: 6162-6166

South Fremantle, Beaconsfield, Hamilton Hill, Hilton, Spearwood, Bibra Lake, Coolbellup, Yangebup, Coogee, Wattleup, Naval Base, Hope Valley, Henderson, Munster, Samson

Balcatta-Craigie: 6021-6026

Balcatta, Stirling, Hamersley, Duncraig, Greenwood, Warwick, Hillarys, Craigie, Kallaroo, Padbury, Kingsley, Woodvale

City Beach-Carine: 6015, 6018-6020, 6029

City Beach, Karrinyup, Doubleview, Scarborough, North Beach, Carine, Trigg, Sorrento, Marmion, Waterman, Innaloo, Gwelup

Mullaloo-Quinns Rock: 6027-6028, 6030-6031, 6032-6035, 6037, 6041-6044, 6065

Joondalup, Currambine, Kinross, Ocean Reef, Heathridge, Edgewater, Beldon, Mullaloo, Iluka, Quinns Rock, Merriwa, Mindarie, Clarkson, Neerabup, Carramar, Wanneroo, Wangara, Landsdale, Yanchep, Two Rocks, Guilderton, Seabird, Ledge Point, Lancelin

South Perth-Rossmoyne: 6148, 6151-6152

Shelley, Rossmoyne, Ferndale, Riverton, South Perth, Kensington, Como, Manning, Karawara, Salter Point, Waterford

Applecross-Willagee: 6149-6150, 6153-6156

Bullcreek, Murdoch, Bateman, Applecross, Ardross, Mt Pleasant, Brentwood, Alfred Cove, Attadale, Booragoon, Myaree, Willetton, Melville, Winthrop, Willagee

Subiaco-Mosman Park: 6008-6012, 6014

Subiaco, Nedlands, Crawley, Dalkeith, Peppermint Grove, Shenton Park, Claremont, Swanbourne, Cottesloe, Mosman Park, Wembley, Floreat

Kalamunda-Mahogany Creek: 6070-6074, 6076, 6081-6083

Kalamunda, Darlington, Glen Forest, Hovea, Mahogany Creek, Mundaring, Sawyers Valley, Walliston, Lesmurdie, Carmel, Bickley, Pickering Brook, Gooseberry Hill, Parkerville, Stoneville, Mount Helena, Gidgegannup

Methodology

Previous publications

This report updates N&S data previously published in *Statistical Bulletin No. 3* (December 1996), *Statistical Bulletin No. 6* (February 2000), *Statistical Bulletin No. 7* (March 1999), *Statistical Bulletin No. 14* (July 2001), *Statistical Bulletin No. 18* (December 2003) and *Statistical Bulletin No. 23* (July 2006).

Source of data

The data contained in this bulletin is provided by the Sexual Health and Blood Borne Virus Program, Communicable Disease Control Directorate, which has overall responsibility for the State's needle and syringe program provided through retail pharmacies, needle exchange programs and other providers such as non metropolitan hospitals.

As monthly records are maintained of the number of N&S ordered by each individual pharmacy, it is possible to collate the number of N&S by outlet and locality for each pharmacy based NSP.

In early 1999, the WAAC, which operates the mobile NSEP in Perth, introduced separate recording of the number of N&S distributed at each of the sites where the van operates on different days of the week. With the enhancements to the mobile NSEP data, it was possible to undertake an analysis of the total number of N&S distributed in the years 2000 to 2003 in the Perth metropolitan area based on postcode locality for all outlets.

Interpretation of data

The metropolitan area was broken up into 19 localities based on groups of adjacent postcode districts. Each locality contains the total number of N&S distributed in that geographical area. A postcode district may encompass more than one suburb. This does not mean that N&S were distributed from outlets in all the suburbs listed. The suburbs within each locality are listed in Appendix 2.

There are limitations in using postcode data to identify possible differences between localities in the rate of access to NSPs by IDUs since, as in some areas, chemists do not retail N&S. Also some areas may show higher volume of distribution than other areas because IDUs have come from adjacent suburbs to access the nearest outlet.

While a local pharmacy may retail N&S as Fitpacks, Shar-pzKitz and Sterafit packs, costs may determine access to pharmacy based versus other types of NSP, such as NSEPs, where charges are based on cost recovery and exchange.

Also caution should be exercised in making inferences about underlying patterns of injecting drug use based on the distribution of N&S by postcode data, as some outlets may be located on major transport routes.

Another caution in interpreting data is that a number of pharmacies located in the metropolitan area provide after hours access to N&S, which may attract a greater number of clientele from outside that locality.

Furthermore, WASUA's fixed site NSEPs distributes very large numbers of N&S in the Perth inner city area. While this could be misinterpreted as indicating Northbridge is an area in which high levels of injecting drug use occur, a high volume of N&S distribution does not indicate more prevalent injecting drug use by residents of the area. WASUA attracts a clientele from across the metropolitan area.

Acronyms used

BBVs	Blood borne viruses
IDUs	Injecting drug users
N&S	Needles & syringes
NSP	Needle & syringe program
NSEP	Needle & syringe exchange program
PHU	Public Health Unit
WA	Western Australia
WAAC	WA AIDS Council
WASUA	WA Substance Users' Association

Data revision

Data presented in this bulletin may vary from earlier publications because the datasets operated by the department and other organisations who also provide data used to compile this report may have been revised due to cleaning, recoding and/or updates of systems.

This publication is available online at
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