



Distribution of Needles & Syringes in Western Australia from 1987 - 2006

In Brief

- There was a total of 40,843,434 sterile needles and syringes (N&S) distributed from March 1987 to December 2006.
- Just over half (55.3%) of all N&S were distributed through retail pharmacies and 37.6% were distributed through mobile and fixed needle and syringe exchange programs (NSEPs).
- From March quarter 1987 to the March quarter 2004 the greatest number of N&S were distributed through retail pharmacies, whereas since mid 2004 the greatest number of N&S has been distributed through NSEPs.
- The greatest number of N&S have been consistently distributed in the Perth inner city area, where there are well established NSEP sites.
- Three metropolitan localities of Dianella-Ballajura, Cannington-Gosnells and Victoria Park-Redcliffe had a mean of 200,000 or more N&S distributed per year.

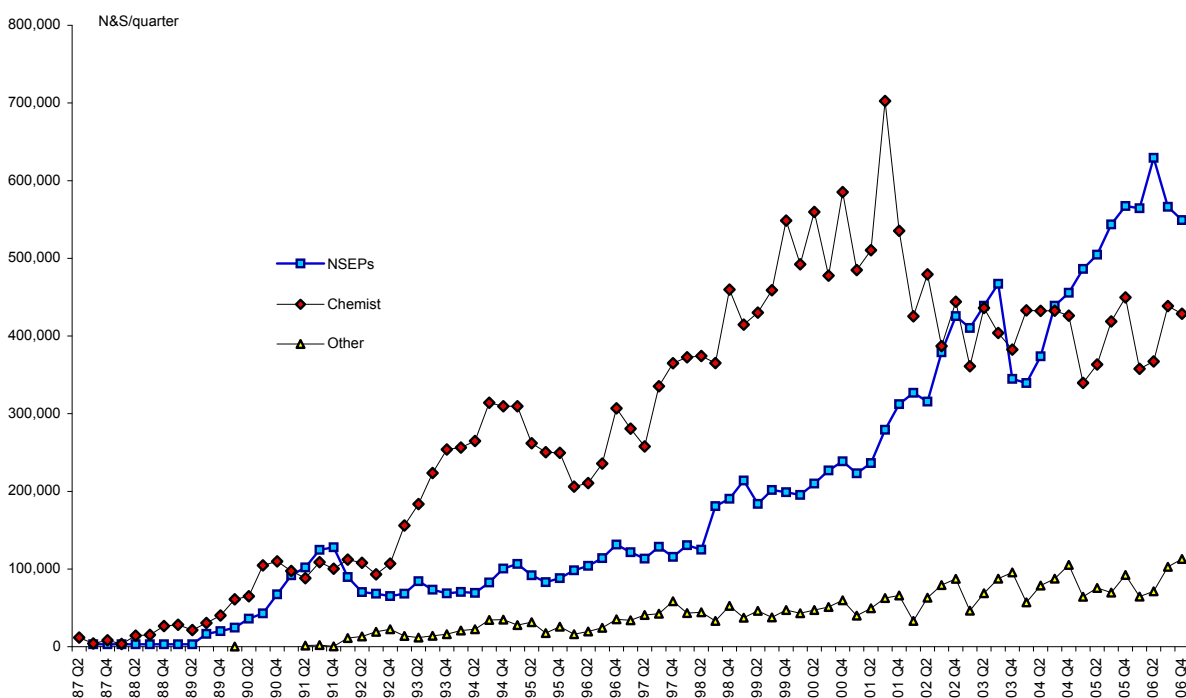
Introduction

The *Poisons Act 1964*, which has operated in Western Australia (WA) since May 1994, allows for approved organisations to provide sterile injecting equipment to people who inject drugs. A combination of government, non government and retail pharmacies provide needle and syringe (NSP) services throughout WA.

This publication summarises trends in needle and syringe (N&S) data from mid 1987, when programs were first established in WA in response to concern about the transmission of blood borne viruses (BBVs) among people who injected drugs. For further details about programs see the Methodology section (page A-9).

There are four models of NSPs currently operating in Western Australia as follows. The first program is needle and syringe exchange programs (NSEPs), which supply free sterile needles and syringes conditional on the return

Figure 1
Quarterly totals of needles and syringes distributed by type of outlet, WA, 1987 - 2006



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of used items ie “exchanged” or a cost recovery charge applies. NSEPs are operated from both fixed and mobile sites and in addition to providing a wide range of injecting equipment, other services such as education, support and referral services are also offered.

The second program is pharmacy based NSPs, which are run on a commercial basis via the retail sale of approved equipment such as Fitpack, Fitstick and Sterafit products. A feature of these packs is that they incorporate a self locking mechanism for the retention of used N&S for safe disposal.

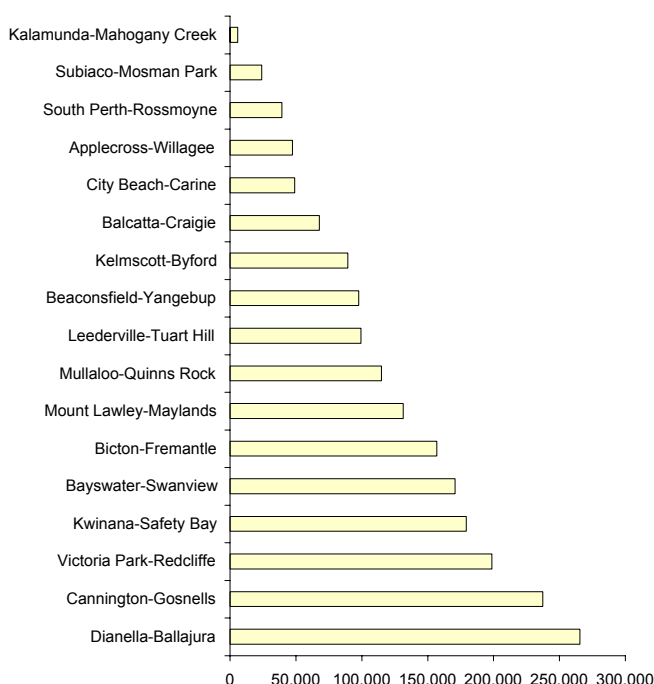
The third program is Health Service based. These operate out of regional and rural hospitals, Public Health Units and Community Health Centres. These outlets distribute free sterile N&S in form of Fitsticks. The fourth program is a vending machine, which involves a self service device which dispenses injecting equipment packs for a minimal charge.

Summary

Table 1 (page 3) shows that a total of 40,843,434 sterile N&S were distributed in WA from March 1987 to December 2006. Overall, just over half (55.3%) of all N&S were distributed through retail pharmacies and just over one third (37.6%) were distributed through mobile and fixed NSEPs.

Of the 15,356,913 N&S distributed through mobile and fixed NSEPs, 56.3% were distributed through mobile

Figure 2
Mean annual rate of distribution of needles & syringes, metropolitan localities, 2002 - 2006



NSEPs and 43.7% through NSEPs operating at fixed sites (Table 1, page 3).

In relation to the remaining N&S distributed through other outlets, 1,395,123 (3.4%) were distributed through hospitals, 592,791 (1.5%) were through vending machines and 929,292 (2.3%) were through other outlets such as community health centres, nursing posts, community based organisations and public health units (PHUs).

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 4,253,245 in 2006 - an increase from a mean of 196 per day in 1988 to a mean of 11,653 per day in 2006.

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 pharmacies and NSEPs. From 1993 with the expansion in pharmacy based programs, 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. Since mid 2005 there has been a moderate increase in N&S distributed per quarter, with a total of 428,722 in the December quarter 2006. See Tables A-1 and A-2 (pages A-1 and A-2).

The number of N&S distributed through NSEPs gradually increased from the beginning of 1993 to the September quarter 2003 (467,255) and then declined to the March quarter 2004 (339,496). However, since early 2004 the number of N&S distributed per quarter has steadily grown, with a peak of 629,334 in the June quarter 2006, with a small decline occurring over the latter part of 2006.

Figure 1 (page 1) shows that since mid 2004 more N&S have been distributed each quarter through NSEPs than through the chemist based program.

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.

Metropolitan Area

A ranking of the mean annual rate of distribution, based on the annual totals for the five year period from 2002 to 2006, for 17 localities throughout the Perth metropolitan area (excluding the Perth inner city locality) is presented in Figure 2. (*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.*)

This data provides a broad overview of variation in the Perth metropolitan area, of clustered groups of contiguous postcode localities based on the annual totals of N&S distributed from all outlets located in each postcode locality.

Further discussion of the limitations of this data is contained in the Methodology section (Page A-9).

This data has been averaged over a five year period rather than a one year period to avoid short term fluctuations in distribution (Table A-3, page A-3).

There were three localities in the Perth metropolitan area which had a mean of more than 200,000 and up to 275,000 N&S distributed per year - Dianella-Ballajura (275,452), Cannington-Gosnells (235,017) and Victoria Park-Redcliffe (201,711).

There were four localities which had a mean of between 125,000 and up to 200,000 N&S distributed per year- Kwinana-Safety Bay (179,166), Bayswater-Swan View (170,750), Bicton-Fremantle (156,893) and Mount Lawley-Maylands (131,372).

There were four localities which had a mean of between 75,000 and 125,000 N&S distributed per year- Mullaloo-Quinns Rock (114,839), Leederville-Tuart Hill (99,408), Beaconsfield-Yangebup (97,616) and Kelmscott-Byford (89,426).

Relatively few N&S were distributed in the remaining five metropolitan localities, with the least annual mean (5,718) recorded in the postcode areas of Kalamunda-Mahogany Creek.

Regional Centres

A ranking of the mean annual rate of distribution, based on the annual totals for the five year period from 2002 to 2006, for 12 selected non metropolitan towns and regional centres is presented in Figure 3 (page 4).

In these 12 localities it was found that in the 2002 to 2006 period, the highest number of N&S distributed was in Mandurah-Falcon-Secret Harbour postcode areas, with a mean of 142,814 N&S distributed per year (Table A-6, page A-4).

The next three highest regional centres were Bunbury-Eaton, Kalgoorlie-Boulder and Geraldton, which had means of 113,393, 99,076 and 67,355 N&S distributed per year, respectively.

Table 1
Annual totals of needles and syringes distributed by type of outlet, WA, 1987 - 2006

	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
2006	1,592,209	991,126	1,318,300	186,455	10,620	154,535	4,253,245
Total	22,569,315	8,647,729	6,709,184	1,395,123	592,791	929,292	40,843,434

Note: 'Other' includes community health centres, nursing posts, community based organisations and Public Health Units (PHUs). 'Mobile NSEP' includes Derbal Yerrigan which operated a mobile NSEP from 1996 to 1998 and since 2001 includes the service provided by WASUA in Bunbury. 'Vending machine' refers to vending machine which operated in East Perth up to 1999 and a new service which commenced in Kalgoorlie in 2001. Recent increases in 'other outlet' reflects increased distribution of Fitpacks by PHUs to hospitals within their regions.

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

A separate series of breakdowns of the number of N&S distributed in each of these 12 non metropolitan towns and regional centres from 1993 to 2006 is presented in Figures A-1 to A-12 (pages A-5 to A-7).

It should be noted that in some of these breakdowns of annual distribution of N&S in the more remote regional centres may overestimate distribution attributable to that centre, as the data includes outlets located outside of the centre due to the centralisation of ordering of supplies by PHUs.

A feature of these breakdowns is that there have been different patterns of the number of N&S distributed per year in these selected localities. For instance, in the localities of Kalgoorlie-Boulder relatively large numbers of N&S have been distributed per year throughout the 14 year period. In other regions, such as the localities of Bunbury-Eaton and Mandurah-Falcon-Secret Harbour and Geraldton there have been marked increases in the distribution of N&S.

The growth in these particular regional areas can be attributable to the expansion of access to sterile injection equipment with opening of additional distribution mechanisms, such as after hour services and an extension of metropolitan mobile service (Mandurah).

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.

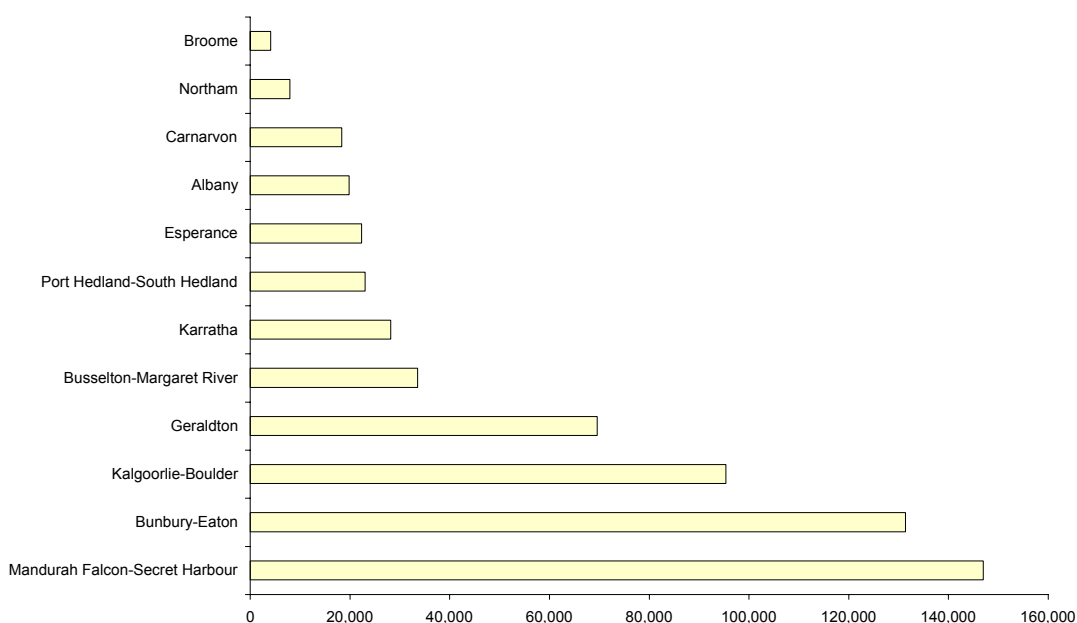
In Kalgoorlie-Boulder access to sterile injection equipment was expanded in 2001 with the commencement of a N&S vending machine on an after hours basis at the Kalgoorlie Regional Hospital. In conjunction with the reduced role of the hospital as a source of N&S, demand has grown for N&S provided at no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

In a number of other regions such as Broome and Carnarvon, the annual number of N&S has declined in recent years, whereas in other localities such as Esperance, Busselton-Margaret River and Karratha there has been steady increases in the distribution of N&S per year through pharmacy based programs operating in those areas.

Further research is required to be able to determine the extent to which in some of these regions the trends in increased distribution of N&S reflect improved risk reduction outcomes (eg decreased rates of re-use) as compared to the development of localised increased levels of injecting drug use.

Figure 3
Mean annual rate of distribution of needles & syringes, regional centres, 2002 - 2006



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.

Appendices: Data Tables & Figures

Table A-1
Quarterly totals of needles & syringes distributed by type of outlet
1987 - 1996

		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
1989	Qtr 4	3,000	26,540	-	29,540
	Qtr 1	3,000	28,210	-	31,210
	Qtr 2	3,000	21,370	-	24,370
1990	Qtr 3	16,587	30,500	-	47,087
	Qtr 4	20,061	40,180	-	60,241
	Qtr 1	24,610	60,975	250	85,835
	Qtr 2	36,117	64,930	-	101,047
1991	Qtr 3	42,894	104,700	-	147,594
	Qtr 4	67,410	109,750	-	177,160
	Qtr 1	91,945	97,530	-	189,475
	Qtr 2	101,970	88,210	1,400	191,580
1992	Qtr 3	124,677	108,780	1,960	235,417
	Qtr 4	128,018	100,300	400	228,718
	Qtr 1	89,581	112,165	11,148	212,894
	Qtr 2	70,363	108,000	13,107	191,470
1993	Qtr 3	68,152	93,150	19,077	180,379
	Qtr 4	65,140	106,885	22,558	194,583
	Qtr 1	68,244	155,945	13,766	237,955
	Qtr 2	84,187	183,705	11,655	279,547
1994	Qtr 3	73,271	223,545	13,915	310,731
	Qtr 4	68,721	253,830	16,005	338,556
	Qtr 1	70,553	256,340	20,905	347,798
	Qtr 2	69,149	264,760	22,395	356,304
1995	Qtr 3	82,686	314,070	34,485	431,241
	Qtr 4	100,595	309,540	34,840	444,975
	Qtr 1	106,594	309,575	27,820	443,989
	Qtr 2	91,863	261,920	31,630	385,413
1996	Qtr 3	82,999	250,440	17,555	350,994
	Qtr 4	88,215	249,635	25,735	363,585
	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

Note: 'Other' includes community health centres, nursing posts, community based organisations and 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 - 2006

		NSEPs	Chemist	Other	Total
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
2006	Qtr 1	564,476	357,765	64,478	986,719
	Qtr 2	629,334	367,226	71,306	1,067,866
	Qtr 3	566,328	438,496	102,810	1,107,634
	Qtr 4	549,288	428,722	113,016	1,091,026

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

Table A-3
Distribution of needles & syringes by locality, Perth metropolitan area, 2002 - 2006

Locality	Postcodes	Annual number of N&S					Mean annual (2002-2006)
		2002	2003	2004	2005	2006	
Perth inner city	6000, 6003-6005	891,297	986,445	945,745	1,274,384	1,415,240	1,102,622
Mount Lawley-Maylands	6050-6052	164,720	131,658	139,602	112,848	108,034	131,372
Bicton-Fremantle	6157-6161	118,325	142,186	145,870	177,907	200,177	156,893
Leederville-Tuart Hill	6006-6007, 6016-6017, 6060	128,464	120,478	104,670	80,296	63,132	99,408
Victoria Park-Redcliffe	6100-6106	202,992	183,148	206,303	201,646	198,857	198,589
Cannington-Gosnells	6107-6110, 6147	228,642	205,218	237,973	255,915	258,949	237,339
Dianella-Ballajura	6059, 6061-6064, 6066-6068, 6090	275,709	253,669	275,091	260,747	262,574	265,558
Kwinana-Safety Bay	6167-6172	129,277	168,274	184,299	192,210	221,771	179,166
Kelmscott-Byford	6111-6112, 6201, 6121-6126	89,376	80,169	86,286	92,751	98,550	89,426
Bayswater-Swanview	6053-6058, 6069, 6084	149,795	170,584	163,087	183,170	187,116	170,750
Beaconsfield-Yangebup	6162-6166	91,382	90,068	104,933	92,488	109,209	97,616
Mullaloo-Quinns Rock	6027-6028, 6030-6035, 6037, 6041-6044, 6065	116,911	114,584	112,148	118,902	111,648	114,839
Balcatta-Craigie	6021-6026	84,583	69,955	70,155	59,786	54,367	67,769
South Perth- Rossmoyne	6148, 6151-6152	49,028	43,978	37,298	34,087	32,871	39,452
City Beach-Carine	6015, 6018-6020, 6029	62,240	50,448	47,537	42,979	42,141	49,069
Applecross-Willagee	6149-6150, 6153-6156	54,779	46,608	43,604	48,064	43,457	47,302
Subiaco-Mosman Park	6008-6012, 6014	30,844	26,153	26,153	22,189	14,992	24,066
Kalamunda-Mahogany Creek	6070-6074, 6076, 6081-6083	7,555	6,228	5,474	4,404	4,927	5,718
Total		2,875,919	2,889,851	2,936,228	3,254,773	3,428,012	3,076,957

Table A-4**Annual totals of needles and syringes distributed by selected towns & localities, WA, 1993 - 1999**

	1993	1994	1995	1996	1997	1998	1999
Esperance (6450)	2,955	3,280	4,950	5,010	6,865	10,915	10,298
Albany (6330)	4,625	7,085	3,900	3,120	2,930	4,719	7,700
Busselton-Margaret River (6280-6285)	4,555	10,270	8,820	10,020	15,025	22,920	23,229
Bunbury-Eaton (6230-6232)	7,085	25,610	18,855	21,450	31,840	45,220	61,769
Mandurah-Falcon-Secret Harbour (6173-6176, 6210)	22,515	29,800	32,675	34,095	44,285	53,905	62,900
Northam (6401)	305	1,515	2,590	1,925	1,620	3,975	5,430
Kalgoorlie-Boulder (6430-6432)	32,375	77,590	59,310	64,710	108,415	104,630	102,109
Geraldton (6530-6531)	21,830	30,330	18,745	19,635	18,220	23,498	35,625
Carnarvon (6701)	3,700	5,500	2,940	6,080	7,020	11,006	11,139
Karratha (6714)	1,680	3,140	3,510	4,130	2,110	3,780	7,864
Port Hedland-South Hedland (6721)	2,360	4,970	13,615	12,525	13,105	17,375	15,800
Broome (6725)	3,270	4,560	3,545	3,740	4,220	6,400	10,540

Table A-5**Annual totals of needles and syringes distributed by selected towns & localities, WA, 2000 - 2006**

	2000	2001	2002	2003	2004	2005	2006
Esperance (6450)	14,922	15,727	15,812	11,501	23,218	31,830	29,171
Albany (6330)	24,019	22,301	13,605	15,692	22,982	21,300	25,446
Busselton - Margaret River (6280-6285)	17,518	20,447	25,231	18,958	30,513	40,185	52,813
Bunbury - Eaton (6230-6232)	42,604	23,634	56,679	136,797	157,462	149,508	156,278
Mandurah - Falcon - Secret Harbour (6173-6176, 6210)	70,827	117,798	142,094	138,343	118,752	152,152	178,150
Northam (6401)	6,510	9,325	7,335	6,697	9,969	9,711	5,942
Kalgoorlie - Boulder (6430-6432)	118,256	117,750	108,737	114,782	98,592	80,065	74,628
Geraldton (6530-6531)	52,254	56,190	58,592	63,712	72,603	74,220	78,814
Carnarvon (6701)	8,945	14,372	18,650	15,100	26,650	15,950	15,380
Karratha (6714)	25,210	21,174	24,880	22,820	34,472	27,750	30,850
Port Hedland - South Hedland (6721)	5,775	6,370	6,225	8,150	6,318	35,800	58,661
Broome (6725)	11,715	17,000	6,785	3,580	3,400	3,260	3,440

Table A-6**Summary of distribution of needles & syringes by selected towns & localities, 2002 - 2006**

	Postcodes	Mean annual (2002-2006)
Esperance	6450	21,210
Albany	6330	20,221
Busselton - Margaret River	6280-6285	31,358
Bunbury - Eaton	6230-6232	113,393
Mandurah - Falcon - Secret Harbour	6173-6176, 6210	142,814
Northam	6401	8,163
Kalgoorlie - Boulder	6430-6432	99,076
Geraldton	6530-6531	67,355
Carnarvon	6701	17,684
Karratha	6714	26,991
Port Hedland - South Hedland	6721-6722	20,237
Broome	6725	6,244

Figure A-1
Annual needles and syringes, Esperance post-code area, 1993 - 2006

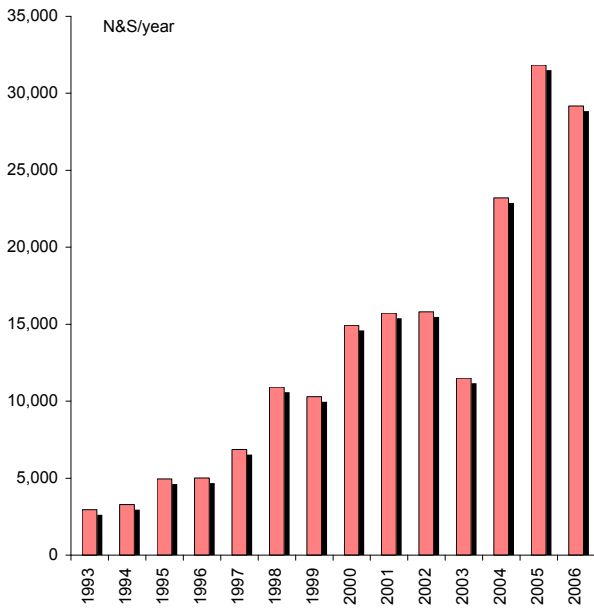


Figure A-3
Annual needles and syringes, Busselton-Margaret River postcode areas, 1993 - 2006

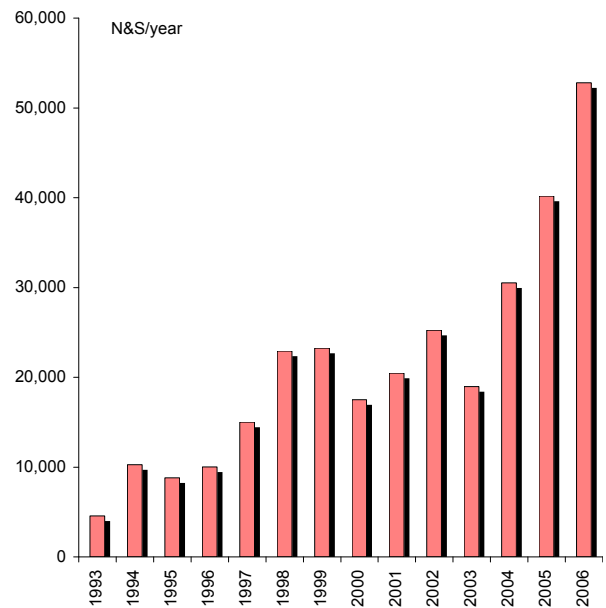


Figure A-2
Annual needles and syringes, Albany postcode area, 1993 - 2006

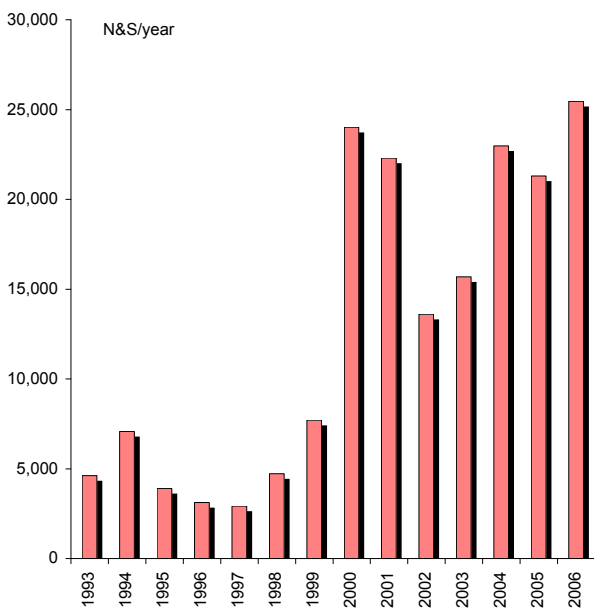


Figure A-4
Annual needles and syringes, Bunbury-Eaton postcode areas, 1993 - 2006

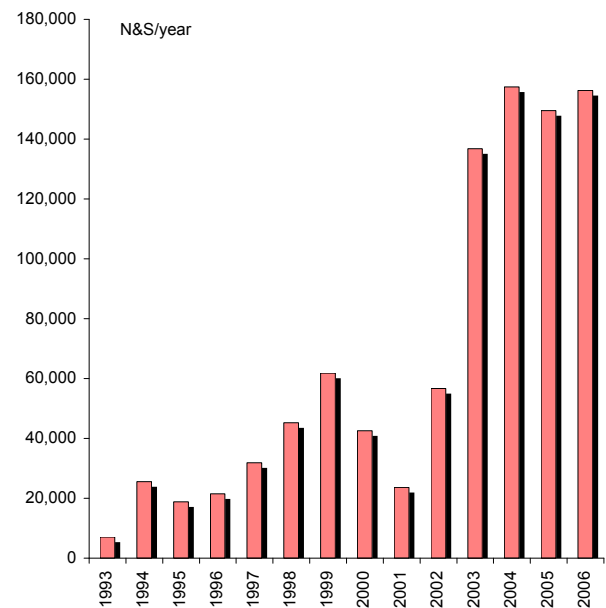


Figure A-5
Annual needles and syringes, Mandurah - Falcon postcode area, 1993 - 2006

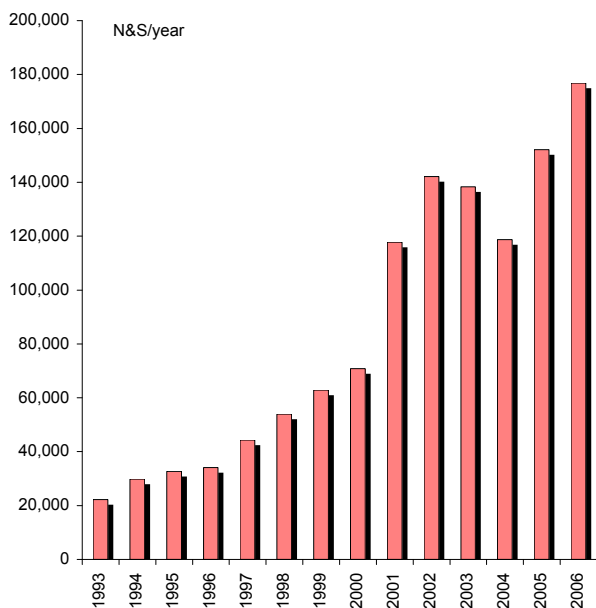


Figure A-7
Annual needles and syringes, Kalgoorlie - Boulder postcode areas, 1993 - 2006

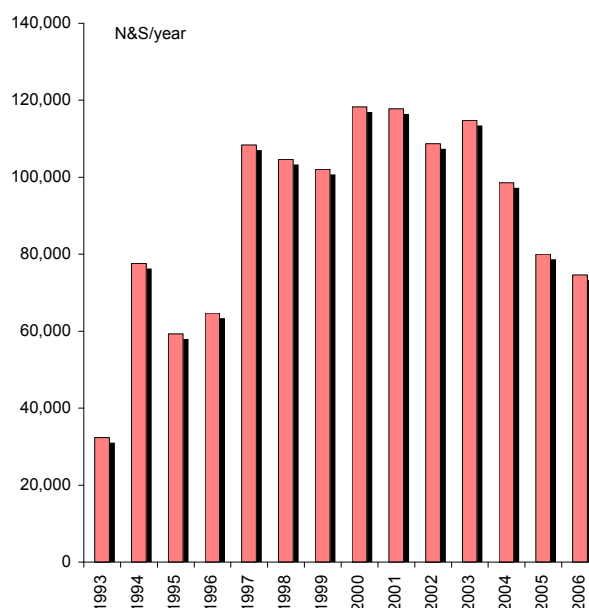


Figure A-6
Annual needles and syringes, Northam post-code area, 1993 - 2006

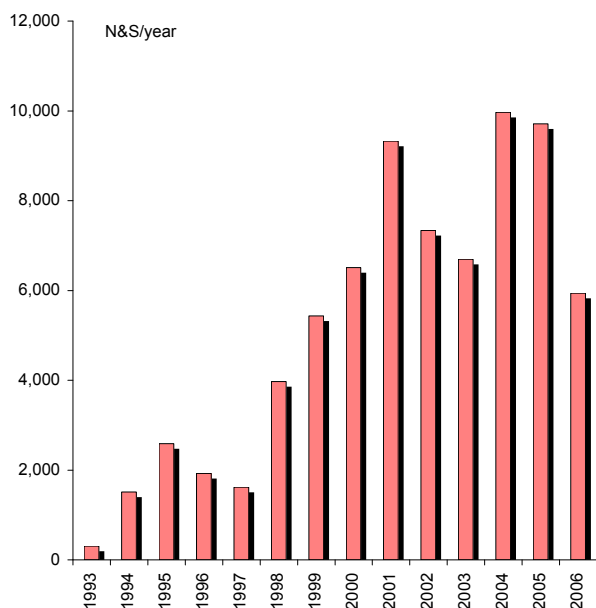


Figure A-8
Annual needles and syringes, Geraldton post-code area, 1993 - 2006

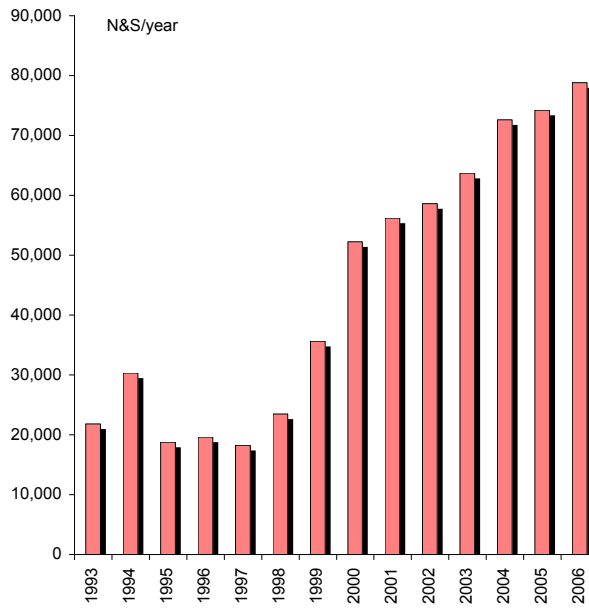


Figure A-9
Annual needles and syringes, Carnarvon post-code area, 1993 - 2006

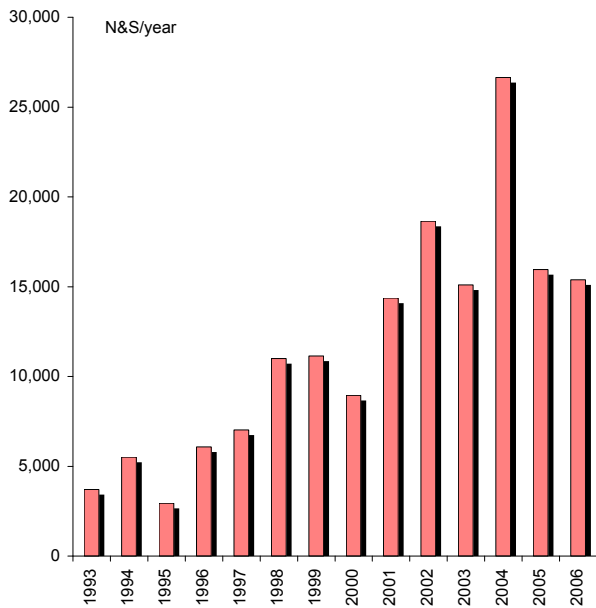


Figure A-11
Annual needles and syringes, Port Hedland - South Hedland postcode areas, 1993 - 2006

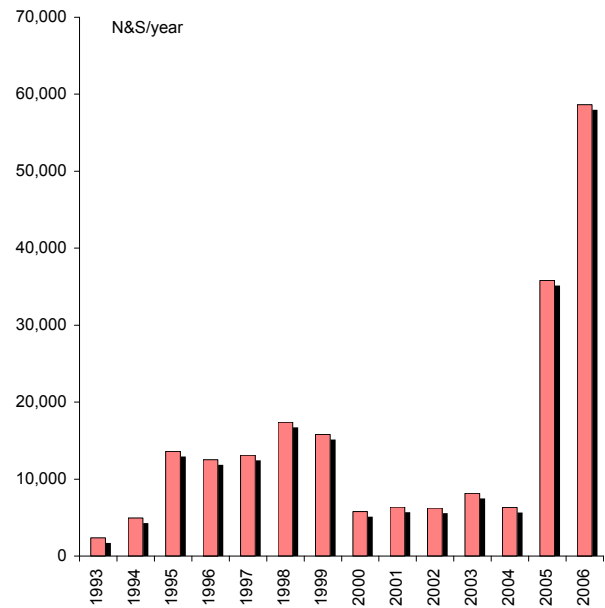


Figure A-10
Annual needles and syringes, Karratha post-code area, 1993 - 2006

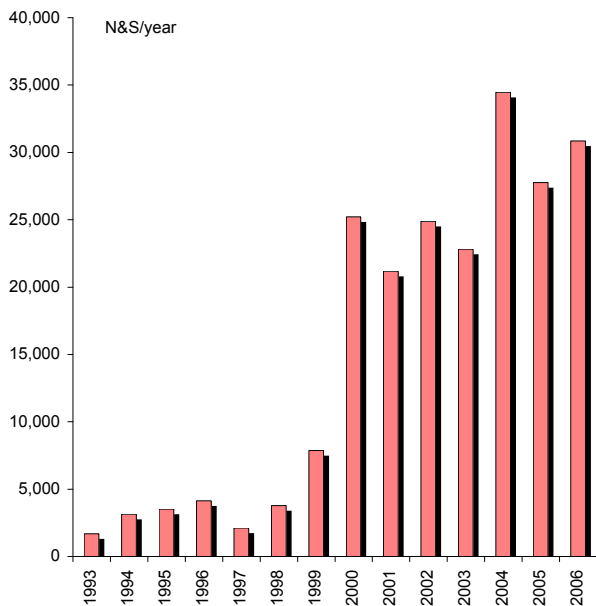
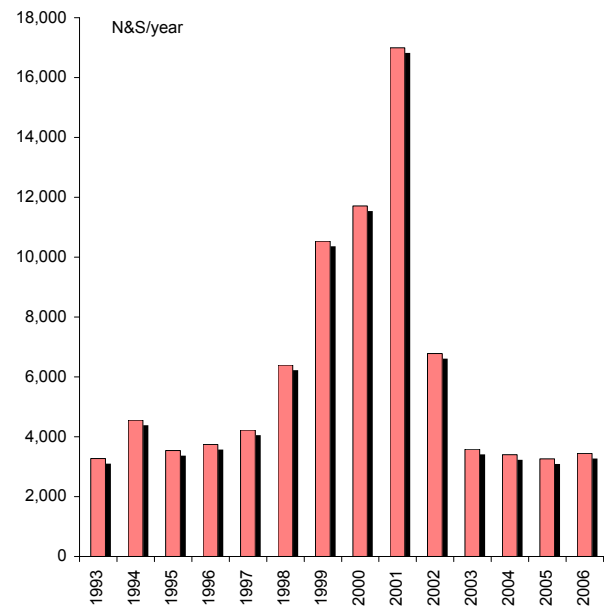


Figure A-12
Annual needles and syringes, Broome post-code area, 1993 - 2006



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

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, Bedforddale, 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, 6030-6035, 6037, 6041-6044, 6065

Joondalup, Currabine, 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), *Statistical Bulletin No. 23* (July 2006) and *Statistical Bulletin No. 30* (January 2007).

Source of data

The data contained in this bulletin is provided by the Sexual Health and Blood Borne Virus Program (SHBBVP) Communicable Disease Control Directorate, which has overall responsibility for the State's needle and syringe program.

As 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 the Perth metropolitan area, 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 has been possible to undertake an analysis of the total number of N&S distributed since 2000 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, pharmacies 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.

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. This could be misinterpreted as indicating the inner city area is an area in which high levels of injecting drug use occur. However, 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 metropolitan and regional areas.

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
SHBBVP	Sexual Health and Blood Borne Virus Program
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.

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