

Statewide Summary of Breath Alcohol Data For Year 2008

The following report summarizes the breath alcohol data obtained from BAC Datamaster breath test instruments in association with DUI arrests performed in Washington State during the year 2008. Only breath alcohol results of 0.01 g/210L or greater are included in this summary. This summary should be considered an approximation since the accuracy, in several respects, depends on the reliability of the data entered and the successful collection by the host computer.

The following table shows the average breath alcohol concentration for each age group

Mean Breath Alcohol Concentration by Age Group

alc1

Age Group	Mean	N	Std. Deviation
13 to 19	.1011	2317	.05188
20 to 29	.1372	13432	.04980
30 to 39	.1470	6572	.05345
40 to 49	.1524	5214	.05846
50 to 59	.1515	2758	.05984
60 to 69	.1437	753	.05637
70 and Over	.1317	199	.04470
Total	.1405	31245	.05482

The following table shows the percent of male and female found within each age category

Age by Gender Crosstabulation

		Gender		Total
		Female	Male	
Age	13 to 19	649	1908	2557
		25.4%	74.6%	100.0%
	20 to 29	3550	12292	15842
		22.4%	77.6%	100.0%
	30 to 39	1838	6568	8406
		21.9%	78.1%	100.0%
	40 to 49	1754	5279	7033
		24.9%	75.1%	100.0%
	50 to 59	812	2778	3590
		22.6%	77.4%	100.0%
	60 to 69	171	767	938
		18.2%	81.8%	100.0%
	70 and Over	36	220	256
		14.1%	85.9%	100.0%
Total		8810	29812	38622
		22.8%	77.2%	100.0%

The following table shows the mean breath alcohol concentrations for males and females:

Mean Breath Alcohol by Gender

alc1

Gender	Mean	N	Std. Deviation
Female	.1417	7223	.05553
Male	.1402	24048	.05461
Total	.1405	31271	.05483

The following table shows the distribution of those arrested for DUI by race:

Frequency by Racial Group

	Frequency	Percent	Valid Percent	Cumulative Percent
Asian	1203	3.1	3.1	3.1
Black	2137	5.6	5.6	8.7
East Indian	33	.1	.1	8.8
Hispanic	2830	7.4	7.4	16.2
Native American	956	2.5	2.5	18.7
Pacific Island	68	.2	.2	18.8
Unknown	603	1.6	1.6	20.4
White	30531	79.6	79.6	100.0
Total	38361	100.0	100.0	

The following table shows the mean alcohol concentrations by racial category:

Mean Breath Alcohol by Racial Group

alc1

race	Mean	N	Std. Deviation
Asian	.1245	970	.04703
Black	.1314	1624	.05238
East Indian	.1408	21	.06090
Hispanic	.1395	2323	.05185
Native American	.1602	705	.05683
Pacific Island	.1270	56	.05191
Unknown	.1382	499	.05088
White	.1414	24826	.05529
Total	.1405	31024	.05481

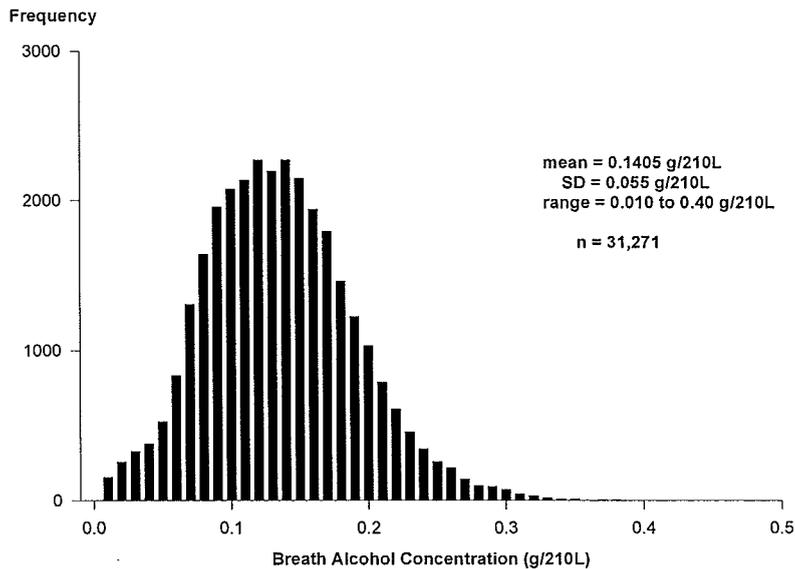
The following table shows the distribution of gender according to the different racial groups:

Race by Gender Crosstabulation

		Gender		Total
		Female	Male	
Race	Asian	289	914	1203
		24.0%	76.0%	100.0%
	Black	335	1802	2137
		15.7%	84.3%	100.0%
	East Indian	1	32	33
		3.0%	97.0%	100.0%
	Hispanic	235	2595	2830
		8.3%	91.7%	100.0%
	Native American	349	607	956
		36.5%	63.5%	100.0%
	Pacific Island	14	54	68
		20.6%	79.4%	100.0%
	Uknown	70	533	603
		11.6%	88.4%	100.0%
	White	7472	23059	30531
		24.5%	75.5%	100.0%
Total		8765	29596	38361
		22.8%	77.2%	100.0%

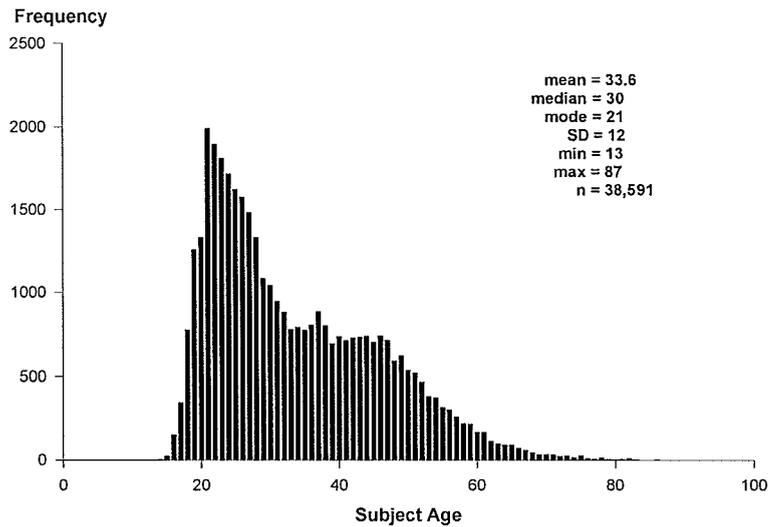
The following is the distribution of all breath alcohol results for all subjects arrested for DUI during 2008 who provided a breath sample. 88% of the subjects were 0.080 g/210L or greater.

Distribution of Breath Alcohol Concentration For The First Sample
Statewide Data 2008

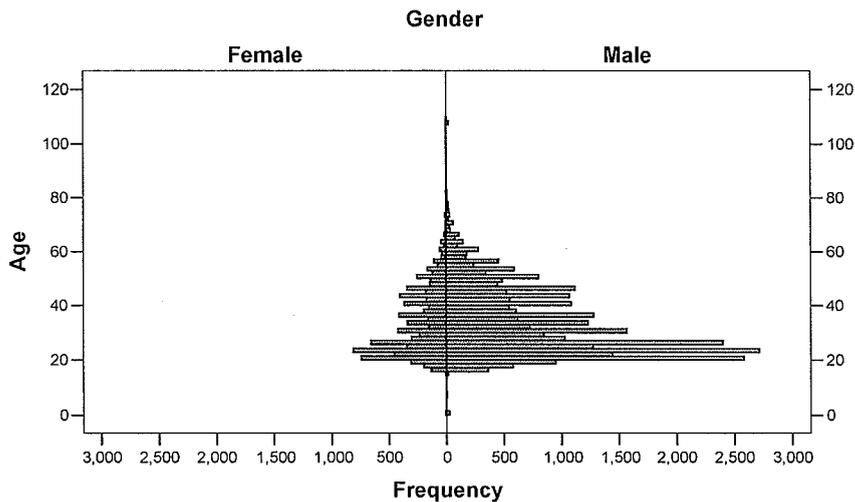


The following plot shows the distribution of subject age for statewide DUI arrests during 2008:

Distribution of Age for Subjects Arrested For DUI Statewide During 2008



The following shows a population pyramid which compares the age distribution for females and males side by side. From this the two distributions can be better compared. We see for the males there are more subjects at the higher ages than for females. Also, there appears to be a larger proportion of males in the 20 to 30 year age group compared to the females. The large majority of males compared to females are clearly seen in comparing the two figures.



The following table shows the mean alcohol concentration for subjects arrested by the Washington State Patrol (WSP) compared to other agencies:

Mean Breath Alcohol by Agency

alc1

Agency	Mean	N	Std. Deviation
WSP	.1320	14685	.05161
Seattle PD	.1525	723	.05790
King County SO	.1565	687	.05646
Spokane PD	.1685	406	.05622
Tacoma PD	.1617	364	.05969
Other Agencies	.1466	14406	.05612
Total	.1405	31271	.05483

The following table shows the refusal rates by gender:

Gender by Test Refusal Rates

		Test Refusal Status		Total
		Refused Test	Provided Sample	
Gender	Female	1330 15.1%	7491 84.9%	8821 100.0%
	Male	5255 17.6%	24585 82.4%	29840 100.0%
Total		6585 17.0%	32076 83.0%	38661 100.0%

The following table shows the refusal rate for WSP compared to Other Agencies:

Agency by Refusal Rate

		Test Refusal Status		Total
		Refused Test	Provided Sample	
Agency	WSP	2555 14.6%	14935 85.4%	17490 100.0%
	Seattle PD	221 22.4%	767 77.6%	988 100.0%
	King County SO	165 18.9%	707 81.1%	872 100.0%
	Spokane PD	174 29.4%	418 70.6%	592 100.0%
	Tacoma PD	99 21.0%	372 79.0%	471 100.0%
	Other Agencies	3371 18.5%	14877 81.5%	18248 100.0%
	Total	6585 17.0%	32076 83.0%	38661 100.0%

The following table shows refusal rates by racial group:

Refusal Rates by Racial Group

	Test Refusal Status		Total
	Refused Test	Provided Sample	
Race Asian	196 16.3%	1007 83.7%	1203 100.0%
Black	464 21.7%	1673 78.3%	2137 100.0%
East Indian	8 24.2%	25 75.8%	33 100.0%
Hispanic	452 16.0%	2378 84.0%	2830 100.0%
Native American	238 24.9%	718 75.1%	956 100.0%
Pacific Island	12 17.6%	56 82.4%	68 100.0%
Unknown	88 14.6%	515 85.4%	603 100.0%
White	5081 16.6%	25450 83.4%	30531 100.0%
Total	6539 17.0%	31822 83.0%	38361 100.0%

The following table illustrates the breath test refusal rates by age group.

Refusal Rate by Age Group

	Test Refusal Status		Total
	Refused Test	Provided Sample	
Age 13 to 19	214 8.4%	2343 91.6%	2557 100.0%
20 to 29	2126 13.4%	13716 86.6%	15842 100.0%
30 to 39	1673 19.9%	6733 80.1%	8406 100.0%
40 to 49	1642 23.3%	5391 76.7%	7033 100.0%
50 to 59	725 20.2%	2865 79.8%	3590 100.0%
60 to 69	152 16.2%	786 83.8%	938 100.0%
70 and Over	42 16.4%	214 83.6%	256 100.0%
Total	6574 17.0%	32048 83.0%	38622 100.0%

The following table illustrates the breath test refusal rates by each of the Washington State Patrol Districts:

Breath Test Refusal Rates by WSP District

District	Test Refusal Status		Total
	Refused Test	Provided Sample	
1.00	379 15.4%	2089 84.6%	2468 100.0%
2.00	572 16.0%	2999 84.0%	3571 100.0%
3.00	228 14.0%	1401 86.0%	1629 100.0%
4.00	173 13.8%	1078 86.2%	1251 100.0%
5.00	220 13.5%	1405 86.5%	1625 100.0%
6.00	114 11.7%	860 88.3%	974 100.0%
7.00	612 14.4%	3642 85.6%	4254 100.0%
8.00	236 14.5%	1391 85.5%	1627 100.0%
Total	2534 14.6%	14865 85.4%	17399 100.0%

The following table illustrates the mean breath alcohol concentration obtained in Washington State Patrol DUI arrests by District:

Mean Breath Alcohol Concentration by WSP District

alc1

District	Mean	N	Std. Deviation
1.00	.1380	2052	.05386
2.00	.1264	2968	.04738
3.00	.1300	1378	.04892
4.00	.1445	1060	.05236
5.00	.1346	1373	.05404
6.00	.1341	841	.05390
7.00	.1286	3590	.05069
8.00	.1321	1354	.05492
Total	.1320	14616	.05163

The following table illustrates the number and percent of Washington State Patrol DUI arrests coming from accident investigations within each District:

Percent of DUI Arrests Coming From Accidents by WSP District

	Accident		Total
	No Accident	Accident	
District 1.00	2012 81.5%	456 18.5%	2468 100.0%
2.00	3077 86.2%	494 13.8%	3571 100.0%
3.00	1487 91.3%	142 8.7%	1629 100.0%
4.00	1059 84.7%	192 15.3%	1251 100.0%
5.00	1384 85.2%	241 14.8%	1625 100.0%
6.00	889 91.3%	85 8.7%	974 100.0%
7.00	3868 90.9%	386 9.1%	4254 100.0%
8.00	1405 86.4%	222 13.6%	1627 100.0%
Total	15181 87.3%	2218 12.7%	17399 100.0%

The following table illustrates the number and percent of DUI arrests coming from accident investigations for different agencies within the state:

Percent of DUI Arrests Coming From Accidents for Different Agencies

Agency	Accident		Total
	No Accident	Accident	
WSP	15265 87.3%	2225 12.7%	17490 100.0%
Seattle PD	624 63.2%	364 36.8%	988 100.0%
King County SO	626 71.8%	246 28.2%	872 100.0%
Spokane PD	367 62.0%	225 38.0%	592 100.0%
Tacoma PD	314 66.7%	157 33.3%	471 100.0%
Other Agencies	15085 82.7%	3163 17.3%	18248 100.0%
Total	32281 83.5%	6380 16.5%	38661 100.0%

Summarizing Figures:

2.5% of the first breath sample attempts results in "Invalid Sample"

80 (0.2%) of the first breath sample attempts resulted in "Interference Detected"

21.3% of the DUI arrests statewide were done in King County for 2008.

79% of the tests performed in 2008 had a generic code entered for the Liquor Board License Number. As a result, 22% had an actual Liquor Board License Number entered as the place where the subject was last drinking.

54% of the subjects were administered PBT tests.

99.3% of the duplicate breath tests agreed within the required $\pm 10\%$ of the mean.

The following shows the top twenty-five liquor licensed establishments identified most frequently in the breath test database during 2008:

Rank	Name	Location	License Number	DUI Contacts
1	Lady Luck Cowgirl Up Steakhouse	Tacoma	357687	69
2	The Vault	Olympia	081860	64
3	Tulalip Casino	Marysville	085216	59
4	Hoops Sports B & G	Yakima	356926	54
5	Mukelshoot Casino	Auburn	079098	51
6	Wayne's Inn	Puyallup	357372	47
7	Charley's B & G	Olympia	354881	44
8	McClouds	Bremerton	086908	43
9	Emerald Queen Casino	Fife	366407	40
10	Schotze's	Everett	077604	40
11	Joker's Casino	Richland	357267	40
12	Oscar's B & G	Vancouver	368430	39
13	Suquamish Clearwater Casino	Suquamish	079392	36
14	The Shark	Kirkland	355289	36
15	The Royal Inn	Bellingham	353649	34
16	Jake's on 4th	Olympia	078740	32
17	Charley's Steak and Ale	Fircrest	357678	32
18	Pint and Quarters Ale House	Lacey	071452	31
19	The Sand Bar	Moses Lake	350084	30
20	Papa's Casino Rest. & Lng	Moses Lake	350542	30
21	Daverthump's Pub	Lynnwood	357903	29
22	The Pub	Kennewick	360487	28
23	Silver Reef Casino	Ferndale	084034	27
24	O'Henry's Sports Bar	Puyallup	087019	25
25	Sharky's Pub	Sumner	351772	25

R. G. Gullberg

Washington State Patrol 1/21/2009