# Reducing Alcohol-Related Harms in Los Angeles County

A Cities and Communities Health Report





# Message from the Health Officer

As the second-leading cause of premature death and disability in Los Angeles County,<sup>1</sup> excessive alcohol consumption continues to be a serious public health concern. Each year 2,500 people in the county die from alcohol-related causes, with the loss of approximately 78,000 years of potential life. In addition to the devastating personal and societal effects of alcohol abuse on individuals, families, and communities, excessive alcohol consumption costs Los Angeles County an estimated \$10.8 billion annually, or roughly \$1,000 for every resident.<sup>2</sup>



More than half of adults in Los Angeles County report drinking alcohol in the past month. When used in moderation, alcohol use may have modest health

benefits. However, excessive alcohol consumption, which includes binge drinking<sup>3</sup> and heavy drinking,<sup>4</sup> leads to serious medical illnesses, impaired mental health, increased motor vehicle crashes, increased rates of violent crime, and a multitude of other harmful social consequences on family interactions, work productivity, and school performance.

An estimated 16.2% (or 1,190,000) of county adults are binge drinkers (Figure 1) and an additional 3.3% (or 242,000) are heavy drinkers (Figure 2). Both binge drinking and heavy drinking are more common among males and young adults; heavy drinking is also more common among whites and those of higher socioeconomic status. The high rates of binge drinking among teens and young adults are a particular cause for concern, as close to 1 in 5 high school students in Los Angeles reported at least one episode of binge drinking in the past month.

A high density of alcohol outlets increases alcohol consumption,<sup>6</sup> motor vehicle crashes,<sup>7</sup> alcohol-related hospital admissions,<sup>8</sup> injury deaths,<sup>9</sup> assaults and violent crime,<sup>10</sup> suicides,<sup>7</sup> drinking and driving,<sup>11,12</sup> child maltreatment,<sup>13</sup> and neighborhood disturbances.<sup>14</sup> In this report, we examined the relationship between the density of alcohol outlets and three alcohol-related harms in 117 cities and communities across Los Angeles County and found similar results; increased rates of violent crime, alcohol-involved motor vehicle crashes, and alcohol-related deaths were all associated with having a high density of alcohol outlets in that city or community.

Limiting the density of alcohol outlets is one effective approach to reducing excessive alcohol consumption and alcohol-related harms. <sup>15</sup> To assist communities in designing strategies and in policy making efforts to prevent alcohol-related harms, this report provides a profile of alcohol outlet density and alcohol-related consequences by city and community. We hope the information provided will help support and strengthen efforts to prevent alcohol-related diseases and injuries throughout the county.

Jonathan E. Fielding, MD, MPH

Director of Public Health and Health Officer

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**Figure 1.** Percent of Adults Who Reported Binge Drinking in the Past Month, by Age Group, 2007 Binge drinking for females is drinking 4 or more drinks, and for males 5 or more drinks, on one occasion at least one time in the past month. Source: 2007 Los Angeles County Health Survey

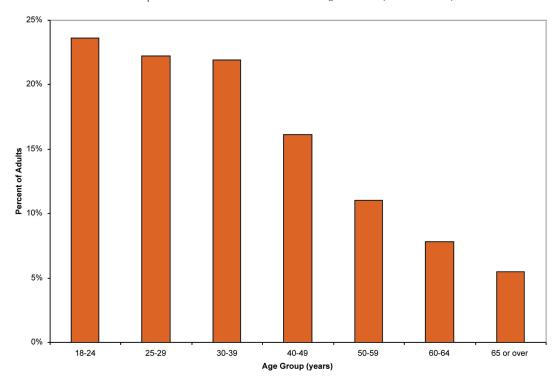
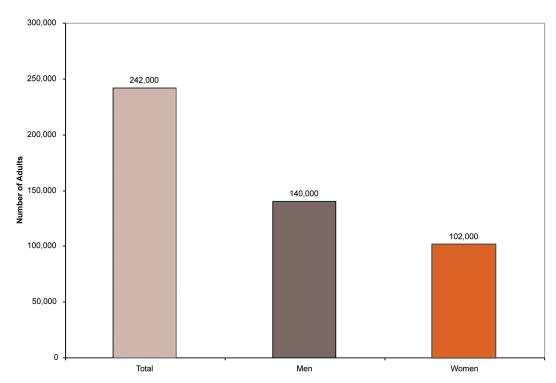


Figure 2. Number of Adults Who Reported Heavy Drinking in the Past Month, by Gender, 2007 Heavy drinking for males is consuming more than 60 drinks, and for females more than 30 drinks, in the past month. Source: 2007 Los Angeles County Health Survey



## **Study Methods**

#### **Defining Cities and Communities within Los Angeles County**

Cities and communities (unincorporated areas) in Los Angeles County were defined using the Census 2000 Incorporated Places and Census Designated Places. The city of Los Angeles was further divided into its 15 city council districts to provide more local information.<sup>16</sup>

The 2007 population estimates for Los Angeles County<sup>17</sup> were used to determine density and those at risk for alcohol-related harms. Cities and communities with less than 10,000 residents are excluded from this report because estimates for these areas are unreliable. For each of the remaining 117 cities and communities, the density of alcohol outlets and the rates of several alcohol-related harms were examined.

#### **Determining Alcohol Outlet Density**

Information on alcohol outlets within Los Angeles County was obtained from the California Department of Alcoholic Beverage Control (ABC). <sup>18</sup> ABC categorizes alcohol outlets as:

- *on-premises* outlets where alcohol is served to be consumed on site, e.g. bars and restaurants.
- off-premises outlets where alcohol is sold to be consumed off site, e.g. liquor stores and grocery stores.<sup>19</sup>

A total of 16,039 alcohol outlets in LA County were identified and included in the analysis. The densities (number of outlets per 10,000 residents) of on-premises and off-premises alcohol outlets were calculated separately, and categorized into tertiles of "low," "medium," or "high" density.

#### **Measuring Alcohol-Related Harms**

In this report, three alcohol-related harms were examined: alcohol-involved motor vehicle crashes,<sup>20</sup> violent crimes,<sup>21</sup> and alcohol-related deaths.<sup>22</sup> These three harms were analyzed because city/community-level data were available and because they have been found in other studies to be related to alcohol outlet density.

#### **Data Analysis**

As the intent of this report was to explore the potential impact of the density of alcohol outlets on cities and communities, all data were aggregated at the city and community level. The density of on-premises and off-premises alcohol outlets and the rates of alcohol-related harms (motor vehicle crashes, violent crime, and deaths) were calculated for each city/community. Each city/community was then ranked relative to others in Los Angeles County, where a low ranking indicates fewer alcohol outlets per resident and a high ranking indicates more alcohol outlets per resident. While the relative rankings are listed, alcohol outlet density was also categorized into three groups (low/medium/high) by tertile, and alcohol-related harms were categorized into four groups (lowest/low/high/highest) by quartile, to allow for more stable and easily interpretable comparisons.

Logistic regression modeling was performed to examine the associations between alcohol outlet density and alcohol-related harms, adjusting for economic hardship to account for neighborhood socioeconomic conditions. Details regarding the economic hardship index have been published elsewhere. No adjustments were made for other neighborhood characteristics; e.g., population density, neighborhood diversity, or urban versus rural.

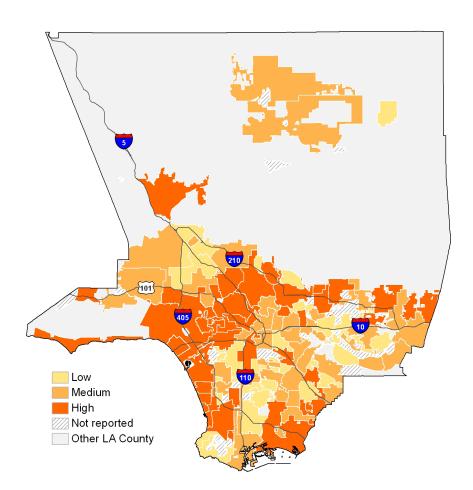
## **Findings**

#### **Alcohol Outlet Density**

In Los Angeles County, there is an average of 16 alcohol outlets (on- and off-premises combined) per 10,000 people and about four alcohol outlets per square mile. This is slightly lower than the statewide average for California of 18 outlets per 10,000 people. However, outlet density varies widely among cities and communities across the county, ranging from 0 to 47.3 (West Hollywood) on-premises alcohol outlets, and 0 to 23.8 (Commerce) off-premises alcohol outlets per 10,000 residents. *Table 1* presents the density of on-premises and off-premises alcohol outlets for each city and community.

The geographic distribution of on- and off-premises outlets differs (Maps 1 and 2). There is a higher density of *on*-premises outlets in affluent communities, including the Beach Cities, West Hollywood, and some Foothill communities (Map 1, p<0.001). On the other hand, a higher density of *off*-premises outlets was only weakly associated with less affluent communities (Map 2, p=0.076), with higher density seen in some central and south Los Angeles communities, as well as the cities of Commerce, Malibu, and Sante Fe Springs.

Map 1. On-Premises Alcohol Outlet Density among Los Angeles County Cities and Communities, 2009



Map 2. Off-Premises Alcohol Outlet Density among Los Angeles County Cities and Communities, 2009

#### Association Between Alcohol Outlet Density and Alcohol-Related Harms

101

Low Medium High Not reported Other LA County

Using logistic regression to adjust for community-level economic hardship, we found that having a high density of either on-premises or off-premises outlets was associated with significantly higher rates of alcohol-related harms.

#### **Violent Crime**

Communities with a high density\* of either On- or Off-Premises outlets were...

- 9 to 10 times more likely to have increased rates of violent crime (p<0.01)
- While rates of Violent Crime were generally lower in areas of low economc hardship (i.e. more affluent areas), areas with higher *on-* or *off-*premises outlet density were much more likely to have increased rates of violent crime, when comparing communities with similar levels of economic hardship.

#### Alcohol-involved Motor Vehicle Crashes

Communities with a high density of On-Premises alcohol outlets were...

• 4 times more likely to have increased rates of alcohol-involved crashes (p=0.008)

#### **Alcohol-related Deaths**

Communities with a high density of Off-Premises alcohol outlets were...

• 5 times more likely to have increased rates of alcohol-related deaths (p=0.004)

The rates of violent crimes, alcohol-involved motor vehicle crashes, and alcohol-related deaths for each city and community are presented in *Table 2*.

<sup>\*</sup> compared to low density

Table 1. On-Premises and Off-Premises Alcohol Outlet Density, by City and Community, Los Angeles County, 2009<sup>18,19</sup>

| City/Community Name         | On-Premises<br>AOD | Rank/Tertile |   | Off-Premises<br>AOD | Rank/      | Tertile |  |
|-----------------------------|--------------------|--------------|---|---------------------|------------|---------|--|
| Los Angeles County          | 8.9                | _            | _ | 6.7                 | _          | _       |  |
| Agoura Hills                | 15.5               | 101          |   | 6.9                 | 62         |         |  |
| Alhambra                    | 8.1                | 71           |   | 4.6                 | 22         |         |  |
| Altadena                    | 1.6                | 9            |   | 4.6                 | 22         |         |  |
| Arcadia                     | 13.5               | 95           |   | 7.1                 | 70         |         |  |
| Artesia                     | 23.1               | 111          |   | 8.4                 | 91         |         |  |
| Avocado Heights             | 4.0                | 28           |   | 6.2                 | 53         |         |  |
| Azusa                       | 8.9                | 75           |   | 9.3                 | 101        |         |  |
| Baldwin Park                | 3.7                | 25           |   | 5.6                 | 38         |         |  |
| Bell                        | 5.4                | 44           |   | 8.5                 | 93         |         |  |
| Bell Gardens                | 3.5                | 23           |   | 9.9                 | 105        |         |  |
| Bellflower                  | 5.6                | 47           |   | 7.7                 | 81         |         |  |
| Beverly Hills               | 41.4               | 116          |   | 10.3                | 107        |         |  |
| Burbank                     | 13.6               | 96           |   | 7.3                 | 72         |         |  |
| Calabasas                   | 8.4                | 73           |   | 6.7                 | 59         |         |  |
| Carson                      | 4.3                | 33           |   | 8.3                 | 88         |         |  |
| Cerritos                    | 12.4               | 94           |   | 5.3                 | 33         |         |  |
| Citrus                      | 0.0                | 1            |   | 0.8                 | 3          |         |  |
| Claremont                   | 11.9               | 91           |   | 3.5                 | 13         |         |  |
| Commerce                    | 10.4               | 85           |   | 23.8                | 117        |         |  |
| Compton                     | 1.5                | 7            |   | 6.4                 | 55         |         |  |
| Covina                      | 9.9                | 82           |   | 8.3                 | 88         |         |  |
| Cudahy                      | 2.7                | 18           |   | 6.6                 | 57         |         |  |
| Culver City                 | 20.6               | 109          |   | 11.3                | 109        |         |  |
| Del Aire                    | 8.9                | 75           |   | 8.9                 | 99         |         |  |
| Diamond Bar                 | 6.8                | 56           |   | 4.5                 | 21         |         |  |
| Downey                      | 8.8                | 74           |   | 5.9                 | 46         |         |  |
| Duarte                      | 6.9                | 62           |   | 9.1                 | 100        |         |  |
| East Compton                | 0.8                | 5            |   | 4.1                 | 18         |         |  |
| East La Mirada              | 2.0                | 13           |   | 3.0                 | 7          |         |  |
| East Los Angeles            | 4.2                | 32           |   | 8.0                 | 83         |         |  |
| East San Gabriel            | 1.9                | 12           |   | 3.1                 | 9          |         |  |
| El Monte                    | 4.5                | 36           |   | 6.8                 | 60         |         |  |
| El Segundo                  | 38.7               | 115          |   | 12.3                | 112        |         |  |
| Florence-Graham             | 3.2                | 21           |   | 8.3                 | 88         |         |  |
| Gardena                     | 15.8               | 102          |   | 8.4                 | 91         |         |  |
| Glendale                    | 9.2                | 79           |   | 8.2                 | 86         |         |  |
| Glendora                    | 9.9                | 82           |   | 4.8                 | 26         |         |  |
| Hacienda Heights            | 4.6                | 38           |   | 3.9                 | 17         |         |  |
| Hawaiian Gardens            | 11.9               | 91           | = | 11.9                | 111        |         |  |
| Hawthorne                   |                    | 41           |   |                     |            |         |  |
|                             | 5.1                |              | = | 6.2                 | 53         |         |  |
| Hermosa Beach               | 38.6               | 114          |   | 11.3                | 109<br>104 |         |  |
| Huntington Park             | 6.8                | 56<br>45     |   | 9.7                 |            |         |  |
| Inglewood                   | 5.5                | 45           |   | 8.7                 | 96         |         |  |
| La Canada Flintridge        | 10.4               | 85           |   | 5.7                 | 40         |         |  |
| La Crescenta-Montrose       | 2.2                | 14           |   | 3.3                 | 10         |         |  |
| La Mirada                   | 7.7                | 66           |   | 6.6                 | 57         |         |  |
| La Puente                   | 5.6                | 47           |   | 8.1                 | 84         |         |  |
| La Verne                    | 10.8               | 89           |   | 5.7                 | 40         |         |  |
| Lake Los Angeles            | 2.5                | 16           |   | 4.2                 | 19         |         |  |
| Lakewood                    | 6.6                | 54           |   | 7.0                 | 67         |         |  |
| Lancaster                   | 7.8                | 67           |   | 5.4                 | 35         |         |  |
| Lawndale                    | 4.5                | 36           |   | 8.7                 | 96         |         |  |
| Lennox                      | 1.5                | 7            |   | 5.8                 | 42         |         |  |
| Lomita                      | 17.1               | 106          |   | 7.6                 | 79         |         |  |
| Long Beach                  | 10.7               | 88           |   | 7.0                 | 67         |         |  |
| Los Angeles, All Districts  | 8.7                | _            | _ | 6.5                 | _          | _       |  |
| LA City Council District 01 | 6.3                | 50           |   | 7.3                 | 72         |         |  |
| LA City Council District 02 | 6.8                | 56           |   | 7.3                 | 72         |         |  |
| LA City Council District 03 | 9.1                | 78           |   | 6.1                 | 50         |         |  |
| LA City Council District 04 | 14.3               | 99           |   | 5.4                 | 35         |         |  |

|                             |                    |       |         | o" -                |       |         |  |  |
|-----------------------------|--------------------|-------|---------|---------------------|-------|---------|--|--|
| City/Community Name         | On-Premises<br>AOD | Rank/ | Tertile | Off-Premises<br>AOD | Rank/ | Tertile |  |  |
| LA City Council District 05 | 18.5               | 108   |         | 5.8                 | 42    |         |  |  |
| LA City Council District 06 | 4.1                | 31    |         | 6.5                 | 56    |         |  |  |
| LA City Council District 07 | 2.8                | 19    |         | 4.7                 | 24    |         |  |  |
| LA City Council District 08 | 1.7                | 10    |         | 4.9                 | 30    |         |  |  |
| LA City Council District 09 | 10.4               | 85    |         | 8.5                 | 93    |         |  |  |
| LA City Council District 10 | 10.3               | 84    |         | 5.9                 | 46    |         |  |  |
| LA City Council District 11 | 14.5               | 100   |         | 7.0                 | 67    |         |  |  |
| LA City Council District 12 | 7.1                | 63    |         | 6.1                 | 50    |         |  |  |
| LA City Council District 13 | 12.1               | 93    |         | 6.9                 | 62    |         |  |  |
| LA City Council District 14 | 5.9                | 49    |         | 8.2                 | 86    |         |  |  |
| LA City Council District 15 | 6.5                | 52    |         | 7.2                 | 71    |         |  |  |
| Lynwood                     | 3.4                | 22    |         | 5.3                 | 33    |         |  |  |
| Malibu                      | 27.0               | 113   |         | 12.4                | 113   |         |  |  |
| Manhattan Beach             | 22.5               | 110   |         | 7.4                 | 77    |         |  |  |
| Maywood                     | 4.7                | 39    |         | 10.1                | 106   |         |  |  |
| Monrovia                    | 14.0               | 98    |         | 6.9                 | 62    |         |  |  |
| Montebello                  | 6.7                | 55    |         | 6.9                 | 62    |         |  |  |
| Monterey Park               | 7.9                | 68    |         | 5.0                 | 31    |         |  |  |
| Norwalk                     | 4.3                | 33    |         | 5.4                 | 35    |         |  |  |
| Palmdale                    | 6.8                | 56    |         | 3.6                 | 15    |         |  |  |
| Palos Verdes Estates        | 3.6                | 24    |         | 4.3                 | 20    |         |  |  |
| Paramount                   | 5.5                | 45    |         | 7.3                 | 72    |         |  |  |
| Pasadena                    | 16.6               | 104   |         | 5.9                 | 46    |         |  |  |
|                             |                    |       |         |                     |       |         |  |  |
| Pico Rivera                 | 6.3                | 50    |         | 8.1                 | 84    |         |  |  |
| Pomona                      | 6.5                | 52    |         | 5.6                 | 38    |         |  |  |
| Rancho Palos Verdes         | 4.0                | 28    |         | 3.5                 | 13    |         |  |  |
| Redondo Beach               | 18.0               | 107   |         | 8.6                 | 95    |         |  |  |
| Rosemead                    | 6.8                | 56    |         | 5.8                 | 42    |         |  |  |
| Rowland Heights             | 8.0                | 69    |         | 3.0                 | 7     |         |  |  |
| San Dimas                   | 8.1                | 71    |         | 7.6                 | 79    |         |  |  |
| San Fernando                | 6.8                | 56    |         | 9.5                 | 103   |         |  |  |
| San Gabriel                 | 16.9               | 105   |         | 7.3                 | 72    |         |  |  |
| San Marino                  | 3.7                | 25    |         | 0.7                 | 2     |         |  |  |
| Santa Clarita               | 9.8                | 81    |         | 6.9                 | 62    |         |  |  |
| Santa Fe Springs            | 16.3               | 103   |         | 23.6                | 116   |         |  |  |
| Santa Monica                | 25.5               | 112   |         | 8.7                 | 96    |         |  |  |
| Sierra Madre                | 10.9               | 90    |         | 3.6                 | 15    |         |  |  |
| Signal Hill                 | 8.0                | 69    |         | 12.5                | 114   |         |  |  |
| South El Monte              | 7.1                | 63    |         | 13.4                | 115   |         |  |  |
| South Gate                  | 4.7                | 40    |         | 7.9                 | 82    |         |  |  |
| South Pasadena              | 9.7                | 80    |         | 4.7                 | 24    |         |  |  |
| South San Jose Hills        | 0.4                | 4     |         | 1.7                 | 4     |         |  |  |
| South Whittier              | 2.5                | 16    |         | 4.8                 | 26    |         |  |  |
| Temple City                 | 5.3                | 42    |         | 5.9                 | 46    |         |  |  |
| Torrance                    | 13.6               | 96    |         | 7.5                 | 78    |         |  |  |
| Valinda                     | 1.8                | 11    |         | 3.3                 | 10    |         |  |  |
| View Park-Windsor Hills     | 3.9                | 27    |         | 4.8                 | 26    |         |  |  |
| Vincent                     | 2.2                | 14    |         | 2.2                 | 5     |         |  |  |
| Walnut                      | 4.0                | 28    |         | 2.8                 | 6     |         |  |  |
| Walnut Park                 | 4.3                | 33    |         | 4.8                 | 26    |         |  |  |
|                             |                    |       |         |                     |       |         |  |  |
| West Cavina                 | 5.3                | 42    |         | 9.3                 | 101   |         |  |  |
| West Covina                 | 7.2                | 65    |         | 5.1                 | 32    |         |  |  |
| West Hollywood              | 47.3               | 117   |         | 11.0                | 108   |         |  |  |
| West Puente Valley          | 0.0                | 1     |         | 0.0                 | 1     |         |  |  |
| West Whittier-Los Nietos    | 2.8                | 19    |         | 3.4                 | 12    |         |  |  |
| Westmont                    | 0.0                | 1     |         | 6.1                 | 50    |         |  |  |
| Whittier                    | 9.0                | 77    |         | 6.8                 | 60    |         |  |  |
| Willowbrook                 | 0.8                | 5     |         | 5.8                 | 42    |         |  |  |

Low Medium HIgh Excludes cities/communities with populations less than 10,000; AOD = Alcohol Outlet Density/10,000 population

Table 2. Alcohol-Related Harms, by City and Community, Los Angeles County<sup>20-22</sup>

| City/Community Name   | Violent Crime Rank/Quartile<br>Rate (/1,000) |     | Motor<br>Vehicle Crash Rate<br>(/10,000) | Rank/C | (uartile | Alcohol-Related<br>Death Rate<br>(/100,000) | Rank/Quartile |     |           |
|-----------------------|--|-----|--|--------|----------|---|---------------|-----|-----------|
| Los Angeles County    | 6.1  | _   | _  | 12.8   | _        | _   | 8.9           | _   |           |
| Agoura Hills          | 1.9  | 15  |  | 12.9   | 86       |   | 3.2           | 6   |           |
| Alhambra              | 3.2  | 37  |  | 7.8    | 29       |   | 6.3           | 27  |           |
| Altadena              | 4.1  | 57  |  | 7.5    | 26       |   | 5.8           | 22  |           |
| Arcadia               | 2.6  | 30  |  | 10.2   | 56       |   | 6.2           | 25  |           |
| Artesia               | 4.7  | 68  |  | 8.4    | 35       |   | 9.8           | 69  |           |
| Avocado Heights       | 3.2  | 37  |  | 18.5   | 113      |   | 10.6          | 85  |           |
| Azusa                 | 4.1  | 57  |  | 14.9   | 100      |   | 11.6          | 99  |           |
| Baldwin Park          | 3.6  | 45  |  | 13.0   | 88       |   | 10.0          | 71  | $+\equiv$ |
| Bell                  | 4.5  | 63  |  | 15.2   | 104      |   | 8.0           | 40  | +=        |
| Bell Gardens          | 5.4  | 76  |  | 5.6    | 10       |   | 8.6           | 48  | =         |
| Bellflower            | 6.4  | 86  |  | 9.3    | 41       |   | 11.4          | 95  | +=        |
|                       | 3.9  | 53  |  | 8.0    | 33       |   | 2.1           | 5   | +=        |
| Beverly Hills         |  | 27  |  |        | 71       |   | 8.1           |     | +=        |
| Burbank               | 2.4  |     |  | 11.5   |          |   |               | 43  | +=        |
| Calabasas             | 0.8  | 2   |  | 9.0    | 38       |   | 4.2           | 9   | +         |
| Carson                | 6.8  | 90  |  | 10.8   | 64       |   | 7.9           | 39  |           |
| Cerritos              | 2.7  | 32  |  | 15.2   | 103      |   | 3.2           | 6   | _         |
| Citrus                | 3.0  | 34  |  | 7.8    | 32       |   | 7.8           | 38  |           |
| Claremont             | 2.2  | 21  |  | 11.3   | 67       |   | 9.1           | 58  | _         |
| Commerce              | 10.1   | 110 |  | 50.2   | 117      |   | 15.8          | 116 |           |
| Compton               | 16.8   | 115 |  | 9.7    | 47       |   | 10.8          | 88  | _         |
| Covina                | 3.6  | 45  |  | 6.9    | 22       |   | 9.3           | 62  |           |
| Cudahy                | 5.4  | 76  |  | 6.3    | 15       |   | 5.3           | 15  |           |
| Culver City           | 4.3  | 61  |  | 13.7   | 94       |   | 8.6           | 48  |           |
| Del Aire              | 3.5  | 42  |  | 7.3    | 24       |   | 11.1          | 94  |           |
| Diamond Bar           | 1.8  | 13  |  | 12.7   | 82       |   | 4.6           | 12  |           |
| Downey                | 4.2  | 59  |  | 15.4   | 105      |   | 9.0           | 56  |           |
| Duarte                | 4.0  | 55  |  | 5.2    | 8        |   | 9.2           | 60  |           |
| East Compton          | 14.5   | 112 |  | 10.1   | 54       |   | 7.2           | 35  |           |
| East La Mirada        | 2.2  | 21  |  | 4.6    | 7        |   | 14.8          | 112 |           |
| East Los Angeles      | 7.3  | 98  |  | 14.2   | 98       |   | 15.2          | 115 |           |
| East San Gabriel      | 1.5  | 9   |  | 2.5    | 1        |   | 6.2           | 25  |           |
| El Monte              | 5.6  | 79  |  | 11.7   | 75       |   | 9.2           | 60  |           |
| El Segundo            | 2.1  | 19  |  | 17.6   | 111      |   | 10.3          | 77  |           |
| Florence-Graham       | 12.2   | 111 |  | 10.3   | 59       |   | 10.9          | 90  |           |
| Gardena               | 7.1  | 95  |  | 15.9   | 106      |   | 8.5           | 47  |           |
| Glendale              | 1.8  | 13  |  | 9.8    | 51       |   | 7.0           | 33  |           |
| Glendora              | 1.4  | 7   |  | 11.6   | 72       |   | 10.7          | 87  |           |
| Hacienda Heights      | 2.3  | 23  |  | 10.9   | 65       |   | 5.7           | 21  |           |
| Hawaiian Gardens      | 9.1  | 108 |  | 7.5    | 27       |   | 13.4          | 110 |           |
| Hawthorne             | 8.0  | 102 |  | 13.2   | 90       |   | 9.4           | 63  |           |
| Hermosa Beach         | 3.5  | 42  |  | 12.5   | 80       |   | 5.2           | 14  |           |
| Huntington Park       | 8.8  | 106 |  | 15.0   | 102      |   | 10.4          | 79  |           |
| Inglewood             | 8.6  | 103 |  | 7.8    | 30       |   | 10.8          | 88  |           |
| La Canada Flintridge  | 1.0  | 4   |  | 6.6    | 17       |   | 5.3           | 15  |           |
| La Crescenta-Montrose | 1.9  | 15  |  | 8.2    | 34       |   | 6.8           | 31  | +=        |
| La Mirada             | 2.4  | 27  |  | 10.7   | 61       |   | 8.1           | 43  | +         |
|                       |  |     |  |        |          |   |               |     | +=        |
| La Puente             | 5.8  | 81  |  | 9.6    | 43       |   | 10.4          | 79  | +=        |
| La Verne              | 2.0  | 18  |  | 8.9    | 37       |   | 7.1           | 34  | +         |
| Lake Los Angeles      | 5.9  | 83  |  | 7.8    | 31       |   | 11.5          | 98  |           |
| Lakewood              | 4.9  | 70  |  | 6.4    | 16       |   | 6.4           | 28  |           |

Highest (89th to 117th)

Lowest (1st to 29th) Low (30th to 58th) High (59th to 88th) Excludes cities/communities with populations less than 10,000

Table 2. Alcohol-Related Harms, by City and Community, Los Angeles County<sup>20-22</sup>

| City/Community Name         | Violent Crime<br>Rate (/1,000) | Rank/Quartile Motor Vehicle Crash Rate (/10,000) |   | Alcohol-Related Death Rate (/100,000) |     | Rank/Quartile |      |     |   |
|-----------------------------|--------------------------------|--|---|---------------------------------------|-----|---------------|------|-----|---|
| Lancaster                   | 8.8                            | 106  |   | 9.8                                   | 50  |               | 10.4 | 79  |   |
| Lawndale                    | 6.7                            | 88   |   | 11.6                                  | 74  |               | 10.1 | 76  |   |
| Lennox                      | 6.5                            | 87   |   | 11.6                                  | 73  |               | 10.9 | 90  |   |
| Lomita                      | 5.3                            | 73   |   | 5.7                                   | 11  |               | 9.5  | 65  |   |
| Long Beach                  | 6.8                            | 90   |   | 13.8                                  | 96  |               | 9.4  | 63  |   |
| Los Angeles, All Districts  | 6.5                            | _  | _ | 11.6                                  | _   | _             | 9.4  | _   | _ |
| LA City Council District 01 | 6.8                            | 90   |   | 14.6                                  | 99  |               | 12.1 | 103 |   |
| LA City Council District 02 | 4.9                            | 70   |   | 12.9                                  | 87  |               | 9.0  | 56  |   |
| LA City Council District 03 | 1.7                            | 12   |   | 10.5                                  | 60  |               | 7.5  | 37  |   |
| LA City Council District 04 | 4.6                            | 67   |   | 13.3                                  | 91  |               | 6.5  | 29  |   |
| LA City Council District 05 | 2.9                            | 33   |   | 10.0                                  | 52  |               | 4.3  | 11  |   |
| LA City Council District 06 | 4.5                            | 63   |   | 12.8                                  | 85  |               | 9.7  | 68  |   |
| LA City Council District 07 | 3.1                            | 35   |   | 9.4                                   | 42  |               | 10.9 | 90  |   |
| LA City Council District 08 | 15.3                           | 113  |   | 11.1                                  | 66  |               | 10.5 | 82  |   |
| LA City Council District 09 | 17.0                           | 116  |   | 15.0                                  | 101 |               | 12.7 | 107 |   |
| LA City Council District 10 | 6.8                            | 90   |   | 12.0                                  | 76  |               | 8.4  | 46  |   |
| LA City Council District 11 | 3.9                            | 53   |   | 9.7                                   | 49  |               | 8.1  | 43  |   |
| LA City Council District 12 | 2.6                            | 30   |   | 10.1                                  | 55  |               | 6.9  | 32  |   |
| LA City Council District 13 | 7.1                            | 95   |   | 11.5                                  | 70  |               | 9.9  | 70  |   |
| LA City Council District 14 | 6.9                            | 94   |   | 10.8                                  | 63  |               | 12.4 | 104 |   |
| LA City Council District 15 | 8.6                            | 103  |   | 10.2                                  | 58  |               | 11.4 | 95  |   |
| Lynwood                     | 9.5                            | 109  |   | 9.7                                   | 48  |               | 10.3 | 77  |   |
| Malibu                      | 1.9                            | 15   |   | 25.0                                  | 114 |               | 5.5  | 17  |   |
| Manhattan Beach             | 1.4                            | 7  |   | 11.4                                  | 68  |               | 5.5  | 17  |   |
| Maywood                     | 5.7                            | 80   |   | 6.7                                   | 18  |               | 8.8  | 51  |   |
| Monrovia                    | 3.3                            | 41   |   | 12.6                                  | 81  |               | 11.8 | 101 |   |
| Montebello                  | 3.7                            | 50   |   | 11.4                                  | 69  |               | 13.9 | 111 |   |
| Monterey Park               | 2.5                            | 29   |   | 9.1                                   | 40  |               | 5.6  | 20  |   |
| Norwalk                     | 5.1                            | 72   |   | 12.8                                  | 84  |               | 10.6 | 85  |   |
| Palmdale                    | 6.7                            | 88   |   | 10.2                                  | 57  |               | 8.0  | 40  |   |
| Palos Verdes Estates        | 0.3                            | 1  |   | 5.5                                   | 9   |               | 1.8  | 2   |   |
| Paramount                   | 7.3                            | 98   |   | 9.7                                   | 46  |               | 8.6  | 48  |   |
| Pasadena                    | 4.5                            | 63   |   | 13.7                                  | 93  |               | 4.2  | 9   |   |
| Pico Rivera                 | 4.0                            | 55   |   | 6.8                                   | 19  |               | 12.5 | 105 |   |
| Pomona                      | 7.5                            | 101  |   | 17.1                                  | 109 |               | 8.8  | 51  |   |
| Rancho Palos Verdes         | 0.9                            | 3  |   | 3.7                                   | 4   |               | 5.8  | 22  |   |
| Redondo Beach               | 3.1                            | 35   |   | 16.7                                  | 108 |               | 8.9  | 53  |   |
| Rosemead                    | 4.2                            | 59   |   | 7.3                                   | 23  |               | 9.6  | 67  |   |
| Rowland Heights             | 3.2                            | 37   |   | 6.2                                   | 14  |               | 1.6  | 1   |   |
| San Dimas                   | 2.3                            | 23   |   | 10.1                                  | 53  |               | 9.5  | 65  |   |
| San Fernando                | 4.8                            | 69   |   | 13.8                                  | 95  |               | 16.9 | 117 |   |
| San Gabriel                 | 4.5                            | 63   |   | 12.0                                  | 77  |               | 10.0 | 71  |   |
| San Marino                  | 1.0                            | 4  |   | 8.7                                   | 36  |               | 1.9  | 3   |   |
| Santa Clarita               | 2.3                            | 23   |   | 6.8                                   | 21  |               | 5.8  | 22  |   |
| Santa Fe Springs            | 7.2                            | 97   |   | 45.8                                  | 116 |               | 13.3 | 109 |   |
| Santa Monica                | 6.3                            | 85   |   | 18.1                                  | 112 |               | 10.0 | 71  |   |
| Sierra Madre                | 1.1                            | 6  |   | 3.0                                   | 2   |               | 9.1  | 58  |   |
| Signal Hill                 | 5.8                            | 81   |   | 17.6                                  | 110 |               | 10.0 | 71  |   |
| South El Monte              | 6.0                            | 84   |   | 7.6                                   | 28  |               | 15.1 | 114 |   |
| South Gate                  | 5.5                            | 78   |   | 13.2                                  | 89  |               | 11.8 | 101 |   |
| South Pasadena              | 1.5                            | 9  |   | 10.7                                  | 62  |               | 3.9  | 8   |   |

Lowest (1st to 29th) Low (30th to 58th) Excludes cities/communities with populations less than 10,000

Highest (89th to 117th)

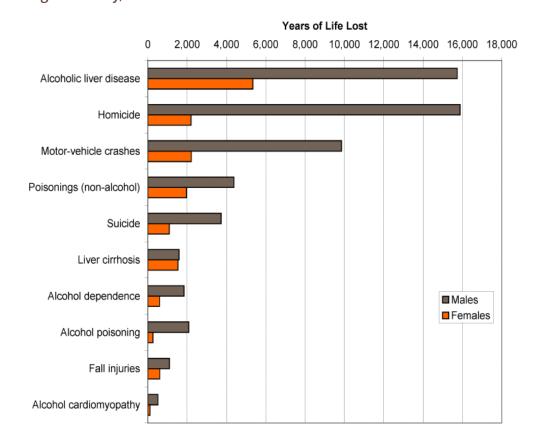
High (59th to 88th)

Table 2. Alcohol-Related Harms, by City and Community, Los Angeles County<sup>20-22</sup>

| City/Community Name      | Violent Crime<br>Rate (/1,000) | Rank/Q | uartile | Motor<br>Vehicle Crash Rate<br>(/10,000) | Rank/Quartile |  | Alcohol-Related Rank/<br>Death Rate<br>(/100,000) |     | /Quartile |  |
|--------------------------|--------------------------------|--------|---------|--|---------------|--|---|-----|-----------|--|
| South San Jose Hills     | 4.3                            | 61     |         | 7.4                                      | 25            |  | 11.4  | 95  |           |  |
| South Whittier           | 3.6                            | 45     |         | 9.1                                      | 39            |  | 12.7  | 107 |           |  |
| Temple City              | 2.1                            | 19     |         | 3.2                                      | 3             |  | 6.7   | 30  |           |  |
| Torrance                 | 2.3                            | 23     |         | 3.8                                      | 5             |  | 7.3   | 36  |           |  |
| Valinda                  | 3.5                            | 42     |         | 6.1                                      | 12            |  | 5.5   | 17  |           |  |
| View Park-Windsor Hills  | 7.3                            | 98     |         | 13.9                                     | 97            |  | 4.8   | 13  |           |  |
| Vincent                  | 3.2                            | 37     |         | 6.8                                      | 20            |  | 8.9   | 53  |           |  |
| Walnut                   | 1.6                            | 11     |         | 4.2                                      | 6             |  | 1.9   | 3   |           |  |
| Walnut Park              | 5.3                            | 73     |         | 9.6                                      | 44            |  | 8.0   | 40  |           |  |
| West Carson              | 5.3                            | 73     |         | 9.6                                      | 45            |  | 15.0  | 113 |           |  |
| West Covina              | 3.6                            | 45     |         | 16.1                                     | 107           |  | 8.9   | 53  |           |  |
| West Hollywood           | 8.7                            | 105    |         | 35.1                                     | 115           |  | 10.0  | 71  |           |  |
| West Puente Valley       | 3.6                            | 45     |         | 6.1                                      | 13            |  | 10.9  | 90  |           |  |
| West Whittier-Los Nietos | 3.8                            | 52     |         | 12.2                                     | 78            |  | 11.6  | 99  |           |  |
| Westmont                 | 20.8                           | 117    |         | 12.5                                     | 79            |  | 10.5  | 82  |           |  |
| Whittier                 | 3.7                            | 50     |         | 12.7                                     | 83            |  | 12.6  | 106 |           |  |
| Willowbrook              | 15.4                           | 114    |         | 13.3                                     | 92            |  | 10.5  | 82  |           |  |

Excludes cities/communities with populations less than 10,000

Figure 3. Leading Causes of Years of Life Lost Due to Alcohol for Males and Females, Los Angeles County, 2007<sup>24</sup>



#### **Discussion**

Alcohol is the third-leading cause of preventable death in the United States, <sup>15</sup> and accounts for 2,500 deaths in Los Angeles County each year, 75% of which occur in men. <sup>24</sup> It also results in 78,000 years of potential life lost due to premature death from alcohol use (Figure 3), with premature deaths among young people (less than age 21) accounting for more than 12% of the years of life lost. Excessive consumption of alcohol is a major public health concern among teenagers and adults in Los Angeles County, with significant health and economic impacts. These include societal harms not only from illnesses, but also due to injuries, violent crimes and property crimes, traffic accidents, work loss, and community and family disruptions.

The Surgeon General's
Call to Action
To Prevent and Reduce
Underage Drinking
2007

U.S. Department of Health and Human Services

The findings in this analysis are consistent with previous studies which have shown significant associations between alcohol availability and alcohol-related harms. For example, environmental factors such as the density of alcohol outlets have been found to play an important role in teenage drinking. Among teenagers in California, binge drinking and driving after drinking have been associated with the availability of alcohol outlets within a half-mile from home.<sup>25</sup>

Preventing alcohol misuse and abuse among teenagers and young adults is especially critical. Attitudes toward drinking and drinking behaviors are formed during youth, and alcohol is the most frequently used drug among teenagers. Underage drinking is a major cause of death from injuries among persons under the age of 21, and the early onset of drinking increases the risk of alcohol-related problems later in life.<sup>26</sup> The seriousness of this problem led the U.S. Surgeon General to issue a "Call to Action to Prevent and Reduce Underage Drinking" in 2007.

Excessive alcohol use also disproportionately affects some racial/ethnic groups. For example, although rates of heavy drinking are highest among whites, the death rate from alcohol-related liver disease and cirrhosis is much higher among Hispanics.<sup>22</sup>

Fortunately, alcohol misuse and abuse is not only highly treatable, but largely preventable. Drinking among youth and adults is strongly influenced by alcohol control policies, <sup>27</sup> and the findings in this report emphasize the need to take preventive actions at the community level and to implement targeted interventions that reduce alcohol outlet density.

In California, laws and regulations that determine alcohol access and availability primarily rest with the state, and to a lesser degree, local government. The California Department of Alcoholic Beverage Control (ABC), has the authority to license and regulate the manufacture, importation, and sale of alcoholic beverages. This includes reviewing and approving new outlet licenses, ensuring compliance with laws and regulations, and conducting limited prevention and education programs. Local governments can influence the licensing and compliance process and help minimize harms associated with problem alcohol outlets through their land use policies (e.g., zoning, conditional use permits, ordinances). Communities can also participate in public hearings and work with ABC to identify outlets that fail to comply with requirements.

The State has the sole authority to impose alcohol taxes. State excise taxes are levied on the sale of specific goods or commodities (e.g., alcohol), and are controlled at the State level, with revenues benefiting the State General Fund. Recently, State and local policy-makers have considered mitigation fees as a way to address adverse affects on public health by funding programs to address or prevent those harms at the State or local level. The passage of Proposition 26 in 2010 will make adoption of mitigation fees more difficult to enact because the measure increased the vote requirement to enact from a simple majority to a  $^2/_3$  majority. It is important for communities to understand these processes and authorities so they can best effect needed changes.

# **Strategies to Reduce Alcohol-Related Harms** in Our Cities and Communities

The following are eight recommendations that policymakers, communities, businesses, schools, and health care providers can use to reduce alcohol-related consequences in our cities and communities.

#### 1. Take actions to limit alcohol outlet density.

ABC has the authority to license and regulate the sale of alcoholic beverages. As part of the licensing process, ABC is required to inform local government of applications. Local government and communities can play an important role in the ABC decision-making process, including commenting on or protesting an application. Additionally, as recommend by the Community Guide, <sup>28</sup> local government can use land use powers to influence the process by limiting the number of new alcohol outlets allowed by the city or county general plans, or by imposing operating restrictions on new or existing outlets.

**New Alcohol Outlets:** Local jurisdictions can implement zoning ordinances or require applicants to obtain a "conditional use permit" prior to ABC license approval that includes conditions such as restrictions on location/density, hours of sale, types of beverages sold, and licensee conduct. Community members can also participate in public hearings for new outlets, e.g., by highlighting areas where on-premises or off-premises outlets are oversaturated.

**Existing Alcohol Outlets:** Local jurisdictions can implement "deemed approved" ordinances that require off-premises outlets to comply with performance standards (e.g., properly maintained premises that do not adversely affect the surrounding community), and require that owners/employees do not permit or facilitate unlawful behavior (e.g., sales to minors, public consumption on the property or surrounding sidewalk, or other illegal activity). Community members can inform or collaborate with ABC in identifying problem outlets or encouraging revocation of a license for continued violations. <sup>28,29</sup>

#### 2. Change the economics of alcoholic beverages.

Despite the clear link between alcohol consumption and alcohol-related harms (e.g., motor vehicle crashes, alcohol-impaired driving, liver cirrhosis, illness/injury, crime), California's alcohol taxes per gallon are below the national average for beer (20¢ vs. 28¢), liquor (\$3.30 vs. \$3.70), and wine (20¢ vs. 79¢); only Louisiana has a lower wine tax than California. California's last increase in alcohol taxes occurred in 1991; the increase was 1¢ per glass of wine and 2¢ per serving of beer and liquor. Alcohol-related harms cost California \$38.0 billion annually, including \$10.8 billion in Los Angeles County. The Community Guide has found that higher alcohol taxes can reduce over-consumption and youth access, as well as provide funds for prevention and health care. In California, efforts to raise taxes begin at the state level, but communities can inform legislators regarding the benefits of such legislation and mobilize support around related ballot initiatives.

#### 3. Restrict alcohol availability and accessibility to minors.

Underage drinking and early initiation of alcohol use are associated with greater alcohol-related problems in adulthood. Restricting the ability of minors to obtain alcohol in the home and community can change social norms regarding the permissibility of underage drinking and delay early initiation of alcohol use. Parents and guardians should closely monitor alcoholic beverages in the home and ensure underage drinking does not occur at family events. Furthermore, communities can implement and enforce social host ordinances that increase consequences for adults who knowingly permit underage drinking in private settings, such as parties.



Communities can also support the implementation of policies to limit the consumption of alcohol in public places (e.g., parks, beaches) and to decrease the possibility of minors obtaining alcohol at events highly attended by youth (e.g., by requiring ID bracelets).<sup>32</sup>

#### 4. Reduce alcohol advertising in public places and in areas commonly seen by minors.

Exposure to alcohol advertising influences youths' beliefs about alcohol and their intention to drink. Restricting alcohol advertising in public places (e.g., billboards, sporting events) and enforcing signage restrictions at liquor and convenience stores (e.g., no more than 33% of square footage of window advertisements, specific area for alcohol product placement) reduces youth exposure to alcohol marketing.

#### 5. Ensure compliance with responsible sales and serving practices.

Requiring regular retailer/vendor education to deter sales to underage youth (e.g., Responsible Beverage Sales and Service training, ID checks) in combination with compliance checks has been effective in limiting underage alcohol access and use. In California, completion of a Responsible Beverage Sales and Service training is voluntary, but it can be required locally through Conditional Use Permits. The Los Angeles Police Department's Standardized Training for Alcohol Retailers "STAR" training is one no-cost option for those employed in the alcoholic beverage service industry; additional trainers are listed on ABC's website. 33,34 The Community Guide has also identified maintaining limits on hours of alcohol sales as effective in reducing excessive alcohol consumption and related harms. 29 In California, city and county governments have the authority to set different sale hours.

#### 6. Provide educational services.

Providing alcohol education and training to youth in school and community settings can raise awareness, develop refusal skills, and reduce the likelihood they will ride with alcohol-impaired drivers. Information about the hazards of alcohol and the legal and social consequences of use can be disseminated through school and community programs. This will help change students' perceptions, decrease the public's acceptance of underage drinking, and support the message that underage drinking is not acceptable.<sup>29,35</sup>



#### 7. Increase screening by health care providers for alcohol use and misuse.

The U.S. Preventive Services Task Force recommends screening and behavioral counseling to reduce alcohol misuse by adults, including pregnant women. The 5A's framework may be helpful for behavioral counseling: ASSESS alcohol consumption with a brief screening tool followed by clinical assessment as needed; ADVISE patients to reduce alcohol consumption to moderate levels; AGREE on individual goals for reducing alcohol use or abstinence (if indicated); ASSIST patients with acquiring the motivations, self-help skills, or supports needed for behavior change; and ARRANGE follow-up support and repeated counseling, including referring dependent drinkers for specialty treatment. In addition, all pregnant women and women contemplating preg-

nancy should be informed of the harmful effects of alcohol on the fetus.<sup>36</sup>



#### 8. Provide access to mental health and substance abuse services.

Health care providers who are unable to directly provide substance abuse treatment should refer patients who screen positive for further assessment and treatment services, and then follow-up to ensure that the patient received needed services. In LA County, persons without insurance can call the Community Assessment Services Centers at (800) 564-6600 to find the nearest appropriate treatment center.

# **Helpful Online Resources**

Substance Abuse Prevention and Control, LA County Department of Public Health www.publichealth.lacounty.gov/sapc/

National Institute on Drug Abuse www.nida.nih.gov/

Federal Resources to Stop Underage Drinking www.stopalcoholabuse.gov/

Substance Abuse and Mental Health Services Administration Center for Substance Abuse Prevention www.samhsa.gov/prevention/

Centers for Disease Control and Prevention's Alcohol Program www.cdc.gov/Alcohol/

The Guide to Community Preventive Services www.thecommunityguide.org

Join Together: Advancing Effective Alcohol and Drug Policy, Prevention, and Treatment www.jointogether.org

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- 17. Population estimates are produced internally for the County of Los Angeles.
- 18. Listing of all licensed on-premises and off-premises alcohol outlets in Los Angeles County was downloaded January 2009 from the California ABC website [http://www.abc.ca.gov/datport/DataExport.html]. For this report, all outlets with active, pending, or revocation pending due to non-payment of recent renewal status were included (>97%).
- 19. On-premises alcohol license: state license that allows business to sell alcohol beverages for consumption on the premises. Off-premises alcohol license: state license that allows business to sell

- alcohol beverages for consumption away from the premises.
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- 22. Source: 2000-2007 Death Statistical Master Files, California Department of Health Services, Center for Health Statistics. Definition for causes of alcohol-induced deaths is taken from the Centers for Disease Control and Prevention's (CDC) National Vital Statistics Report, volume 57, issue number 14, dated April 17, 2009 page 120. [http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57\_14.pdf]
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Los Angeles County
Department of Public Health
313 North Figueroa Street, Room 127
Los Angeles, CA 90012
(213) 240-7785

#### Los Angeles County Department of Public Health

Jonathan E. Fielding, MD, MPH Director and Health Officer

Jonathan E. Freedman Chief Deputy Director

Steven Teutsch, MD, MPH Chief Science Officer

#### Substance Abuse Prevention and Control

John Viernes, Jr.

Director

Benedict Lee, PhD Special Assistant to the Director, and Chief, Research and Epidemiology Unit

Michelle Gibson, MPH
Prevention and Youth Services Coordinator

Research and Epidemiology Unit

Qian Guo, PhD, MPH; Angelita Balanon, MPH; Farimah Fiali, MPH; Christine Oh, PhD; Quan Truong, MPH

Prevention and Youth Services Unit Delia Barajas; Nancy Schooler; Carmen Martel; Jennifer Zogg, PhD

#### Office of Health Assessment and Epidemiology

Frank Sorvillo, PhD Acting Director

Margaret Shih, MD, PhD Chief, Epidemiology Unit

**Epidemiology Unit** 

Alex Ho, MD, MPH; Aida Angelescu, MS; David Kwan, MPH; Heena Hameed, MPH

#### Office of External Relations & Communications

Alan Albert and Jacquelyn Soria

Graphic Designers

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#### **Los Angeles County Board of Supervisors**

Gloria Molina, First District Mark Ridley-Thomas, Second District Zev Yaroslavsky, Third District Don Knabe, Fourth District Michael D. Antonovich, Fifth District